



# The Florida Green

May/June 1991



*Weston Hills CC  
Fort Lauderdale  
Number 11*

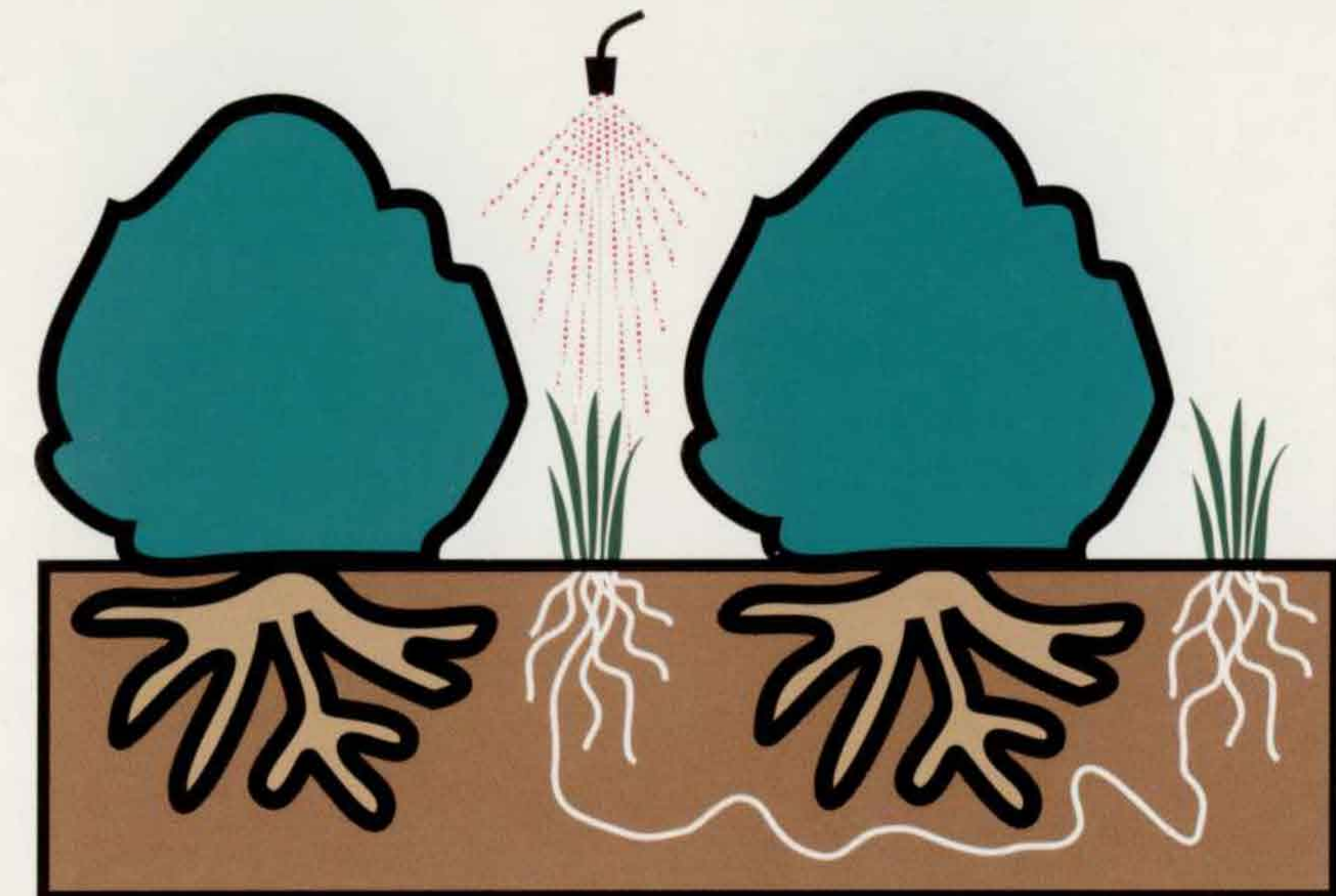
# Take-Away™

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



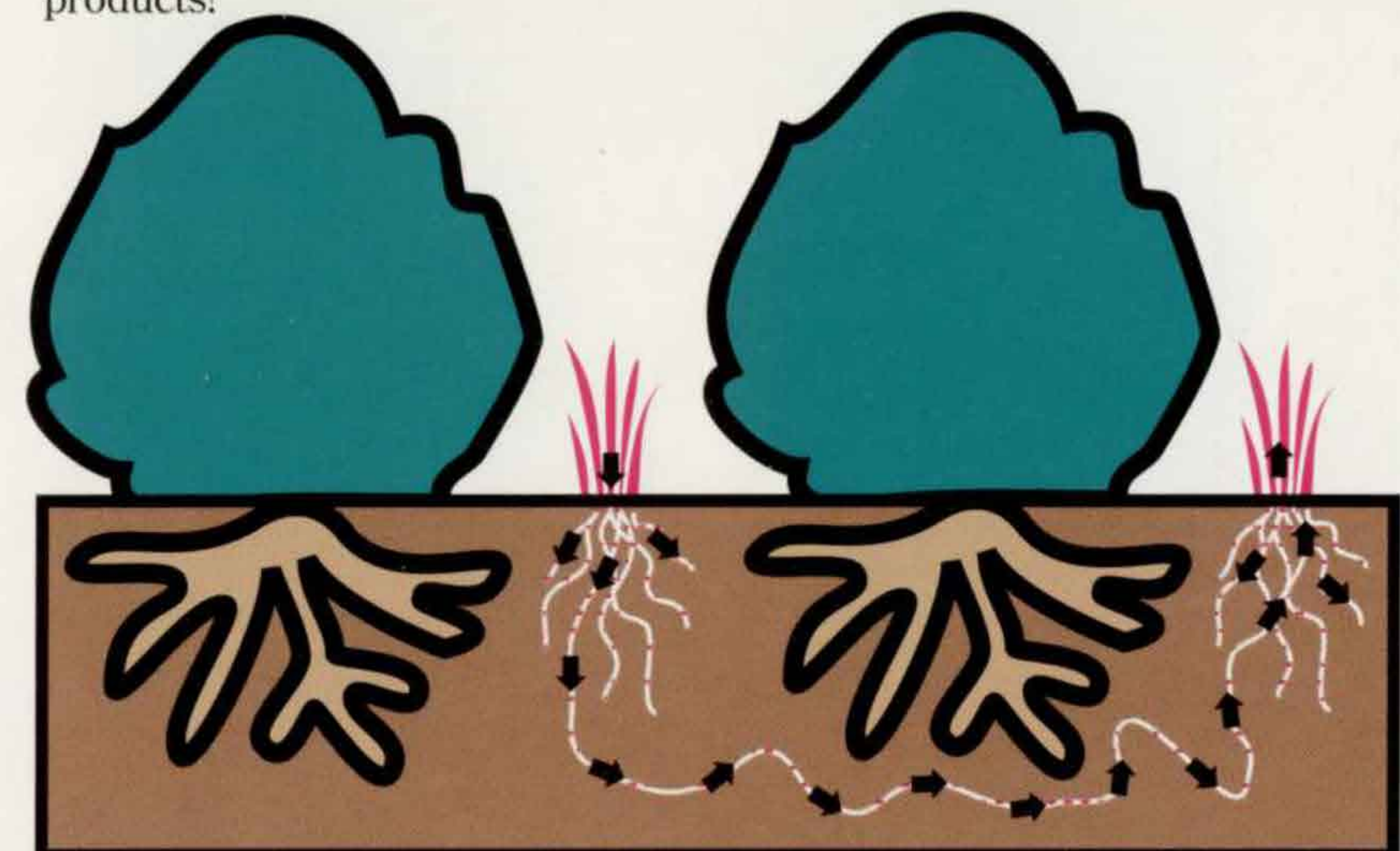
*Take out unsightly  
grassy weeds with  
LESCO Take-Away™  
Postemergence  
Herbicide!*

## Selective



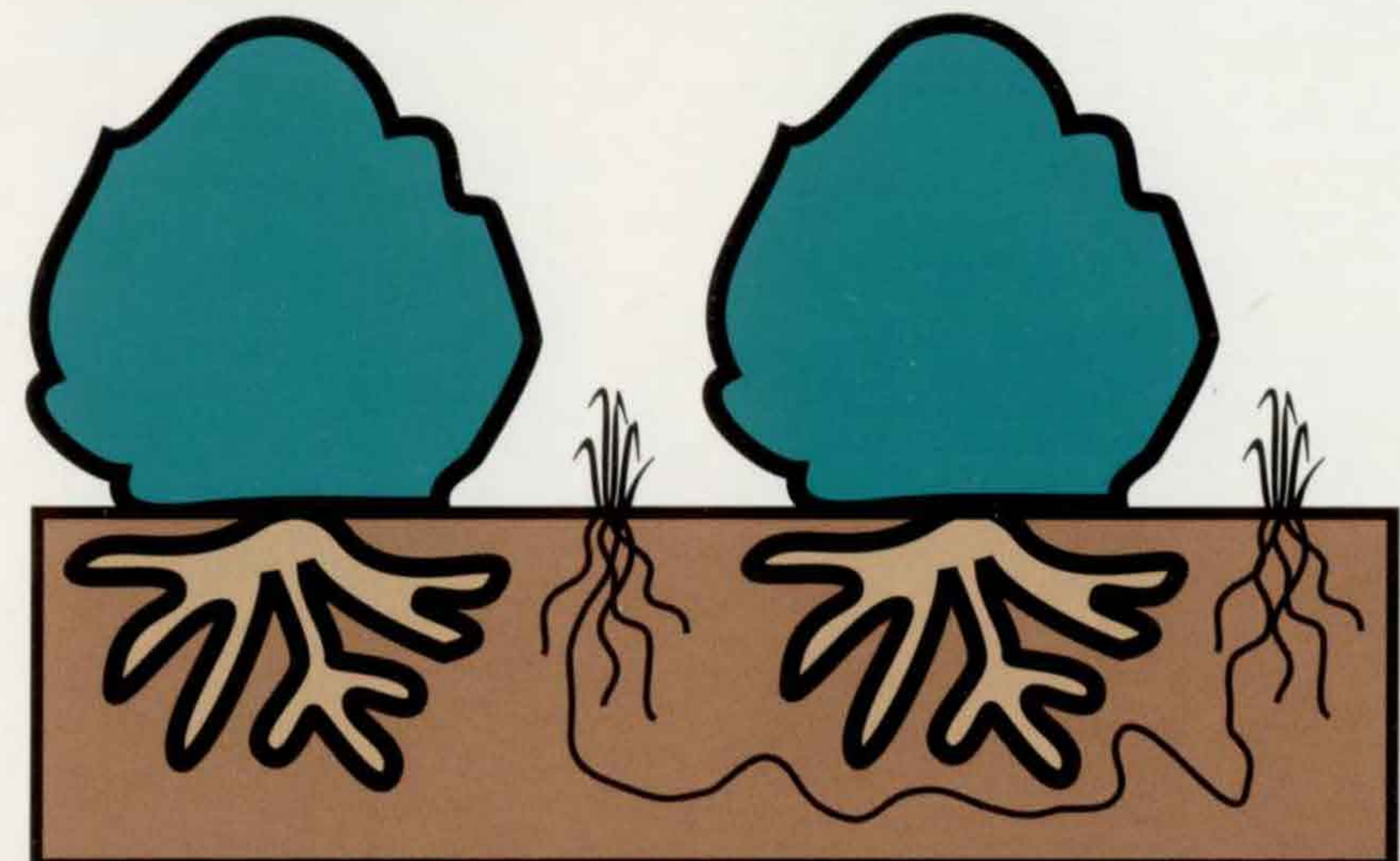
LESCO Take-Away controls over 30 problem annual and perennial grassy weeds. It is labeled for over-the-top application on over 300 species of ornamental plants — that's three times as many ornamentals as competitive products!

## Systemic



Take-Away moves quickly from treated foliage to all growing points and destroys the entire grassy weed plant— shoots, roots, rhizomes and stolons. Take-Away is rainfast one hour after application.

## Fast Acting



Growth of treated grass virtually ceases within 48 hours after application. Grass will show symptoms of loss of vigor, yellowing or reddening. Death of grass usually occurs within 1-3 weeks, depending on species and environmental conditions.

To Order, contact  
your LESCO sales  
representative or call  
**(800)321-5325.**

**LESCO**

ESTABLISHED 1962

20005 Lake Road  
Rocky River, Ohio 44116

Fertilizers, Seed, Control  
Products, Equipment, Parts

## Take away the competition!

Give ornamentals a fighting chance! Grasses compete with ornamentals for moisture, light and nutrients and can also harbor insects and disease-causing organisms. Take-Away removes this threat without injuring desirable plants.

Take-Away controls over 30 annual and perennial grassy weeds including tough-to-control perennial grasses like bermudagrass, torpedograss, quackgrass, johnsongrass, kikuyagrass, guineagrass.

## Cut costs!

Take-Away reduces the need for expensive handweeding. It requires only an over-the-top spray application for quick results.

Apply LESCO Take-Away to actively growing grasses before they reach the maximum size and before tillering and/or seedhead formation. Always use a wetting agent like LESCO Spreader Sticker for better adhesion and improved performance. Rainfall or irrigation occurring one hour or more after application will not affect performance.

Refer to label for specific application rate information. Always read and follow label directions when applying any chemical product.



**LESCO**

**Take-Away<sup>TM</sup>** 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.

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

CONTENTS: 1 GAL.

Systemic Herbicide for Selective Postemergence Grassy Weed Control in Ornamentals.

ACTIVE INGREDIENT:  
Fluazifop-p-butyl  
Butyl (R)-2-[4-[[5-(trifluoromethyl)-2-pyridinyloxy]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.**

#019230

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

**LESCO**

**Take-Away<sup>TM</sup>** 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  
EPA Est. No. 44616-M0-01

NET CONTENTS: 16 FL. Oz.

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INERT INGREDIENTS.....87.00%  
TOTAL.....100.00%  
\*LESCO Take-Away Grassy Weed Herbicide contains 1 pound (+) isomer (fluazifop-p-butyl) per gallon

Manufactured for:  
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#019280

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Golf Course Superintendents  
**New CRUSADE Insecticide**  
Protects All Your Turf





# CRUSADE<sup>®</sup> 5G

Granular Insecticide



ow golf course superintendents have a protective shield against economically-draining pests - new CRUSADE<sup>®</sup> 5G granular insecticide. ♣

Extensively tested by university researchers and golf course superintendents, CRUSADE insecticide consistently delivers superior efficacy. Against a broad spectrum of turf insects, including white grubs, cutworms, mole crickets, sod webworms, and chinch bugs. ♣ CRUSADE is nonphytotoxic, and can be easily applied to both warm and cool season grasses on all areas of the golf course. From tee to green. And its performance is not affected by microbial degradation. ♣ CRUSADE 5G insecticide. Effective, flexible, gentle...on all your turf. For golf course superintendents, it's the only crusade. For turf pests, it's the last crusade. ♣ For more information contact your authorized distributor for CRUSADE, or call ICI Product Information at 1-800-759-2500.



**Professional Products**  
Wilmington, Delaware 19897

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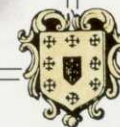
Granular Insecticide

Offered by **LESCO** Contact your sales representative or call 1-800-321-5325

Apply turf chemicals sparingly and according to label directions.

CRUSADE<sup>®</sup> is a trademark of an ICI Group Company.

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By special arrangement with the University of Florida's Institute of Food and Agricultural Sciences, the complete four-page IFAS Fact Sheet on bermudagrass decline is reprinted as a pull-out supplement.

# The Florida Green

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## Welcome!

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# TURFGRASS QUIZ

OMASCAROS



Something is terribly wrong with this green in California. A severe soil depression runs the full length of the green. The sod is parted in an irregular fashion. What's your diagnosis?

Answer on Page 34

# READ

...the fine print.

**Net Weight 61 $\frac{3}{8}$  lbs**

CAUTION: PLEASE KEEP OUT OF THE REACH OF CHILDREN. EYE CONTACT WITH CONTENTS MAY CAUSE IRRITATION. FLUSH EYES WITH WATER AS SOON AS POSSIBLE.

ProTurf Fairway Fertilizer 32-3-10 643-8408

Guaranteed Analysis

Total nitrogen (N)	32%
0.8% ammoniacal nitrogen	
24.2% urea, methylene urea, nitrogen	
6.7% water insoluble nitrogen	
Available phosphoric acid (P <sub>2</sub> O <sub>5</sub> )	9%

Scott's ProTurf

**GUARANTEED ANALYSIS**

Total Nitrogen (N)	18%
8.5% Water Insoluble Nitrogen	
9% Ammoniacal Nitrogen	
3.5% Urea Nitrogen	
Available Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )	5%
Soluble Potash (K <sub>2</sub> O)	9%
Magnesium (Mg)	10%
Sulfur (S)	8.0%
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 <sub>2</sub> O <sub>5</sub> )	4.0%
SOLUBLE POTASH (K <sub>2</sub> 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.

Manufactured by Vigoro Industries, Inc.  
Fairview Heights, Illinois 62208.

Par Ex

Down in the analysis area on every fertilizer bag, you'll find the "fine print" that tells you what the big print doesn't. Read all of it. Carefully. But most importantly, look at the percentage of Water Insoluble Nitrogen.

## Water Insoluble Nitrogen (WIN)... the key to superior turf.

The higher the WIN percentage, the longer your turf will remain green. And the less often you will have to fertilize. That's because WIN is the percentage of total Nitrogen that is truly slow release. Freeing small amounts of Nitrogen each time it's touched by water (Par Ex® with IBDU®) or activated by temperature or bacterial action (competitive products).

## No competitor can deliver as much usable WIN as Par Ex.

Only Par Ex contains IBDU — a unique Water Insoluble Nitrogen source that is 100% available to your turf in a single growing season. Consider that urea formaldehyde products (bacteria and temperature released) contain about one third of their WIN in the form of plastic polymers. Its long-term Nitrogen

release is so slow, it's almost useless, and will most likely occur during the hottest periods, just when you don't want it.

For Sulfur Coated Urea (SCU), research has shown that by the time it is spread, about 50% is immediately soluble, effectively doubling your cost of controlled-release Nitrogen and cutting the benefit in half!

## Be sure to read your bag.

If the percentage of Water Insoluble Nitrogen isn't listed, there isn't any slow-release Nitrogen. If it is listed, chances are it won't be as high as the WIN percentage in Par Ex. Even if it is, we guarantee you that 100% of what we list as WIN is available to your turf every growing season. That means for every six months of growing, you'll receive an additional 46-53% more usable WIN than our competitors can deliver.

So start building your WIN percentage today. Talk to your local Par Ex Representative or call 813/294-2567. And get all the WIN you've been reading about.



**par ex**  
THE EX STANDS FOR EXCELLENCE



# Research green dedicated to a very dedicated man

**I**t was an honor to dedicate the FGCSA Research Green at the Fort Lauderdale IFAS Research Center to the memory of Otto Schmeisser.

The event was made even more enjoyable because two of Otto's four daughters, Karen and Kris, were able to attend the ceremony. Otto was an integral part of the Palm Beach and South Florida chapters with over 30 years of service in three separate south Florida golf courses — Indian Creek GC, Gulf Stream GC and Everglades GC. He was well respected by his peers and a very likeable person.

I would like to quote the following from Kris Schmeisser: "The green was so impressive in size and structure that we are sure a tremendous amount of valuable research will be conducted at the site. He (Otto) would be very proud to be associated with this endeavor."

I would like to take this opportunity to thank everyone who has been associated with the planning and construction of this project and especially the following companies who contributed directly to the construction of the green:



Ray Hansen  
FGCSA President

American Peat & Soil  
Estech, Inc.

Lantana Peat & Soil  
Bilberry & Associates  
Florida Rock & Sand

Pifer, Inc.  
Boynton Pump

Golf Ventures  
South Florida Grassing

Central Florida Turf  
Hector Turf

Swiftline Trucking  
D & K Sprinkler  
I.F.A.S.

W. W. Googe Trucking  
DeBra Turf  
ISS Landscape Mgmt.  
Williams Pump Service

# TURF NEWS

## ROUNDUP

### FGCSA research green dedicated to memory of Otto Schmeisser

The IFAS Field Day March 28 was the perfect setting for the dedication of FGCSA's Otto Schmeisser Research Green.

As over 500 attendees were guided in groups around the research plots, Dr. Monica Elliott gave each group a history of the green and its intended purpose, which is to provide a field research laboratory that simulates a golf course putting green.

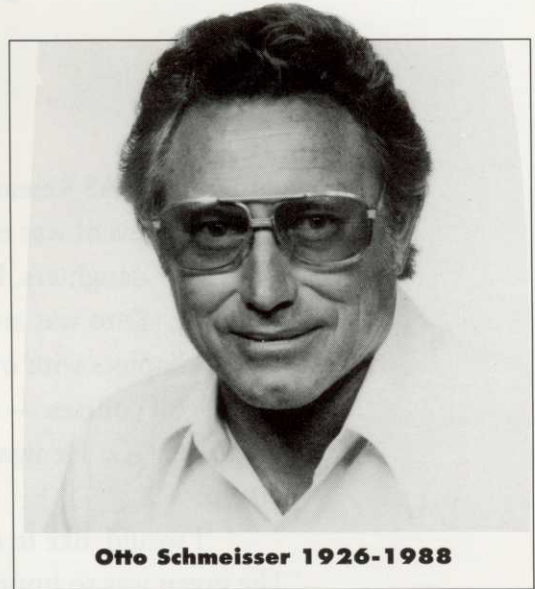
Research on the green will include evaluation of products and the effects of current management practices on the environment; and the development of new management practices.

She detailed the FGCSA's involvement in building the green and its support for the research station.

Meanwhile, Dr. John Cisar explained the first USGA-funded research that he was conducting on leachate studies on a USGA Spec Green.

At the conclusion of the tour of the test plots, the field day attendees gathered at the Otto Schmeisser Research Green as FGCSA President Ray Hansen opened the dedication ceremonies.

Paul Crawford, a member of the FGCSA Research



**Otto Schmeisser 1926-1988**

Committee and friend of the Schmeisser family, outlined Otto's career as a golf course superintendent. Schmeisser's two oldest daughters, Karen and Kris, represented the Schmeisser family and thanked the FGCSA for the honor bestowed on their late father.

Otto Schmeisser was a golf course superintendent from the Old Tom Morris mold: a professional with

#### ALSO

Florida Legislature approves \$350,000 matching funds to build Envirotron ... 11

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Gov. Lawton Chiles considers a new version of the just-defeated water tax that could cost each golf course \$30,000 annually ..... 14

Alabama state employees invest retirement funds in golf course development ..... 15



MIKE BAILEY

Gathered around the monument, from left, Mark Jarrell, CGCS, FGCSA secretary/treasurer; Kris Schmeisser; Paul Crawford, FGCSA research committee; Karen Schmeisser; Ray Hansen, FGCSA president; Kevin Downing, CGCS, FGCSA research committee.

a strong work ethic learned from his horticulturist father, Hans.

Otto was a creative, curious man who created a lifestyle out of his profession as he and wife Trudy raised their four daughters — Karen, Kris, Kim, and Katy. The family always lived on the golf courses where Otto was employed. That included tenures at Normandy Shores G.C., the Gulfstream Club, Indian Creek G.C., and the Everglades Country Club.

Karen and Kris recalled the wonderful, unique years of growing up with golf courses as their backyards. They feel quite at home whenever they visit golf courses, because those visits bring back happy memories of riding the golf courses in the evenings with their dad.

The sisters did admit that at the time they did not really appreciate the complexity of Otto's work. It was not until much later that they were aware of the demands that managing a golf course placed on their father.

All of the daughters have been associated with the turf industry in some way over the years. The common thread has been selling turf supplies.

However, only Kris and Katy are still involved to varying degrees. Kris is the publisher of the Georgia GCSA's magazine, *Through The Green*, and she works with the Mike Young Golf Course Design company in Georgia.

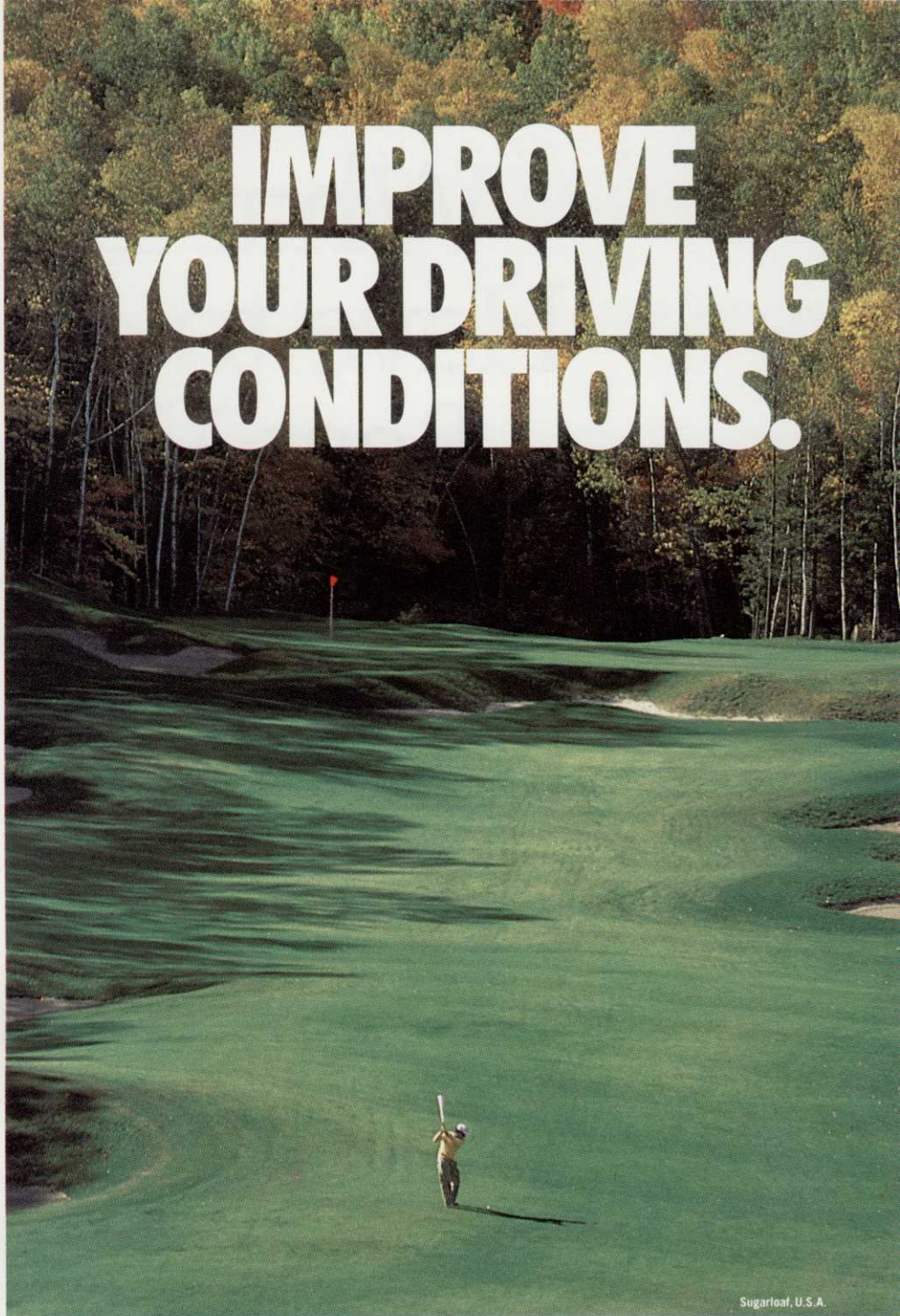
Katy is a landscape architect, managing a horse farm near Athens, Ga., with her mother, Trudy, while working on her masters degree in agronomy. Currently, Karen and Kim are busy raising families in Cocoa Beach and Germany.

Otto Schmeisser was one of the pioneering founders of the FGCSA. He was the prototype professional superintendent. The FGCSA is proud to dedicate the new research green in his memory.

### **Basic genetic research wins \$4,000 Musser grant for Tennessee doctoral student**

Developing techniques to transfer desirable traits from one plant to another has earned a \$4,000 scholarship for a 26-year-old doctoral candidate at the University of Tennessee in Knoxville.

# IMPROVE YOUR DRIVING CONDITIONS.



Sugarloaf, U.S.A.

## **ORTHENE® Turf, Tree & Ornamental Spray keeps pests out of your club.**

Stop pests from playing a round on your course with ORTHENE Turf, Tree & Ornamental Spray. One treatment provides a broad spectrum of protection for turf as well as a wide variety of trees and ornamentals.

ORTHENE kills quickly on contact, then by systemic action. So you'll keep hard-to-kill pests like mole crickets, armyworms and leafhoppers under

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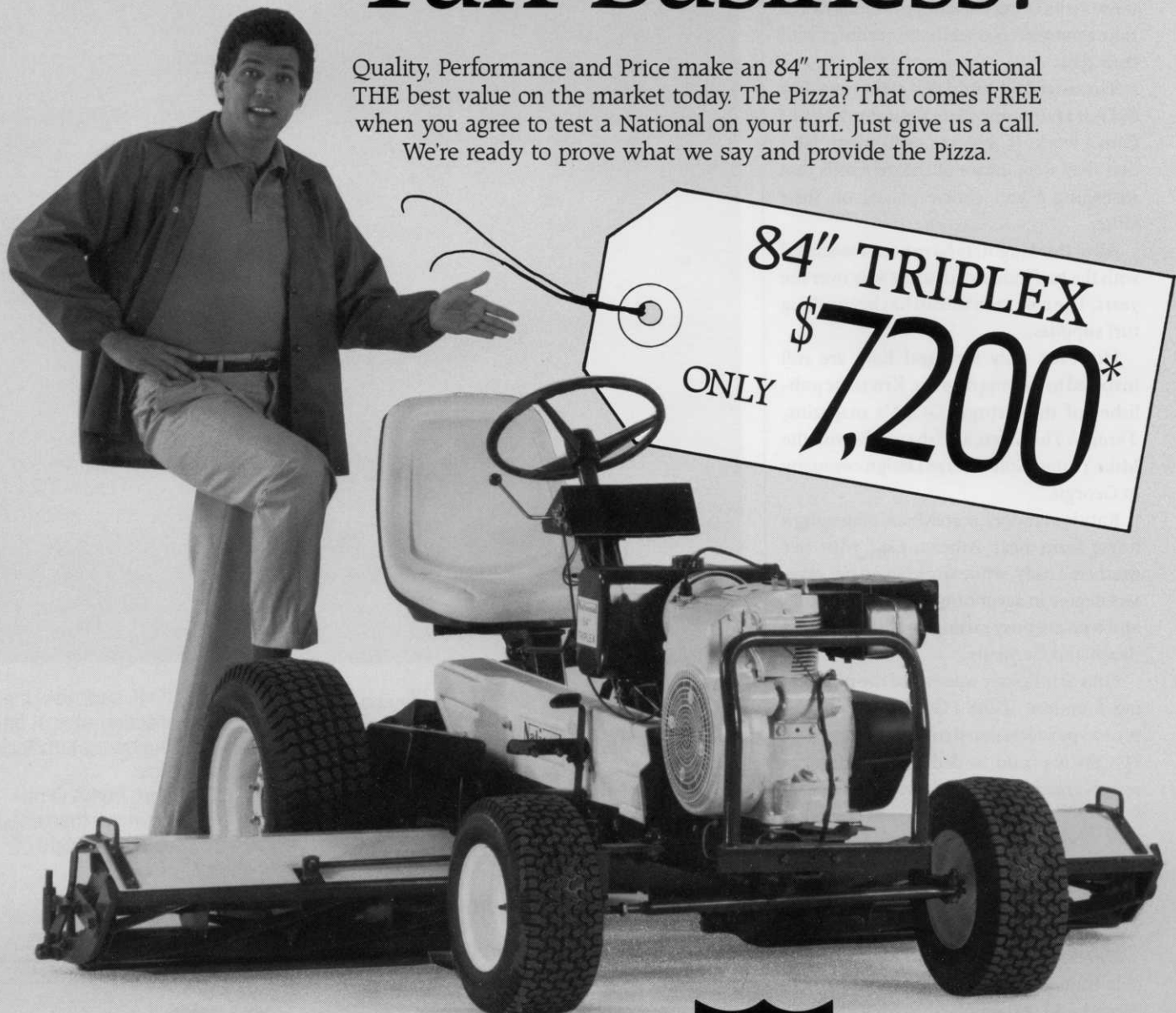
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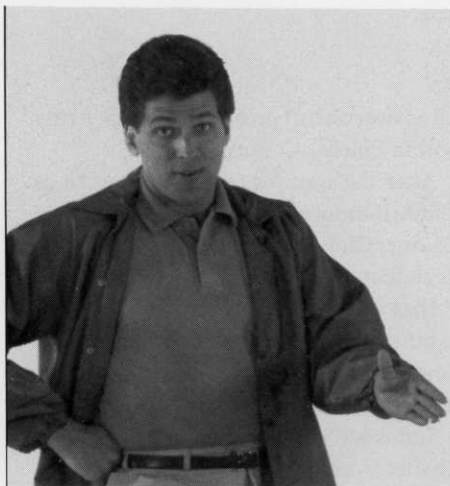


\*Does not include sales tax, freight, or dealer prep; suggested price in U.S. dollars. Price may vary with dealer and region.



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(904) 387-0516

### ORLANDO/LAKE MARY

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### SARASOTA

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Industrial Equip. Co.  
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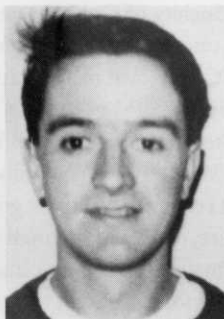
### TAMPA

Debra Turf &  
Industrial Equip. Co.  
6025 U.S. Highway 301  
(813) 621-3077



**NATIONAL MOWER COMPANY**  
700 Raymond Avenue  
St. Paul, Minnesota 55114  
(612) 646-4079

James E. Bond, a native of England, was awarded the 1991 Musser International Turfgrass Foundation's graduate scholarship to complete studies that are "of tremendous benefit to turfgrasses," according to Dr. Lloyd M. Callahan, a University of Tennessee professor in charge of a DNA research program in the department of Ornamental Horticulture and Landscape Design.



James Bond

As a direct result of Bond's work, "highly desired traits such as cold-hardiness, herbicide resistance, disease resistance, among others, can be introduced into desired turfgrasses that do not possess this trait," wrote Callahan in nominating Bond for the scholarship.

"This technology is essential for genetic engineering of plants and the related improvement of crop species," echoed Dr. Peter M. Gresshof, who holds the Racheff Chair of Excellence in plant molecular genetics at the University of Tennessee. "(Bond's) progress has been excellent despite the intellectual and scientific challenge of the research."

The Musser International Turfgrass Foundation was formed by graduates of the turfgrass programs at Penn State University to fund basic turfgrass research through fellowships to outstanding graduate students completing their doctoral work in turfgrass science. It honors the late Dr. H. Burton Musser, turfgrass researcher and educator who developed Penncross creeping bentgrass during his four decades at Penn State.

The organization is funded primarily by contributions from individual golf course superintendents and grants from companies in the turfgrass industry.

### Legislature OKs matching \$350,000 for Envirotron

As expected, the Florida Turfgrass Research Foundation has received \$350,000

in matching funds from the State of Florida for its new Envirotron research facility.

"What made the funding announcement even better was the positive spirit in which the money was awarded," said Bob Yount, executive director of the FTRF and its parent organization, the Florida Turfgrass Association. Yount said he received several indications that legislators genuinely recognized the critical need for an advanced research facility.

The Envirotron — a facility combining a rhizotron, phytotron and laboratory — will become the state's first designated "Environmental Research Unit." It will be built on the University of Florida campus at Gainesville.

Top scientists will be recruited to join UF researchers to investigate many basic questions, including the effects of pollutants in groundwater; the effects of herbicide, fungicide and pesticide on the environment; the breeding of new grasses requiring less water; and the furthering of biological control methods for turfgrass pests.

Water conservation strategies, including the use of recycled water for irrigation, also will be investigated.

The university's Land and Engineering Division will examine three possible sites for the Envirotron.

According to Yount, the early favorite is a site just west of the main campus, next to the entomology and nematology building and across the street from Fifield Hall, which houses the Environmental Horticulture Unit.

Utilities already exist at that site, according to Yount.

Whichever site is selected, construction could begin by late this summer and should take no more than 18 months.

The FTGA was able to raise its \$350,000 share "because of a unified funding campaign through the effort of FTGA members, Florida Golf Course Superintendents Association and many other private organizations, clubs and individuals," Yount said.

"We really appreciate the efforts of the various FGCSA chapters and members who helped us reach our goal.

"This effort was possible only because of the desire of all those in Florida's turf in-

dustry to advance the industry without sacrificing Florida's sensitive environment or natural resources.

"Accurate scientific data will now be available to all Floridians who want a green Florida but not at the risk of damaging our environment."

**Pioneer Florida architect Mark Mahannah, 85, dies**

"I've never seen a hole I couldn't get an eight on," was the way Mark Mahannah, one of Florida's leading golf architects in the post-war construction boom, described his playing prowess.

The prolific superintendent-turned-architect, who designed playable golf holes that probably yielded more pars than eights, died at his home in Nakomis March 18.

Charles Mark Mahannah Sr. was 85.

A native of Delta, Iowa, Mahannah came to Florida as a small child in 1910. His

family was one of the early residents of Fort Lauderdale. He attended the University of Florida and began designing courses in 1946.

Mahannah died with more than 80 course designs to his credit, according to the American Society of Golf Course Architects. He was one of the pioneer members of the ASGCA, elected in 1961 and named a Fellow in 1976.

*The Golf Course* by Geoffrey Cornish and Ron Whitten, the generally accepted standard reference work for golf course architecture, credits Mahannah with 46 original designs in Florida and another 13 major renovations. (See list, opposite page.)

Mahannah's first job was on the construction crew for William S. Flynn at Boca Raton Hotel and Country Club. He later was on the maintenance crew at Miami Biltmore Country Club, becoming its head greenkeeper in the early 1940s. The club was closed during World War II, and Mahannah spent the duration as a techni-

cal adviser on turf problems at a U.S. Army post in Pinellas County.

After the war, he renovated one 18 at Miami Biltmore, which reopened as Riviera Country Club, and then served as its superintendent.

His experience at restoring the course led to other contracts, which he handled part-time until the early 1950s, when he resigned to practice design full-time.

Survivors include two sons, architect Charles Jr. and Gary; a daughter, Suzanne; seven grandchildren and five great-grandchildren.

**P.J. Boatwright, USGA's 'Mr. Rules,' dead at 63**

P.J. Boatwright, Jr., executive director for rules and competitions of the United States Golf Association, died April 5 in Morristown, N.J. after a six-month battle with cancer. He was 63.



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Key Largo .....	1951
<b>Key Biscayne Hotel GC</b>	
Miami Beach .....	1954
<b>Plantation Hotel GC</b>	
Crystal River .....	1958
<b>Rio Pinar CC</b>	
Orlando .....	1958
<b>Kings Bay Y&amp;CC</b>	
Miami .....	1959
<b>Lake Venice CC</b>	
Venice .....	1959
<b>Lost Tree Club</b>	
Singer Island .....	1960
<b>Royal Palm Beach G&amp;CC</b>	
Royal Palm Beach .....	1960
<b>Homestead AFB GC</b>	
Homestead .....	1961
<b>Sandpiper Bay CC (Sinners)</b>	
Port St. Lucie .....	1961
<b>Key Colony GC</b>	
Key Biscayne .....	1962
<b>Residential CC</b>	
North Miami Beach .....	1962
<b>Greynolds Park GC</b>	
Miami Beach .....	1964
<b>Haulover Beach GC</b>	
Miami .....	1964
<b>Okeechobee G&amp;CC</b>	
Okeechobee .....	1966
<b>Sun City Center G&amp;CC (South)</b>	
Sun City Center .....	1967

<b>Boca Teeca CC</b>	
Boca Raton .....	1968
<b>Cocoa Beach Municipal</b>	
Cocoa Beach .....	1968
<b>Indian Trail CC</b>	
Palm Beach .....	1968
<b>Calusa CC</b>	
Miami .....	1969
<b>Jacaranda CC East</b>	
Plantation .....	1970
<b>Mirror Lakes CC</b>	
Lehigh Acres .....	1970
<b>Fountainbleau Park CC</b>	
Miami .....	1971
<b>Miles Grant CC</b>	
Stuart .....	1972
<b>El Conquistador CC</b>	
Bradenton .....	1973
<b>Jacaranda CC West</b>	
Plantation .....	1975
<b>Jacaranda West CC</b>	
Venice .....	1976
<b>Isla del Sol GC</b>	
St. Petersburg .....	1977
<b>Fountainbleau Park West</b>	
Miami .....	1979
<b>Ventura CC</b>	
Orlando .....	1980
<b>Caloosa CC</b>	
Sun City Center .....	1981

<b>Hillcrest East GC</b>	
.....	?
<b>Renovations</b>	
<b>Biltmore Hotel (Riviera CC)</b>	
Coral Gables .....	1946
<b>Naples Beach Hotel</b>	
Naples .....	1953
<b>Riviera CC</b>	
Ormond Beach .....	1954
<b>Hollywood Beach Hotel CC</b>	
Hollywood .....	1955
<b>Westview CC</b>	
Miami .....	1955
<b>Tarpon Springs CC</b>	
Tarpon Springs .....	1957
<b>Crystal River CC</b>	
Crystal River .....	1958
<b>Everglades Club</b>	
Palm Beach .....	1958
<b>Gulfstream GC</b>	
Delray Beach .....	1960
<b>Sun City Center North</b>	
Sun City Center .....	1972
<b>Palma Ceia G&amp;CC</b>	
Tampa .....	1979
<b>Normandy Shores GC</b>	
Miami Beach .....	?
<b>Port Charlotte CC</b>	
Port Charlotte .....	?

Source: The Golf Course and Golf Guide to the South



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One of the most prominent and influential personalities in golf, Boatwright is perhaps best known to golf course managers as the man who personally supervised the preparation of golf courses for USGA championships and who personally selected the pin placements each day.

A native of Augusta, Ga., he grew up in Spartanburg, S.C., and became an accomplished player, winning the Carolina Amateur in 1951 and the Carolina Opens of 1957 and 1959. He played in four U.S. Opens, making the cut at Merion Golf Club in 1950, the site of Ben Hogan's comeback from serious injuries suffered in an automobile accident.

He left his post as executive secretary of the Carolina GC in 1959 to become assistant director of the USGA. He was named executive director 10 years later, succeeding Joseph C Dey Jr., who had resigned to become first commissioner of the PGA Tour.

Ironically, Dey succumbed to a long illness less than a month before Boatwright died.

Boatwright is survived by his wife, Nancy;

two daughters, Cindy and Carolyn; a son, P.J. Boatwright III; and three grandchildren.

**Governor considers water tax; could cost each course up to \$30,000 annually**

A water tax proposed by the Florida Legislature would have a "staggering" effect on the state's golf industry, according to Bob Yount, executive director of the Florida Turfgrass Association.

The proposal calls for a 10-cent tax on every 1,000 gallons over a water-user's allotment, with the money funding water conservation studies and practices. Courses using effluent would not be affected.

"I think it's an idea we've got to pursue and see what the implications are," said Lt. Gov. Buddy MacKay in an Associated Press story May 12.

A proposal for a similar tax was shot down by Florida lawmakers this year. That proposal's sponsor, Rep. Sandy Safley, R-Clearwater, met with Gov. Lawton Chiles and MacKay early in May.

"The governor thinks water will be the issue of the decade and seemed very supportive of the fee idea," Safley said.

Raymon Finch, owner and developer of Emerald Dunes GC in West Palm Beach, said the bill is aimed primarily at the agricultural industry, the state's biggest water user, but will cost most Florida courses an additional \$20,000 to \$30,000 annually.

"We're opposed to (Safley's) bill," said Bobby Brantley, executive director of the Florida Golf Council. "Its supporters hope the tax will encourage golf courses to speed up the process of hooking into reclaimed water systems.

"We want to do everything we can to help conserve water. But we don't want the state mandating that everyone use reclaimed water when there isn't enough available. It's not fair to begin taxing courses if the reclaimed water isn't there."

The Florida Golf Council favors further study on the availability of effluent use before imposing any new taxes. At the very least, Brantley expects the state's water management districts to soon begin requiring courses to use reclaimed water

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where it's available. A new tax, while not a certainty, is a definite possibility, he added.

Finch and Brantley fear any new tax would not stay at 10 cents very long.

"I was in the Legislature for eight years and served as lieutenant governor for four," Brantley said. "In my experience, it's very rare that a tax is ever replaced or reduced. Once it's on the books, the only way it usually goes is up."

"We need to conserve water," Yount said. "We don't oppose a tax as long as it is equitable."

Making the tax equitable requires taking a course's seasonal watering needs into consideration, Yount said. Monthly allotments should be higher when courses traditionally need more water — during the summer, while overseeding or when growing in new grass — and lower when the need drops.

The state's water management districts and the Legislature have been very cooperative, Yount said.

"We've met many times. It's a foregone conclusion we must consider something like this to conserve water," he said. "But the golf industry produces a lot of revenue. People are starting to realize the importance of golf to the state. We want to be viewed as part of the solution, not the problem." (Adapted from *Golf Course News*)

### **Alabama state employees investing retirement funds in public golf courses**

When Bobby Brantley has secured the golf industry's water flank, another project awaits the executive director of the new Florida Golf Council: encouraging the state to get more directly involved in golf course development.

For instance, Alabama state employees are investing some of their retirement funds in the construction of 12 championship-caliber courses around the state.

"This project represents a major breakthrough for Alabama golf," said Dr. David Bronner, CEO of Retirement Systems of Alabama. "We've known for a long time that golf courses are a sound investment, so we've taken a leadership role in their development and construction.

Each site will feature three courses —

two regulation-length and one par three for a total of 54 holes. The courses are scheduled to begin opening this fall.

Development of the golf courses fits Bronner's overall goals for the state.

"Our priority is to improve the quality of life and attract more tourists and retirees to Alabama... and golf is the ideal means to achieve our objectives," he said.

To oversee its golf development business, RSA formed Sun Belt Golf, Inc., which is headed by former golf pro Bobby Vaughan.

"Each facility will be capable of hosting a major championship event," Vaughan says. "We're not building public courses, but great courses the public can play on."

Sun Belt Golf, which constructs, owns and operates the courses, has been successful in having municipalities and developers donate land at each site. "We haven't had to buy an acre yet," Vaughan says.

As an example, he points to the 8,000-acre Birmingham site donated by U.S. Steel. Once the land was secured, the city of Birmingham provided the infrastructure, including roads and sewage treatment. Other land has been donated in exchange for the option to build housing.

Each site is unique, according to Roger Rulewich, chief designer for Robert Trent Jones Sr.

"In designing each of the 12 courses, we highlighted the area's outstanding natural beauty," said the former president of the American Society of Golf Course Architects.

While the first 12 courses are under construction, Sun Belt President Vaughan continues discussions with other municipalities and developers for the construction of additional Alabama courses.

But they may not stop at the border.

"We have the financial backing, architectural team and experience to expand the program nationally," said Vaughan. "We hope someday soon, golfers in every state will be able to tee it up at a local course while contributing to the retirement funds of Alabama state employees."

Perhaps the administrators of Florida's retirement funds should take a long look at the Alabama model and put the state's \$5.5 billion industry to work for Florida employees.

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*Robert Trent Jones Jr. moved two million cubic yards of dirt at Weston Hills CC in western Broward County to produce a very playable golf course in his first Florida effort.*

# Jones gets it

BY KIT BRADSHAW

Robert Drake is just about the happiest man you're going to find.

His "office" is Robert Trent Jones Jr.'s first golf course in Florida: Weston Hills Country Club west of Fort Lauderdale.

During his career, he has had the opportunity to grow in three

different Florida courses.

And he is working to get a junior program at Weston Hills using three outlying holes so kids like his sons, Matthew and Thomas, have a place to learn the game.

Things couldn't be better for this Indiana-born golf course superintendent.

He's particularly happy about his involvement with Jones during the



# right the first time

construction of Weston Hills. It gave him the chance to make suggestions on the final shaping, and some of the characteristics of the course reflect his input to the architect.

"I'd ask Bobby to gentle a grade so I could mow it easier, and if he could, he would do it," Drake says. "If it interfered with the shot values, then he would keep it the way it was. The important thing from my standpoint is that Bobby took the time to listen.

"Gary Linn (Jones' senior designer) says Bobby spent more time at this course than any he's done in the last three to five years," Drake says. "His dad practically lives in his back yard down here, and Bobby wanted to do this course particularly well. I was lucky to be involved so early in the construction process and have a chance to work with Bobby."

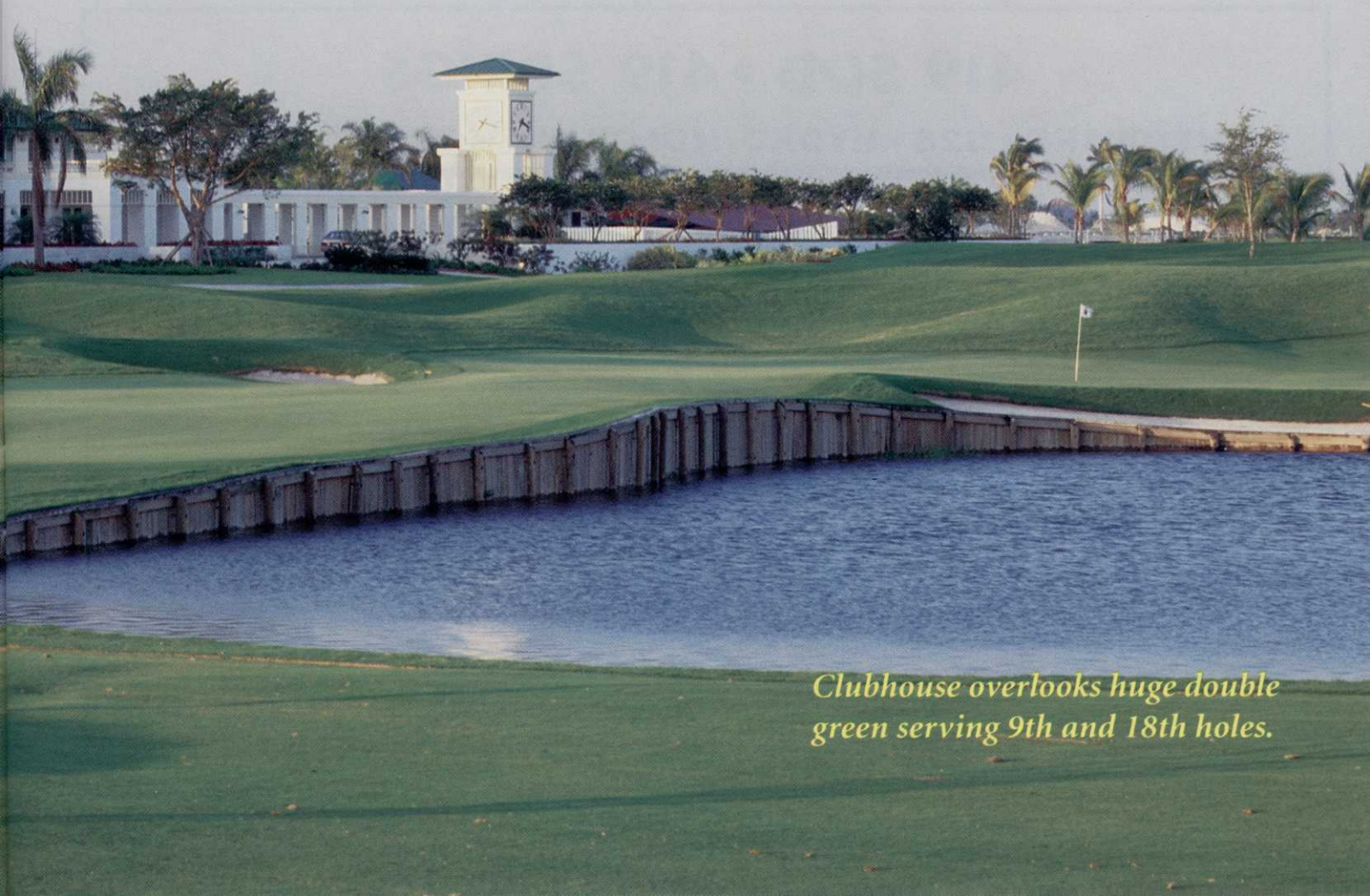
From a golfer's point of view, Drake likes the Weston Hills

course.

"I've been on a lot of golf courses in the area, and on some of them, each four-par looks a lot like the one you played before. Here, every hole is distinctive. It's a refreshing situation to be in.

"And Bobby made this course so people can really play on it. You don't have to carry impossible shots over water like you do on some courses.

"Even though Bobby started with essentially flat property and moved



*Clubhouse overlooks huge double green serving 9th and 18th holes.*

close to two million cubic yards of dirt, the course looks as though it's been here quite a while.

"We've got 75 sand traps, ranging in size from 800 square feet to about 15,000 square feet and water on 11 of the holes. The course kind of lulls you for the first four holes—there's no water on them—and then there's water on the rest of the nine, and on five of the back holes.

"Actually, the water on 5,6,7,8 and 13,16, and 17 is all the same lake. It's kind of a moat around the property. That makes the course really interesting."

Weston Hills is Drake's third opportunity to be involved with construction of a course. After attending Purdue University and then graduating from Lake City Community College, he worked briefly at Deer Creek Country Club before helping to build the executive course at Boca Del Ray in Delray Beach.

In 1984, Drake went to Stonebridge Golf and Country Club in Boca Raton, where he

helped build and grow in that course.

For a short time, he worked for Aquaturf but, as he says, "I discovered I couldn't function without a farm to take care of."

His "farm" is now Weston Hills Country Club, where he and his staff of 20 take care of the golf course area and the common grounds of the community.

Despite some severe slopes at the course, Drake says Weston Hills is not an overly difficult course to maintain.

"We have 419 bermudagrass on the tees, fairways and roughs and Tifdwarfbermuda on the greens, with bentgrass overseeding in the winter," Drake says. "For the most part, the course is pretty straightforward. On the severe slopes, the crew uses 21-inch, self-propelled rotary mowers. With a two-cycle engine, they can run on an angle without damaging the motor.

"One of the things that makes the course easy to maintain is the way it was designed to allow for homes, but without the tunnel effect you get on a lot of courses that have

homes on both sides, or water on one side and homes on the other. The homesites were planned so that they are inside the course, and almost all the houses have a golf or lake view or both. But they look across two or three holes. They have the view, but they aren't right against the course," Drake says.

"This means that the golfers don't have to alter a shot because the homes are along one side. At some courses, you are afraid if you slice the ball, you'll wind up in someone's swimming pool."

Drake says the location of homesites allowed Jones to create parallel holes. "It not only makes it easier to pull a gang mower through these holes, but it gives the course a nice feel — like you get when you play some of the older courses up north," Drake says.

To keep the course irrigated, Drake has 1800 irrigation heads and 104 satellite clocks, about double the number of heads he has operated on other courses. The irri-

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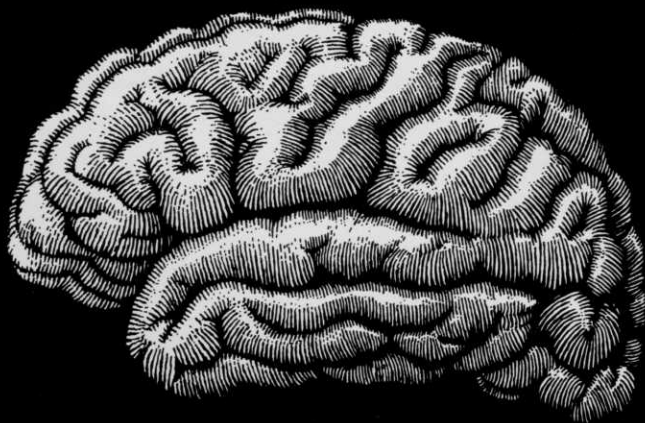
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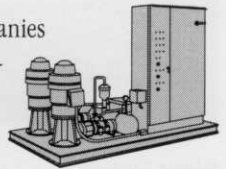
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**Robert Drake**

**Age:** 35

**Education:** Attended Purdue University  
Graduated from Lake City Community College

**Current Position:** Golf Course  
Superintendent Weston Hills Country Club, Fort Lauderdale

*“...when you’re trying to get a course playable in the short time they want it, then your involvement in organizations begins to deteriorate. I think the guys in the association understand this.”*

**Previous employment:** Assistant superintendent Deer Creek Country Club, Deerfield Beach; superintendent Boca Del Ray, Delray Beach; superintendent Stonebridge Golf and Country Club, Boca Raton; director of golf course construction for South Florida Aquaturf

**Personal:** Married 14 years to Kristy, real estate salesperson for Stonebridge; Two sons — Matthew, 9 and Thomas, 6

gation system not only waters the 18 holes that make up the Jones course, but three additional holes at Weston Hills.

These three holes — a three-, four- and five-par — were put in ahead of schedule to add to the aesthetics of the entryway, but Drake sees them as an ideal spot for junior golfers.

Drake also had a few more immediate and long-term goals.

For one thing, he would like to become more active with the FGCSA. “I was involved before I came to Weston Hills, but when you’re trying to get a course playable in the short time they want it, then your involvement in organizations begins to deteriorate. I think the guys in the association understand this. But now that the tough stuff is out of the way, I can participate more.”

He’d also like to upgrade his facilities at

*Tunnel between 9th and 10th holes provides visual interest.*



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*Fountaingrass juts into both the 10th (above) and 11th (cover) fairways, lending strategic as well as visual drama.*

*Huge waste bunker bordered by rocks protects the 17th fairway from the moat which meanders throughout the course. Note tower reflected in water.*







*A few mature trees tie the property to its botanical past.*

Weston Hills, and have a more permanent home for the maintenance equipment.

“Right now, we’re working at a severe disadvantage because we’re in temporary facilities about a mile from the course. I’ve rented a trailer to keep the pesticides in, but I have no place to store fertilizer and no cover for most of the machinery. The sun is really taking a toll on the equipment, and we have to wax it every rainy day we get to protect it from the elements.”

And finally, Drake wants to be involved in yet another course. “Those three holes are the beginning of the next course, and I want to be around when they build that course,” Drake says.

“I think I have the best of all worlds. My uncles were farmers, and even though my dad didn’t farm, I think farming is in my blood. I get to farm and I get to play the best golf courses, strictly for inspection purposes, of course. I’ll never be rich, but as long as I can keep working on golf courses, I’ll always be a happy camper.”

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# Who's away

# ?

*(And what's he putting for?)*

BY JOEL JACKSON, CGCS

**W**ho's away? What's he putting for?

Those were the questions that crackled again and again over Roger Halak's headset as he worked as a spotter during the PGA Seniors Championship last month at the PGA National Club in Palm Beach. His partner at the 10th green, Peter Brooks, called in the scores of the players after they finished the 10th and made their way to the 11th tee.

Halak is assistant superintendent at Boca Del Mar GC in Delray Beach and Brooks, CGCS, is superintendent at The Everglades Club in Palm Beach.

Members of the Palm Beach chapter of the Florida GCSA collectively have earned a reputation as savvy, knowledgeable spotters during ESPN's coverage of the Oldsmobile LPGA Classic at Wycliff C.C. and NBC's coverage of the PGA Seniors Championship.

In fact, they have done such a good job that Lou Safrin, a freelance television producer who has been organizing and coordinating spotters and score reporters at golf events for the past 10 years, wants the

superintendents back next year.

He also invited the Palm Beach crew to handle the Disney Classic in October and the TPC at Eagle Trace next year.

"The Palm Beach group worked out just great," said Safrin, who works with all the networks but mostly NBC.

"Because of their knowledge of golf and golf courses, I had a lot of confidence in their reports and answers. The guys knew where to look and what to look for. It made my job a little easier because I felt comfortable that they were on top of the action.

"Besides that, the guys had a lot of fun doing it."

Using a superintendent chapter has another advantage for Safrin: one-stop shopping.

"Sometimes I have to use three or four contacts to get enough people to meet my needs," he said.

Among his other sources for spotters are collegiate golf teams and local amateur golf associations.

Although flattered by the offer to work the tournaments out of Palm Beach County, Paul Crawford, Palm Beach GCSA external vice president, advised Safrin that other FGCSA chapters around the state could provide equally qualified spotters.

*Members of the Palm Beach GCSA earned \$5,200 for scholarships and research by working as spotters at two televised tournaments*



PAUL CRAWFORD/PALM BEACH GCSA

*Peter Brooks, CGCS, left, and Roger Halak on the 10th green at the PGA Seniors Championship.*

Crawford suggested that a core group of experienced spotters go to the Disney event this fall to help coach and train the Central Florida group and help establish contact with the networks.

Golf tournament organizers provide volunteers for most tournament operations, but the television networks must provide their own communications personnel, and that's where the Palm Beach chapter members come in.

Rich Brogan, formerly superintendent at the Polo Trace Club in Delray Beach, was contacted by Safrin and asked if he could find about 20 people to help with the February LPGA event at Wycliff CC in Lake Worth. He said ESPN would donate \$2,500 to the Palm Beach GCSA for scholarships in return for services rendered.

Brogan took the proposal to the Palm Beach Chapter and the members agreed to participate. Because of a very close contact with the tournament director of the Wycliff event, the chapter was able to buy time to air a GCSAA TV ad for only \$500 and get credit for the members' work during the telecast.

**I**mpressed by the group's efforts, Safrin contacted Brogan a few weeks later to see if the Palm Beach superintendents would be willing to work for NBC at the PGA Championship in April.

Brogan had left the area and he passed the baton to Crawford. This time the Palm Beach Chapter netted a \$2,700 donation

for scholarships and research.

The routines at each tournament were slightly different.

At the LPGA event, 10 spotter-scorer teams walked the back nine with assigned groups of players. The spotters reported scores, club selections, situations, difficulties, etc., back to the control booth so they could track and report the most important action going on. The scorers called in the scores for each player at the completion of each hole.

At the PGA Seniors event, the spotters were stationary — assigned to tee, fairway, and green locations — but essentially reporting back the same critical information needed to produce a logical, coherent, and interesting telecast of the event.

Each location had a coded receptacle for



FGCSA

Part of the crew at the PGA Seniors Championship, from left, Steve Goedereis, Jeff Klontz, Mark Henderson, Paul Crawford, Dale Mitchell, Peter Brooks, Ray Hansen, Scott Spara, Richard Colyer, Brad Stuart, Vince Meade.

the spotter to plug into the “wire” that ran throughout the course and back to the “high resolution trailer.”

At each green there were two lines: one marked “Away” and the other marked “Score.”

Safrin and his wife, Patti, are responsible for the “high resolution board” in the “High Res” trailer, which provides the updated scores and information shown at commercial “cuts.” Lou handles the “Away” line and Patti oversees the “Score” line. This freelance production couple is a fixture at many of golf’s televised events.

Each day, the spotters met at the Safrins’

trailer two hours before air time for a briefing and to receive their assignments. They were given “color sheets” to help identify the players by the color of their clothing.

At 45 minutes before air time, everyone had to be at his assigned spot for roll call. Then they got a 30-minute break. Everyone was back on line 15 minutes before air time and stayed on line for the duration of the broadcast.

At each green, the spotter on the “Away” line was responsible for providing the putting order and the score the player was trying to attain with that stroke when asked “Who’s away and what is he putting for?”

The scorer called in the scores of the players as soon as they completed play on that hole. Spotters at par-three tees and at fairway locations on par fours and par fives gave club selections and shot results when asked.

“Based on the proposed schedule of events that we know about now, we stand to raise almost \$10,000 by working these tournaments,” said Crawford.

Actually, if the FGCSA worked all 15 tour events in Florida and earned an average donation of \$2,500 per event, the association could raise \$37,500 annually for scholarships and research.

“The biggest hook is the fun we had doing it!” says Crawford. “There are guys asking if they can be assured of working at next year’s events based on their ‘seniority’ established this year!”

“There’s no reason we can’t develop this thing statewide and even nationally. With our knowledge of golf courses and our love for the game in general, superintendents are naturals to provide excellent communications to enhance televised golf events.”

“Because of their knowledge of golf and golf courses, I had a lot of confidence in their reports and answers. The guys knew where to look and what to look for. It made my job a little easier because I felt comfortable that they were on top of the action.”

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**FGCSA SPOTLIGHT**



KIT BRADSHAW

*Paul Turcotte's den in Hobe Sound is decorated with the mementos of nearly four decades of service to the Florida GCSA. He was the association's second president.*

# You're never too old to keep on learning

BY KIT BRADSHAW

What do you think Paul Turcotte would talk about in an interview?

His early affiliation with the South Florida Golf Course Superintendents' Association and his term as one its presidents?

His presidency of the state association?

The fact that he's attended more than 25 national GCSAA conventions, including the last one in Las Vegas?

No, the winner of the FGCSA President's Award for lifetime achievement talks about education. He's passionate about the need for golf course superintendents to continue to learn throughout their careers.

"It's nearly impossible for a superintendent to come up through the school of hard knocks like I did," Turcotte says. "Superintendents should really consider getting four-year agronomy degrees. That's the best foundation for the job.

"If they can't do that, then they should go to Lake City Community College and get their two-year degrees. But they shouldn't think that because they have a degree they know everything. They need to study all the time to keep abreast of the changes in the industry.

*President's Award  
for  
Lifetime Achievement  
1990*

*Carl McKinney  
Bud Quandt  
Bob Sanderson  
Paul Turcotte  
Adam Yurigan*

"I know these young fellas say it's hard to keep up with everything. But I kept learning throughout my career. I'm retired, and I still try to keep abreast of new developments."

A native of Maine, Turcotte was working after school at a local nursery by the age of 11. When he was graduated from high school, he became the general manager of the nursery.

• *With all the changes in the regulations, with the Title III and all of it, I don't see how any golf course superintendent could stay away from local, state, or national meetings.* •

Five years later, he and his wife, Germaine, and their infant son migrated to Florida, where Turcotte worked with Exotic Gardens, a greenhouse and retail flower operation in Miami. Within a year, he had accepted the job of horticulturist for the City of Miami.

"My horticulture background was one of the best experiences I had for the work I've done all my life," Turcotte says. "It's all the same plants and turf. Horticulture became the basis of everything else I've learned."

And he has learned.

As Miami's horticulturalist, Turcotte was responsible for the citywide street tree planting program and was in charge of the plant and greenhouse nursery.

In 1959, he worked on the Melreese Golf Course, and the following year he became the superintendent of both city golf courses, overseeing a staff of 24. It was also that year that Turcotte became a member of the South Florida GCSA. He served in various capacities with the organization, becoming its president in 1970.

Turcotte was one of the founders of the state association and was its second president in 1971.

"In the early 1970s, we had the bylaws in place, and we rotated the responsibility for the presidency among the chapters," Turcotte says. "At that time, the South Florida chapter went all the way north to Vero Beach. But the organization didn't really get going until 1978, and since then, there have been tremendous changes."

During this time, Turcotte's responsibilities for the City of Miami were changing as well.

In 1972, he became the assistant director



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of the Parks Department and the golf division for the city. In this position, Turcotte oversaw the maintenance of the city's 92 parks, eight swimming pools, 60 tennis courts, two golf courses and 20 football and baseball fields, including the Orange Bowl.

The department was split in 1978 and in 1979 he was named the director of the golf division, where his responsibilities centered on the two city golf courses and the management of a staff of 50. Turcotte retired from the city in 1985.

Throughout his career, Turcotte continually honed his skills. He took correspondence courses from Cornell University in floriculture and attended yearly turfgrass management seminars at the University of Florida. He traveled throughout the country, attending seminars in turf management, irrigation and equipment maintenance.

He estimates he has attended as many as 2,500 turf meetings at the state and local level and, for more than a quarter of a century, was a faithful participant at the GCSAA national conventions and semi-

nars.

Turcotte was even involved with *The Florida Green*.

"*The Florida Green* was started by the South Florida association," Turcotte says. "I was almost thrown out of the organization when I suggested it should be turned over to the state association. But Dan Jones agreed, and now it's grown right along with the state association."

Even though he's retired to Hobe Sound, Turcotte still attends the Treasure Coast and South Florida chapter meetings.

"With all the changes in the regulations, with the Title III and all of it, I don't see how any golf course superintendent could stay away from local, state, or national meetings," Turcotte says. "There is so much to be learned, and golf course superintendents are such an important part of the industry.

"For years, we stressed that it was important for the superintendent to be involved in the beginning of a golf course, to work with the designers from the start.

"In the past, some of the designers got

carried away, and the golf course superintendent who was brought in after the course was built had to work with what was there.

"Now, this is changing. The golf course superintendent is part of the planning team. He has to know the value of planting native plants, he has to know maintenance and pesticides and irrigation. The only way he's going to know what's necessary is to attend the meetings and learn about changes in his business.

Despite his rigorous work schedule, Turcotte was involved in community activities during his years in Miami.

He was a motivational instructor for Miami's city employees, and for 18 years, he held weekly motivational classes for inmates at Dade County prison. He was also active in the Boy Scouts, an activity which led to finding his present home.

"I've been coming to the Hobe Sound area for several years. We used to camp with the Boy Scouts at Jonathan Dickinson State Park," says Turcotte. "So when I retired, we started looking to look for a home in this area.

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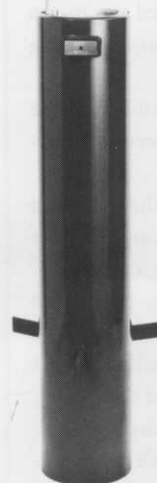
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PHOTOS BY KIT BRADSHAW

## South Florida Field Day draws crowd

Members of the South Florida GCSA gathered at Rolling Hills Resort in Fort Lauderdale April 17 for the chapter's fourth annual field day. Dr. Houston Couch of Virginia Tech University (seen right talking to Steve Kuhn of Doral CC) was the featured speaker in the education session. Following a trade show and lunch, everyone gathered outside for equipment demonstrations under working conditions (above).



Now that he's not working full time, Turcotte stays busy playing golf, biking every day, and hitting the ocean for vigorous swims. He and Germaine also travel to Alabama to see their son, Richard, and to Kentucky to see their daughter, Joline, and their families.

But his interest in the industry remains. One of the most satisfying occurrences has been the growth of golf in Florida.

"They say now that Florida is number one in the country in golf courses, but I could see that coming years ago," Turcotte says. "Golf was one of the main tourist attractions in Florida for years, and now it

brings in millions to the state.

"I think that's why it's even more important for our association to be strong, to have knowledgeable professionals who work for the betterment of golf involved in the association. The entire country is looking at what we do here in Florida with golf course design, management and environmental issues."

### **Crowfoot set for Grand Cypress; may move to new Disney course in '92**

The 1991 Crowfoot Open weekend will take place this year on August 3-5. The

event will be again held at the Grand Cypress Golf Club and Villas and will include the FGCSA Summer Board Meeting, the FGCSA Annual Business Meeting, Educational Seminar, Banquet and Tournament.

Next year look for a possible change of venue as the Crowfoot Committee investigates the possibility of holding the event on either the new Tom Fazio or Pete Dye courses nearing completion at Walt Disney World.

Two new resort areas, Dixie Landings and Port Orleans, across the street from the new courses will make this an exciting site for the 1992 event.

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JOEL JACKSON



JOEL JACKSON

Sam Robinson, above, USGA Section Affairs Committee member from Orlando, moderated the morning session. At left, Jim Moore, center, demonstrates the weather service available on ComputerNet to Richard Haas, superintendent at Crescent Oaks CC in Holiday, left, and Tom Trammel, Indian River Colony Club.



JOEL JACKSON

Dr. Bert McCarty of the University of Florida discussed integrated plant management.

## USGA Green Section Conferences sell out

Approximately 300 golf course superintendents, greens committee members and other club officials attended the USGA Green Section Regional Conference sessions in West Palm Beach and Kissimmee.

The Kissimmee conference at Orange Lake CC was sold out, assuring the continuation of future Green Section programs in the Central Florida area, according to Shelley Foy, administrator of the Green Section's Florida Region.

Five sessions filled the morning and three more rounded out the afternoon.

The Kissimmee program March 14, outlined below, varied only slightly from the Palm Beach Gardens presentation two days earlier.

Ron Dodson, president of the Audubon Society of New York, discussed his organization's new "Cooperative Sanctuary for Golf Courses," suggesting ways similar programs could be set up in Florida.

The New York program was the first of its kind and ushered in a new era of cooperation between the Audubon Society and the golf industry.

Other morning topics included maintenance facilities, Steve Brock and Don



JOEL JACKSON

Ron Dodson, president of the Audubon Society of the State of New York, discussed his state society's Cooperative Sanctuary for Golf Courses.



Above from left, Roger Harvie, USGA regional director; Tom Alex, Arnold Palmer Management; and Larry Kamphaus, Walt Disney World. Left, Steve Brock, architect, and Don Raudenbush, vice president of Erwin Construction Associates, discussed maintenance facilities.

Raudenbush, Erwin Construction Associates; pesticide storage, Lee Bloomcamp, Mobay Corporation; water management; Dwight Jenkins, hydrologist with the St. Johns River Water Management District.

Afternoon topics were computer applications in golf course management, Jim Moore, director of the Green Section's Mid-Continent Region; integrated plant management, Dr. Bert McCarty, University of Florida; successful renovation of 18 greens, Cary Lewis, superintendent at Country Club of Orlando, and Brian Silva, architect.

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# Fungicides

*How you apply it can be at least as important as which one you use, says famed researcher*

BY KIT BRADSHAW

**D**o nozzle type, dilution rates, spray patterns, pH and pressure make a difference when applying fungicides?

"You bet'cha," says Dr. Houston Couch, professor of plant pathology at Virginia Polytechnic Institute and State University. Couch, well known for his book, *Diseases of Turfgrass*, was the speaker at the Fourth Annual South Florida Workshop and Exposition in Fort Lauderdale April 17.

For two hours, he discussed a checklist of items necessary for the correct application of fungicides. This checklist is important, he said, because golf course superintendents need to improve the effectiveness of the fungicides they are applying to the nation's golf courses.

"With the IQ of Zippo the chimp, a crescent wrench and a screwdriver, you can double the effectiveness of your fungicide application," Couch said.

Superintendents must optimize the applications of their fungicides because they are faced with increased expectations.

"The Stimpmeter is the worst thing that happened to golf," he said.

"They roll the golf ball and tell the guy on the spot what they want. To get the number right, the superintendent will roll the green to harden it up, back up on the watering and lower the cutting height. But biologically, under these conditions, the grass has a real problem. Along comes a fungus that really sort of likes this world, and all it's got to do is snarl and this grass dies."



*Dr. Houston Couch, pathologist*

The problem is even worse because of South Florida's climatic conditions, he added. "A lot of you are growing grass in a part of the world where the Lord did not mean for that grass to grow. You know that. This is where he created fungus to kill the grass."

In order to fight the fungus problems, Couch recommends several procedures.

## GRANULAR FUNGICIDES

Although he spent a majority of his time discussing spray fungicides, he did delineate his findings on granular fungicides: mow and irrigate the day before application to have the longest possible interval between application and mowing or watering; and apply the fungicide in the morning while the grass is still wet.

*• With the IQ of Zippo the chimp, a crescent wrench and a screwdriver, you can double the effectiveness of your fungicide application. •*

HOUSTON COUCH

## Pesticide research inadequately funded, says Couch

Dr. Houston Couch feels strongly that superintendents should be more visible in their responsible use of pesticides.

"Golf course superintendents should not just talk about what a golf course does for air quality and sound conditioning and all that stuff," he said. "Because after all is said and done, if three or four ducks die on your golf course, I don't care how much sound pollution and air pollution you are controlling, all the public knows is that are some dead ducks out there. And you are in trouble.

"Generally, superintendents come across as using pesticides properly because the law is making them do it. And that's not the case. Superintendents are responsible people. They are trying to do the job right, but the average citizen thinks they spray indiscriminately. It's not done that way."

To offset this public impression, Dr. Couch had some suggestions.

"Superintendents should be putting out materials that show them using pesticides

and fungicides in the right way, without actually saying it. They should show that they are using Spraycheck, for instance, because it allows them to use the materials more effectively.

"They should show how they use a preventive program to cut fungicide use in half.

"They should demonstrate that synergistic combinations can cut fungicide budgets in half and produce better control."

Couch's research has produced valuable information for superintendents 30 years. He is concerned, however, about pesticide research.

"The GCSAA will not provide and grant money to test pesticides. Should they? I think so. Shouldn't they put out grant money to test nozzle size, longevity of control and so on, so that people can use the materials more effectively?

"Everything we deal with has pesticides... even our clothing has it or clothes would

rot off. The question isn't whether we can live without them; it's whether we can live with them properly.

"But do you realize there isn't a place in this country, including my university or the University of Florida that provides any money for this type of work.

"But if golf courses didn't use pesticides, they wouldn't last a year. Then why shouldn't they be sponsoring research to use these things properly?"

Pat Jones of the GCSAA responds, "The GCSAA is not a test organization. We currently give our research support to the USGA/GCSAA turfgrass breeding program. That's our primary area of support. We also support the USGA research which accounts for pesticides after they are used on the ground."

*The opinions expressed by Dr. Couch are entirely his own and do not necessarily reflect those of The Florida Green or the FGCSA. JJ*



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#### NOZZLE TYPES

Couch is emphatic about not using flood jet nozzles in fungicide applications.

"The flood jet has the worst of all possible worlds," he said, "with big droplet size and lots of aerosol. The material comes through the nozzle, hits the baffle and goes splat. That's equivalent to putting your thumb over a hose. The only good thing you can do with a flood jet nozzle is to take it to a kiln, have it melted down and make it into a doorstep for your office."

He recommends either the flat fan 8002 or the raindrop type nozzles, RA 10 to RA

15 for fungicide applications. He also says fungicides should be applied with 100 percent overlap and the angle of the nozzle on the floating boom should be set at 45 degrees.

"The Chempro floating boom is the hottest thing you'll ever see. It has two manifolds for putting out the same pressure at each nozzle and will give you uniform application. The boom is in a class by itself."

#### NOZZLE PRESSURE

In Couch's research, nozzle pressure made a significant difference in the effectiveness of the fungicides.

"We used the 8002 nozzles with the right dilution rate of Chipco 26019 to control dollar spot," Couch said. "When we used 10 pounds per square inch, we got 55 percent control. But when we switched to 30-60 pounds, with the same amount of material in the same amount of water, we just about doubled the effectiveness of the fungicide. With Dyrene, the same thing occurred. There was 45 percent control at 10

pounds and nearly 100 percent control at 30 - 60 pounds."

In order to calibrate the correct pressure, Couch recommends gauges on both the tank and the nozzle ends. "You should be using the Spraycheck method to check your pressure when you apply fungicides. This may not seem important unless it's your prize putting green, it's five days before the big tournament, the nights are in the 90s and the humidity is 150 percent, and one part of the boom is killing all the fungus and the other part is killing just some of the fungus. That's when you think about moving up North."

Couch recommends 40-pound pressure for both the flat fan nozzles and the raindrop nozzles.

#### DILUTION RATES

Forget the old rule, primarily based on the use of mercury fungicides, of 5-10 gallons per 1,000 square feet.

Couch recommends Daconil 2787 at one gallon per 1,000 square feet; Dyrene at 1-2

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## GOLF COURSE RENOVATION

gallons; Bayleton at 2 gallons; Chipco 26019 at 0.5 to 4 gallons; Banner at 2 gallons; and Vorlan at 1-2 gallons.

"Chipco is hard to mess up," he says. "It's not dilution dependent, so if you went from a half gallon to four gallons per 1,000 square feet, you got some control.

"Dyrene, however, can't be used at four gallons because it's been diluted out of existence and with Daconil, it's dilution dependent, so if you drop down or go up to two gallons, there is a drop in effectiveness.

"Bayleton shouldn't be put in at one or three gallons, but at its optimum rate of two gallons. If you change from the optimum dilution rate with Bayleton, you get less control over the fungus and it doesn't last as long."

**IRRIGATION AND RAINFALL**

Irrigation or rainfall shortly after application will affect the fungicide, and usually not for the better.

In his research, Couch used Dyrene,

Rubigan, Bayleton, and Daconil. He applied the materials to the leaves while they were wet, allowed the leaves to dry, then irrigated. After three days, he irrigated again.

As a result, Couch said, "with dollar spot control, rainfall before the spray dries, significantly reduces the effectiveness of the contact type fungicides. With Rubigan, if the leaves are washed before the spray dries, it's goodbye Rubigan. With Bayleton, leaf washing before the spray dries does not significantly reduce the effectiveness."

He also concluded that the basic effectiveness of turfgrass fungicide is established by the initial amount of the water used in its spray application.

If the treated area gets more water before the spray dries on the leaf, the effectiveness of non-systemic fungicides will drop significantly.

If the fungicide formulation contains a sticking agent, rainfall or irrigation immediately after the spray dries on the leaves

will not appreciably reduce its effectiveness.

**pH AND IN-TANK STABILITY**

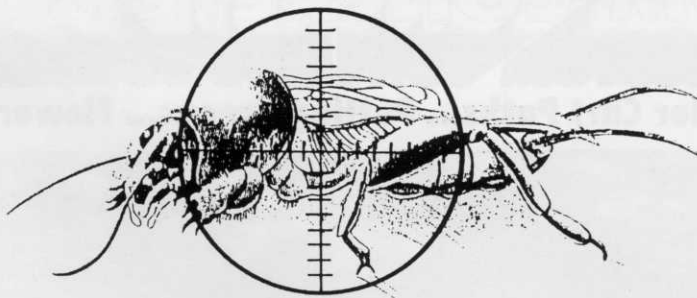
Superintendents need to know the stability of the active ingredient of the fungicide (which usually is supplied by the manufacturer); they need to test for the pH stability of the formulations; and they need to know the pH of the water in the area.

"The lesson here is that if the active ingredient of the product is unstable in alkaline ranges, it will be formulated with a buffer that will skew it toward the acid range," Couch said. "So what you want to find out is if the water you are using will offset what was going on in the first place.

"Dyrene is alkaline sensitive. It loses disease control effectiveness rapidly at 9.5 in the alkaline range. However, if it is used immediately in the acid range it doesn't lose effectiveness."

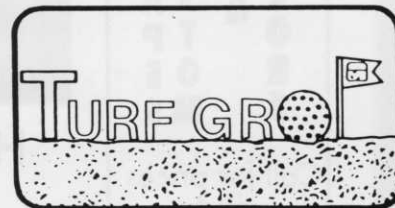
He recommends using a simple pen-type

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pH meter to avoid mistakes. The ideal pH for a fungicide formulation is 6.5.

But pH is not the only significant factor. The length of time a fungicide mixture is stored can affect it, even to the point of rendering it useless.

During Couch's tests, the fungicide formulations were adjusted and tested immediately. Then they were stored for 24 hours at 71 degrees, and tested again.

"If Dyrene is allowed to stand for 24 hours, regardless of pH, there is a significant drop in the effectiveness of the fungicide. The same holds true of Daconil 2787. Although it's stable initially from 3.5 to 9.5, if it is allowed to stand for 24 hours, there is a clumping together of the particles and a loss of effectiveness."

Rubigan is stable from 3.5 to 9.5 initially and remains stable from 6.5 to 9.6 after 24 hours. "But," he said, "at 3.5, the material breaks down significantly. It's acid unstable."

**SYNERGISM**

A lot of research still must be done on synergism, a positive reaction that occurs when fungicides are combined to improve their baselines. But some products have already proven to exhibit that characteristic.

For instance, Fore and Subdue or Fore and Banol can be used at half their dilution rates and improve their effectiveness through synergistic action.

For dollar spot control, Couch recommends Banner and Dyrene, Banner and Chipco 26019 or Banner and Bayleton at a quarter of the normal rate.

"Not everything (combination of fungicides) works, but when they do, it can increase the effectiveness of the products," Couch said.

"Good golf course superintendents need more training in pesticides and agricultural chemicals because we are more dependent on chemicals than ever before," said Couch in an interview after his lecture.

"In order to stay alive in their profession, superintendents need to attend the local, state, and national education sessions. The information they receive in these sessions is current. By the time it hits the magazines, it's months old and by the time the material is in a book it is about two years old."

Couch feels superintendents also need education in personal relations.

"One of the reasons they need this training is because of a trend I see as bad: the trend toward having golf course managers or having corporations involved with the golf course.

"This takes away the superintendent's ability to make spot decisions. In some cases, a superintendent may need a product to take care of a problem, but he can't get the money released, or can't get it released in time to apply the material. And as a result, there's a problem on the course.

"Who gets blamed?" Couch asked rhetorically. "The golf course superintendent, and yet it wasn't his fault."



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*It's amazing what an architect can do with a fertile mind...*

# And a little bit o' muck

BY BRADLEY S. KLEIN

**A**t the official opening of Weston Hills C.C. last November, a visitor came up to architect Robert Trent Jones, Jr. "Nice piece of rolling terrain, Bobby," he commented. "How'd you find it?"

The globe-trotting son of the world's most famous golf designer turned and smiled. "You should have seen this place a year ago," he said to his anonymous admirer.

Now Bobby can allow himself to look back with pride. His first work in Florida has been a commercial and critical success.

The course, at the intersection of routes I-595 and I-75 at the far west

edge of Fort Lauderdale, is the centerpiece of a 4,000-acre business and residential project under development.

ment by Arvida/JMB Partners. When members of the Robert Trent Jones II Group first arrived on site in 1988, they found a plot of land that looked suspiciously like a swamp. The land ran at an elevation of 4 feet with water sitting at two feet.

"Instead of listening to the land, here we had to create it," says Bobby.

Over the years, Robert Trent Jones, Jr. has listened to a stunning variety of land types. Along the way, he has also sung a few distinctive tunes of his own. Never one to be accused of modesty, he has skillfully utilized one of the fastest and most inventive minds in the trade.

The result has been a body of work encompassing 100 completed projects in two dozen states, 20 countries, and five continents. Another 40 courses are in various stages of planning, construction or grow-in.

He has four project designers, a support staff of eight, and some 40 people working for Greenscape Ltd., an affiliated construction division.

Bobby logs over 150,000 miles per year in the air, and his phone bill alone entitles him to AT&T stock.

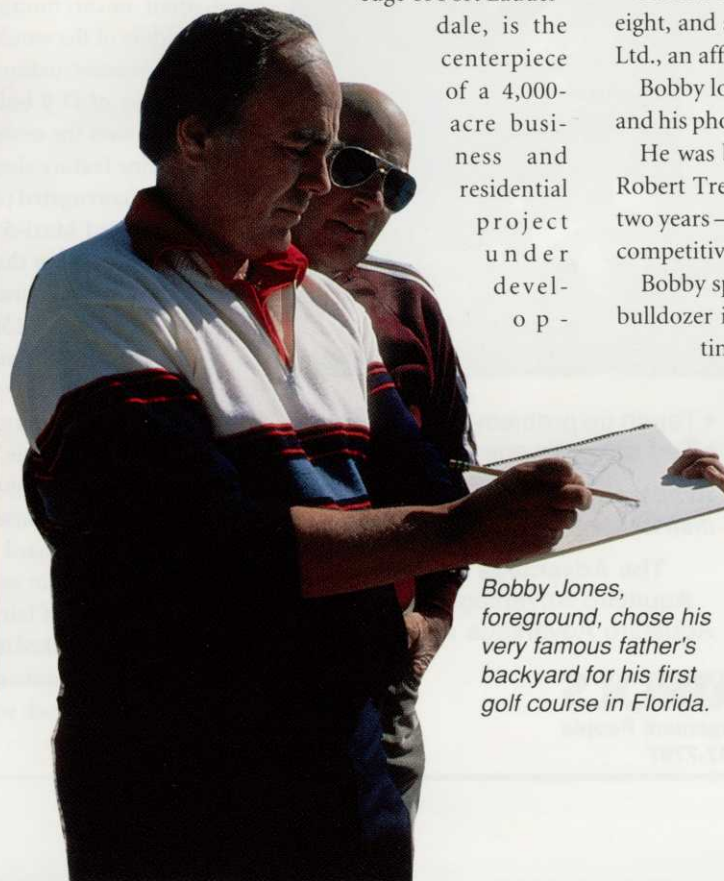
He was born in Montclair, NJ, the eldest son of Robert Trent Jones, Sr. His younger brother — by two years — is Rees Jones. One can only imagine the competitive pressures in such a household.

Bobby spent many a youthful day on a tractor or bulldozer in the company of his father, but by the time he enrolled at Yale in 1957, he had decided to head off in another direction. He took his degree in American Studies, and then spent one unhappy year at Stanford Law School before returning to the family fold as an assistant to his father.

He gradually assumed responsibility for his father's practice throughout the Western U.S. and the Pacific.

Bobby gained the attention of the golf world through his collaboration with his dad on the South Course at

*Recipe for Weston Hills: smear 1 million cubic yards of muck over 150 acres of limestone. Shape. Run 30,000 linear feet of corrugated plastic drain pipe and install 1800 irrigation heads. Cover with 9 inches of dredged sand - 150,000 cubic yards. Plant bermudagrass. Add water and stir.*



*Bobby Jones, foreground, chose his very famous father's backyard for his first golf course in Florida.*

Silverado C.C. in Napa, California. He gained a foothold in Japan in the early 1970's through several projects with his father, and in 1972 he left the fold to create his own company, Robert Trent Jones II Group. Initially the company confined itself to the Western and Pacific realms, but with the internationalization of the golf boom in the last few years his company, like many others, has gone worldwide.

Jones is a naturalist by temperament, a firm believer in environmental integrity. In preparation for his many projects in Japan, he read widely on the philosophical foundations of Japanese gardens and landscaping. He has also done striking work in the mountainous terrain of the Rockies: Sun Valley G. C. in Idaho, Arrowhead G.C. in Colorado, and Jackson Hole Golf and Tennis Club in Wyoming have all been routed through rugged country.

At Sugarloaf G.C. in Maine he has cut an astonishingly bold run along the banks of the Carrabassett River, with massive forested peaks looming in every direction.

At Cape Schanck, two hours south of Melbourne, Australia, he has built two courses, one public, the other private, that wend their way over a massive dune that sits atop the Bass Straits.

And in conjunction with Tom Watson and former USGA president Frank "Sandy" Tatum, Bobby transformed a neglected sand mine in Monterey, California, into the Links at Spanish Bay. Through cooperation with the California Coastal Commission, the course now serves as something of an experimental station for dunes reclamation and the cultivation of seaside grasses.

Jones recently served as president of the American Society of Golf Course Architects, where he oversaw a year-long series of panels and a conference in 1990 — held at Spanish Bay — devoted to environmental soundness and water quality management.

Perhaps his single most famous creation is the flowerbed hole — the par-three 16th at SentryWorld in Wisconsin, where 90,000 geraniums and marigolds create a dazzling scene.

Whether at the drawing board or in the field, Bobby is concerned to maximize the beauty of a golf course, even when that requires a certain artifice.

Jones' talents are not exhausted by his design work. He is, for instance, politically engaged — rare for a golf businessman. He was appointed by President Carter to serve on the U.S delegation to the Conference of Security and Cooperation in Europe that met in Madrid in 1980. He has championed the cause of liberalization in the Soviet Union, and his own personal commitment to detente has been in the form of long protracted negotiations towards his building the Nahabino Golf Course in Moscow.

With all his worldwide activities, however, Bobby Jones, Jr. has been no stranger to the Fort Lauderdale area. Though Weston Hills is his first course in the state, he has spent many weekends and winter months at Coral Ridge C.C., the Fort Lauderdale facility built and owned by his father.

Southern Florida is legendary for its lack of elevation changes. How then, did Jones, Jr. and project designer Gary Linn manage to create such an interesting landscape for Weston Hills?

The answer is Muck Mountain, one million cubic yards of choice fill that had been dug out of the lakes and home sites and then unceremoniously dumped in the middle of the would-be golf course.


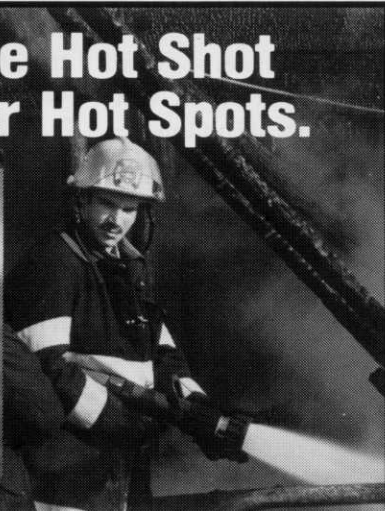
The construction plan was simple: take a convoy of D-9 bulldozers and smear the muck over the underlying limestone. After the fine feature shaping, run 30,000 linear feet of corrugated plastic drain pipe. Install a Rainbird Maxi-5 irrigation system with 1800 heads over the 150 acres. Then cover the entire golf course with a 9-inch layer of dredged sand — 150,000 cubic yards in all. Finally, call in Southern turf, of Tifton, Georgia, to grass the course — Tifdwarf on the greens, 419 bermuda on everything else. Add water and stir.

Presto, a great golf course.

Course superintendent Bob Drake was brought on board in May 1989, just as Muck Mountain was being massaged into rough shape of fairways and mounds. He had earlier worked with architect Karl Litten on several projects, and found Bobby Jones, Jr. easier to work with than he had anticipated.

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"He listened to me," recounts Drake. "Maybe he didn't follow all the advice I offered, but he certainly paid attention."

For their part, both Jones and Gary Linn express admiration for Drake's work throughout.

Says Bobby, "We'd always ask him, can you mow this?"

As a result, says Drake, "the golf course is a little bit easier to maintain than what I first expected. Instead of fly-mowing trap faces, I can use a self-propelled 21-inch mower with a two-cycle engine for the job."

As for design approach, acknowledges Drake, "Bobby is definitely golf-course oriented. He wouldn't compromise his design to facilitate the homes."

Indeed, the success of Weston Hills is that the course fits into the community without having given itself up to frontage lots. Internal space for golf was created through double fairways and generous setbacks.

The par-72 course plays to 5,354 yards

from the red tees and can be stretched to 6,989 yards from the gold. The greens — averaging 6,500 sq. feet are generous enough to accommodate the fickle winds.

Drake maintains the putting surfaces at .130 inch, walk-mowing them four days a week and ride-mowing them the other three days. The tees are also spacious, running from 6,000 to 10,000 sq. feet per hole.

Concrete cart paths run the length of each hole, though Bobby has also designed the course to be walkable. Tunnels, for instance, linking sections of the course are graded at level whereas vehicular roads have been elevated.

Jones is a fervent believer in dry firm turf. "We're after the lean and mean look," he says. That's important in a region where torrential showers are common. Drake claims that the course "can easily take an inch of rain at 4 p.m. and open the next morning with no problems."

There's a definite rhythm to the golf course — a Robert Trent Jones, Jr. trade-

mark. No water comes into play on the opening holes of each nine, but then things get tough as the watery graves progressively intrude upon each hole.

The ninth and 18th holes return in grand style to the clubhouse. They share a sprawling double green, reachable around the respective sides of a lake that divides the two fairways.

The once-barren site is now home to palm, ficus, and oaks. What used to be sandy wasteland has been planted with fountain grass and fakahatchee. It's hard to believe that such rolling, golf ground has been built upon land that not long ago was featureless.

But that is Bobby's special skill.

No one in golf has worked on a greater variety of terrain to create such interesting playing fields. Those who know the "before and after" story of Muck Mountain at Weston Hills have special reason to await Robert Trent Jones, Jr.'s Windsor G.C. in Vero Beach.

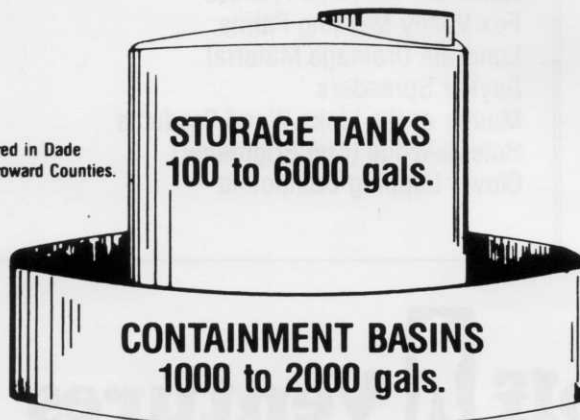
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## Maintenance Shop

- Store all machines and equipment possible inside the maintenance building.
- Secure all loose material such as pipe, garbage cans, etc.
- Check stockade fence for loose boards; brace with 2x4s from both sides.
- Turn off main breaker switches at maintenance building and pump stations.
- Service 2-inch pump for possible emergency.
- Install plywood over all glass windows.
- Store all damageable items above ground level.

## Golf Course

- Store all flags, ball washers, signs and moveable objects in maintenance shop.
- Clean all drainage inlets.
- Check all flap gates for proper operation.
- Prop taller trees with 2x4s in three directions.
- Have backhoe, front-end loader and trucks serviced and fueled.

## Clubhouse

- Store all golf cars at maintenance compound.
- Store all golf clubs in locker room.
- Put 4-inch pump at top of cart storage.
- Put storm shutters on windows.
- Turn off all power except kitchen.
- Turn off main gas line.
- Fill kitchen pots with water.
- Store pool and snack-bar furniture in locker room.
- Remove all outdoor potted plants.
- Remove all outdoor signs and moveable objects.
- Store all important records from temporary buildings in Clubhouse.
- Store all water-damageable items off floor.
- Put sand bags against locker room and clubhouse doors.

## Tennis courts

- Remove windbreaks from fence.
- Store all furniture in locker rooms.
- Remove all signs.

Hurricane season begins in June. Each superintendent should have a preparedness plan specifically designed for his course but Dan Jones, CGCS, offers this general plan as a starting point.



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# Turf Industry Roundup

## Ciba-Geigy buys Vero Beach-based maker of Logic

Ciba-Geigy, manufacturer of turf and ornamental chemicals based in Greensboro, N.C., has acquired **Maag Agrochemicals, Inc.** a Vero Beach-based producer of agricultural chemicals, including Logic fire ant bait.

The company also has reached a marketing agreement with **Biosys**, a producer of biological insect-control products

**Dr. Don Taylor**, senior technical support specialist with Ciba-Geigy Turf and Ornamental Products, recently received the Third Annual Outstanding Industry Award from the Weed Science Society of America. Taylor also recently

was elected president of the North Central Weed Science Society.

**Mickey Lovett** and **Mike Oleykowski** have joined Ciba-Geigy's Turf and Ornamental Products group as marketing representatives. Lovett, who will represent the group in North Florida, returns from the company's agriculture division. He lives in Odessa. Oleykowski's territory will be the Middle Atlantic states.

**Pennant** liquid herbicide by Ciba-Geigy has been approved by the EPA for use on zoysiagrass and on more than 50 different ornamentals.

**Michael L. Dietrich** has been named manager of Lesco's lawn care sales division. He joined Lesco, based in Rocky River, Ohio, from ChemLawn in 1988 as lawn care custom account manager.

**Greensmix**, a division of Wisconsin-based Faulks Bros. Construction Inc., has opened a Pacific Rim division, starting with six courses on the island of Guam.

**Michael E. Anderson** is the Toro Company's new director of sales for commercial products. He had been vice presi-

dent of national sales for the Waterous Company, which supplies hydrants and valves to municipalities. He will work out of the company's corporate headquarters in Minneapolis.

**L.T. Walden** is the new president of the E-Z-Go golf car division of Textron. He was named vice president for customer service in 1984 and executive vice president in 1989 and given the additional title of general manager last year. E-Z-Go is based in Augusta, Ga.

**Rain Bird's** new customer tour program will bring its irrigation customers to company headquarters in Glendora, Calif., in groups of 50-60 for three days of tours, demonstrations and discussions.

**Todd Jerred** is the new vice president of sales and marketing for Ransomes Inc. **Bud Muser** is the Wisconsin-based equipment manufacturer's new director of customer service.

**PanaSea Plus** is a new organic biostimulant that reduces thatch while it increases root mass, according to Emerald Isle, Ltd., the manufacturer. The product is a combination of liquefied sea plant extracts pro-

### 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.



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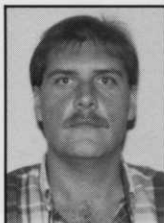
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# WANTED



Dick Campbell



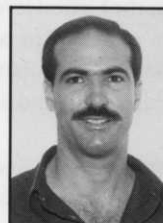
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cessed to preserve naturally-occurring cytokinins. The manufacturer claims its product has the highest level of cytokinins available in any commercial biostimulant and is natural, organic and non-toxic.

**Tom Clark** of Kensington, Md. was elected president of the American Society of Golf Course Architects during the organization's 45th annual meeting in England. Other officers elected were Arthur Hills, Toledo, Ohio, vice president; Gerald Matthews, Lansing, Mich, secretary; Donald Knott, Palo Alto, Calif., treasurer.

Among the association's governors are **Ed Seay** of Ponte Vedra and **Tom Fazio** of Jupiter.

The **Florida Foliage Association's** annual convention will be July 18-21 at Sonesta Sanibel Harbour Resort in Fort Myers.

**Karen E. Pruitt** is the association's new manager of marketing and membership.

**Chuck Yash**, vice president and general manager of Spalding Sports Worldwide's golf products group, has been elected chairman of the Na-

tional Golf Foundation's board of directors. He succeeds Glenn Rupp, who resigned his board position after stepping down as president of Wilson Sporting Goods Co.

Other officers elected were Wally Uihlein, president and CEO of Titleist & Foot-Joy Worldwide, vice chairman; Ed Van Dyke, president of True Temper Sports, secretary; Peter Bonanni, publisher of Golf Magazine, treasurer.

A federal jury in Topeka, Kan. awarded the former executive director of the GCSAA \$1.4 million in a lawsuit over events surrounding his departure from the organization eight years ago.

**James McLoughlin**, who



Clark



Rain Bird product manager Mark Pedicone addresses contractors at the company's new customer tour program.

held the GCSAA's top administrative post from 1980 to 1983, was awarded \$457,000 for breach of separation agreement and \$1 million for libel — \$500,000 compensatory damages and \$500,000 punitive damages.

McLoughlin, now a successful international golf consultant based in Pleasantville, N.Y., claimed he had been forced to resign in 1983 in the face of false charges of mismanagement, embezzlement and moral impropriety.

"The rumors and allegations against me were believed and repeated by most in the golf industry," said McLoughlin. "It has taken eight years to collect the evidence, present it to a jury and to correct the record."

In a news release following the trial, McLoughlin's attor-

ney said his client termed the verdict "a vindication for the golf course superintendent's profession and the three presidents he served under at GCSAA from 1980-1983: Mel Lucas of South Dartmouth, Mass.; Mike Bavier of Chicago, Ill., and Jim Wyllie of Toronto, Ontario."

"GCSAA does not agree with the verdict and will file post-trial motions and vigorously pursue an appeal to the United States Court of Appeals for the 10th Circuit to reverse the award," said GCSAA President Stephen G. Cadenelli, president, in a prepared statement released May 13.

"The award and subsequent appeals processes will have no effect on GCSAA's business operations or membership services."



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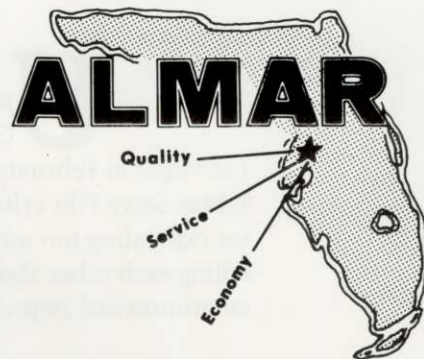
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**U**pon his return from the GCSAA convention in Las Vegas in February, *Golfweek* Business Editor Steve Pike criticized the golf industry for expending too much time and energy telling each other about golf's positive environmental impact rather than focusing

its efforts on educating the public. Steve's column struck a nerve with me because it reflects the same frustration I have felt for years. His perspective on the

golf industry's environmental IQ overall — and the concern of its members — differs from mine, however.

While attending the GCSAA convention, it would be easy to conclude that the industry overall is highly motivated and tuned into research and the environmental issues.

This is misleading.

While the majority of those attending the convention might fit that profile, they represent only a small percentage of those in the business. Those who need education the most cannot (or will not) attend the GCSAA convention or others that offer similar learning opportunities.

As Saddam Hussein recently learned, you cannot win a war unless you have the hearts and minds of your own troops.

Unfortunately for the golf industry, too many people in the business ignore golf's problems and hope they will just go away. As long as they continue to make a good living, they are unconcerned about restrictive regulations and upward spiraling costs.

I believe the environmentally ignorant or insensitive still make up the majority of those in the golf business. If my analysis is correct, how can we possibly convince the general public that we are environmental "good guys?"

For many years, superintendents

comprised the majority of those desirous to learn to help change golf's poor environmental image. The last few years have seen architects and builders getting more involved.

Recently, the formation of organizations such as the Arizona and Florida Golf Councils indicate interest and commitment from a broader cross section of the industry than ever seen before. Perhaps our sleeping giant has awakened, but he has yet to stand up on his own two feet.

Some in the business are not only indifferent to educating themselves and giving something back to the business that sustains them, they also deny others under their authority the opportunity to do so. Many superintendents who don't attend conventions and other educational meetings say their general managers or greens chairmen won't let them. Other superintendents interviewing for new jobs have reported that their interviewer asked questions about their involvement in superintendent associations, bluntly stating they were "not interested in someone who wastes time at those things".

Though other reasons were given for the actions, it is odd that the last three immediate past presidents of the Florida GCSA have all lost their jobs in the past 15 months.

All are highly qualified superintendents. The same thing happened several years ago to the only GCSAA director ever to serve from the state of Florida, which is one reason Florida has no representation on the national level, and probably never will.

The only conclusion I can draw is that many decision-makers in the golf business see each golf course as an island and don't recognize the existence of golf as an industry. They can't seem to grasp the connection between their bottom line and the bottom line of the club down the street.

**S**urmounting this industry failure is a prerequisite to winning over the public. I guess it is easier to keep putting the squeeze on the pro, the

*Most of the golf industry is STILL environmentally ignorant and insensitive*

**Mark My Words**



Mark Jarrell, CGCS

*It is odd that the last three immediate past presidents of the Florida GCSA have all lost their jobs in the past 15 months.*

superintendent, and club manager, and the chef to tighten their budgets than it is to try to get to the root of the problem.

Merely telling the public that golf is an environmental "good guy" isn't going to cut it. Validated research is needed to refute the claims that we are harming the environment.

**I**n the environmental arena, the American system of justice is put aside — the accused are judged guilty until they prove their innocence. Very little evidence (validated research) exists upon which to substantiate our innocence or our guilt.

What little research is available is extremely encouraging and supports our "good guy" position, such as the Cape Cod study about pesticides and groundwater contamination. Many such studies are needed, and needed soon. This research isn't going to get done unless we — as an industry — support it both politically and financially.

To give an example of the political ramifications of research, just last week I was told that the chances of the DER completing the groundwater contamination studies at my course and at Boca Lago, as scheduled, are slim. Since the first rounds of tests indicated no

problems, the DER isn't motivated to finish the project - they would rather pursue testing where negative results are indicated.

The golf industry, meanwhile, is losing an excellent chance to gain one more piece of validated research proving that properly applied chemicals used on golf courses don't contaminate groundwater. If the DER doesn't complete the study and publish its findings, we have nothing to prove this contention.

If Mark Jarrell, superintendent, calls the DER at (904) 488-3601 and asks Bruce Moore or someone else at the agency to finish the study, the response is "we'll get back to you;" if a representative of a \$5.5 billion, politically-active golf industry calls, the answer may be a bit different.

As for the financial support of research, it is very simple: golfers are a minority in this country and tax dollars aren't going to pay for research aimed at helping golf courses.

Most research today is a cooperative effort between industry and the university system. If you are wondering why there is such a lack of pertinent research, look no further than your mirror.

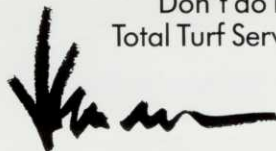
How much have you contributed to turf research over the past few years? If every golfer had been contributing an amount equal to the value a sleeve of golf balls every year for the past several years, we might have had the necessary research in hand to keep greens fees from going up an amount equal to the cost of a new golf bag each year.

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# The Green Pages

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

## State, federal pesticide officials discuss new regs

The American Association of Pesticide Officials held its annual spring meeting March 11-13 in Crystal City, Va. U.S. Environmental Protection Agency officials spoke on important upcoming pesticide regulations concerning containers, pesticide mixing and loading containment and worker protection, and also discussed the re-registration process. Implementation of the regulations will take effect over the next three years.

### CONTAINER REGULATIONS

An updated implementation schedule of EPA's FIFRA pesticide container regulations was released at the AAPCO meeting. The soon-to-be-written regulations will address pesticide management (including mixing and loading containment) and disposal.

Phase 1 regulations, which mostly pertain to manufacturers and distributors of pesticide products, deal with acceptance; voluntary and mandatory recall plans; storage and disposal plans; and indemnification. Phase 1 regulations will be implemented in spring 1992.

Phase 2 regulations concern containers, residue removal and bulk storage and are scheduled for implementation in spring 1993.

Phase 3 involves pesticide management regulations that are concerned with storage, management of excess product, containment at mixing/loading sites, and transportation. Spring 1994 is the targeted implementation date for Phase 3.

### WORKER PROTECTION AND TRAINING

State pesticide control officials attending the conference suggested that the training requirements for the new worker protection regulations be compatible with those for restricted use pesticide applications.

The worker protection rules will be released this summer, but the restricted-use application requirements are not scheduled for release until sometime next year, as part of the final applicator certification regulations.

The final version of the worker protection regulations, which are scheduled for release in late August, will contain specific rules concerning post-application re-entry and training for pesticide applicators. These worker protection regulations will affect only those golf courses that are involved in

producing turf and plants for commercial uses outside of their normal golf course operations.

The revised applicator certification regulations that are scheduled for release in 1992 will, however, affect all courses that apply restricted-use pesticides.

GCSAA will urge the agency to consider coordinating these two separate training requirements when writing the final regulations.

GCSAA recently sent comments on the proposed levels of supervision for restricted-use pesticide application to EPA. The Office of Government Relations had surveyed affiliated-chapter government relations liaisons for their comments on the proposed rules. The majority of respondents said they believed that only certified applicators should be able to apply restricted-use pesticides. GCSAA comments, along with comments from other interested parties, will be considered when the final regulations are drafted.

### REREGISTRATION

The reregistration process is still lagging behind previous projections, said Allan Abramson, acting director of the special review and reregistration division of EPA's Office of Pesticide Programs.

Because of delays in processing the registration of A and B list pesticides (mostly those used on food products), the C and D list pesticides — which include most of the turf and ornamental products — will not be up for reregistration until 1992 or 1993.

Some manufacturers may decide to save the testing costs and reregistration fees for some minor-use products (i.e., products that are not primary rev-

enue producers) by choosing not to reregister them. The EPA's processing delays may also delay the need for golf course superintendents to search for alternatives for suspended products.

However, the federal EPA is not the only pesticide regulator; the states also are involved.

### STATE REGISTRATION

Some states are raising their pesticide registration fees — in some cases by 300 percent to 500 percent. These big fee hikes are causing pesticide manufacturers, especially smaller companies, to reconsider which products they choose to register in which states. The end result may be that superintendents in some states may soon find their choice of chemicals restricted.

This meeting brought together the federal and state regulators and the manufacturers of pesticide products. One of the last points to be made came from several state pesticide regulators: The new federal regulations will put much heavier burdens on the states; however, the states may not have the resources they need to manage or enforce them.

*GCSAA Briefing*

### Senate considers notification rule

The lawn-care industry and environmentalists squared off May 9 at a Senate hearing.

The Environment Committee's subcommittee on toxic substances is holding hearings on legislation sponsored by Democratic Sens. Joseph Lieberman of Connecticut and Harry Reid of Nevada. Their bill would require lawn-care companies to notify neighbors within 1,000 feet of a property before applying pesticides or herbicides.

Witnesses testifying for the environmentalists included a woman who said she was severely injured when she was drenched by chemicals being sprayed on a neighbor's lawn. Christina Locek of Chicago said she was nearly blinded and has had to use canes to walk since the incident, which also killed her dog and her cat.

Warren Stickle, president of the Chemical Producers and Distributors Association, said the bill's notification system was so extensive that it would be unworkable and extremely burdensome to businesses and local governments.

Ann McClure, executive vice president of the Professional Lawn Care Association of America, said her group supports a more limited notification requirement, covering people who live adjacent to a customer's property.

Reid said more than 7 million Americans used \$1.7 billion worth of lawn-care products and services in 1987. Americans use up to 10 times more chemical pesticides per acre for lawns than for agriculture, he said, citing a report by the National Academy of Sciences.

*Excerpted from  
Orlando Sentinel*

## **EPA investigates manipulation of pesticide data**

A Texas laboratory is the subject of an EPA/Justice Department criminal investigation for allegedly falsifying studies on pesticide residues. The EPA said that studies on 17 pesticides — including several golf course chemicals — produced by 11 manufacturers were “alleged to have been improperly manipulated” by Craven Laboratories,

Austin, Tex.

The golf course chemicals listed by the EPA were maneb, sethoxydim, Diquat, mancozeb, fenoxaprop-ethyl, glyphosate and PCNB.

Craven has produced residue chemistry studies for pesticides since 1975, and the EPA is reviewing regulatory options for registrations based on Craven data. Options include requiring replacement data and “other alternatives,” according to the EPA. The agency has sent letters to 262 pesticide registrants asking them to identify all Craven data filed with EPA to support registrations and tolerances, and to estimate when they could file studies to replace Craven data.

The Craven investigation will take time. And if the EPA decides to require replacement data, it will take substantial time and money for the chemical manufacturers to have new studies conducted. If this happens, it could affect the availability and price of some pesticide products that golf course superintendents use.

Linda Fisher, an assistant EPA administrator, said that although current information does not indicate a threat to the environment or to public health, the allegations are “very serious.”

The EPA will review registration data on a chemical-by-chemical and use-by-use basis as it explores regulatory options. One EPA spokesman told *The Wall Street Journal* that the agency does not currently expect new data to require the removal of any of the products from the market.

*GCSAA Briefings*

## **TV spots put supers in positive light**

Superintendents may be

fielding more questions about environmentally responsible turf management as a new public education program gets under way. The joint EPA/GCSAA television public service announcement campaign, which reminds homeowners to “play it safe and think before you apply,” has already attracted a number of media inquiries at GCSAA headquarters.

GCSAA-affiliated chapter presidents, government relations liaisons and members may view such inquiries as excellent opportunities to educate the public about topics such as integrated plant management, water protection, chemical use reduction, hazard communication, and how golf courses use environmentally responsible practices. Specific questions about the “Think Before You Apply” campaign may be directed to GCSAA's communications department.

The PSAs have been distributed throughout the country, to network affiliates in the top 35 U.S. television markets and other key regions, as well as leading national cable TV networks.

The 30- and 10-second spots instruct viewers to follow directions on chemical containers and to use only the amount needed to do the job.

The commercials include a toll-free number (800-858-7378) that viewers may call to receive more information from EPA about the subject.

*GCSAA Briefing*

## **EPA chief testifies on Clean Water Reauthorization**

EPA Administrator William K. Reilly testified at a House oversight committee hearing that one of the most important

issues in the reauthorization of the Clean Water Act is non-point source pollution control.

Reilly told the House Public Works and Transportation Committee that controlling non-point sources of pollution (examples could include runoff of chemicals applied to agricultural field, golf courses and home lawns) would often be more cost-effective than adding additional technological controls at point sources.

Many industries already use technological controls to remove harmful pollutants from water before discharging it into surface waters. Some golf courses presently use the simple technology of a rinse pad and containment system to prevent point-source pollution during mixing and loading.

If such a system is not available, courses should never mix and load near a water source, such as a well or pond, and should rotate sites.

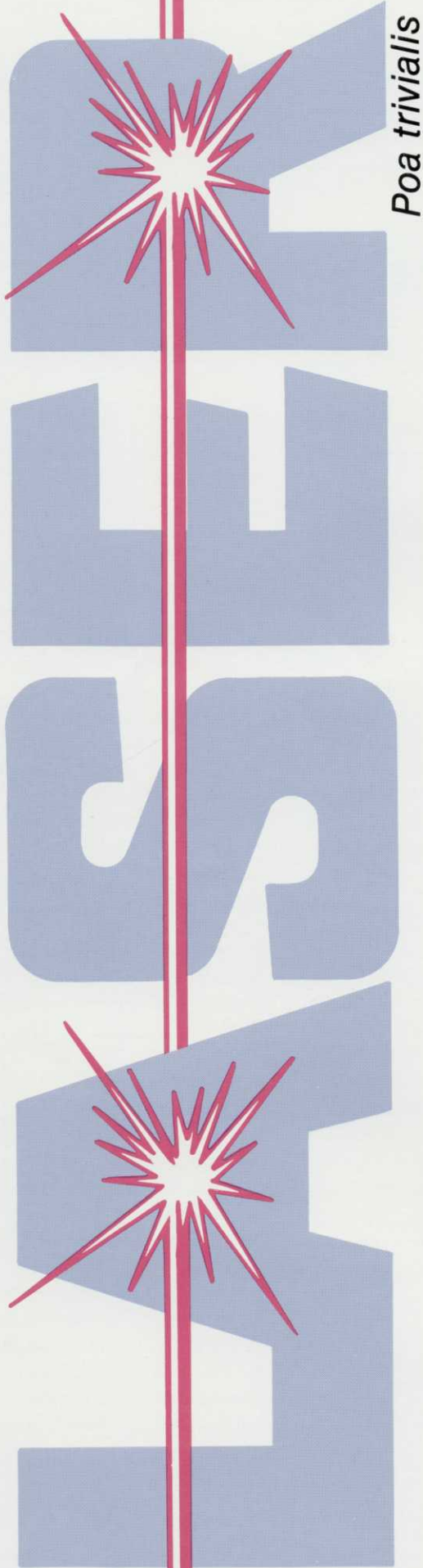
*GCSAA Briefing*

## **Fish and Wildlife Svc. joins EPA in pesticide exams**

EPA is consulting with the U.S. Fish and Wildlife Service to determine whether some registered uses of 31 pesticides need to be limited in order to protect endangered species.

Among the pesticides to be examined are some golf course chemicals: acephate (Orthene), bendiocarb (Turcam), chlorpyrifos (Dursban and others), potassium nitrate, trifluralin (Treflan, Team and others), methyl bromide, aluminum phosphide (Phostoxin), azinphos methyl (Guthion), fenvalerate, naled and permethrin.

*GCSAA Briefing*



*Poa trivialis*

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**H**aving spent the past two and one half years managing bentgrass greens at the Isleworth Golf and Country Club, I have a different perspective of bentgrass from most of my Florida peers. There is only a handful of courses in the state that have pure stands of bentgrass maintained year round.

While I came to respect the fine playing qualities of bentgrass, I also gained an

appreciation for the difficulties of managing a cool season grass year round through three different Florida summers. Now that I have left Isleworth, I am often asked if I'm glad to be away from the

pressure of maintaining the bentgrass.

The easy answer is yes.

The reflective answer is that it was a unique experience fraught with frustrating turf losses countered by remarkable successes.

It is not reasonable for 99.9 percent of the golf courses in Florida even to consider using bentgrass except for winter overseeding. However, if a club or two out there is contemplating pure bentgrass greens as its year-round turf, then please read the following list of requirements that I feel are necessary based on my two and one half years (and three summers!) worth of bentgrass trial and tribulation.

Following this list is no guarantee for success. Remember! Growing bentgrass in Florida is somewhat akin to growing oranges in Pennsylvania. It is out of its "natural range".

But these basics are necessary to assure a reasonable chance for success:

#### SITE

The greens should be located in areas with excellent air circulation and sunlight.

Greens surrounded by trees, mounds, and houses will suffer on hot, humid days. Some courses have installed fans to try to counteract this "stagnant pocket" effect. At Isleworth the highly elevated, exposed greens always did better in times of stress than those down low by the water and shielded by homes or trees.

#### CONSTRUCTION

I highly recommend USGA Specification Greens.

Bentgrass does not tolerate excessive moisture so the consistency and drainage of the greens must be exact. Shortcuts and sloppiness in the construction of the greens will result in definite problems in the summer.

Improperly sized drain gravel, inconsistent thickness of the soil mix, incorrect sub-grade contouring, and on-site mixing of the soil were some of the construction problems that came back to haunt us during times of stress on the Isleworth greens.

#### IRRIGATION

A modern control system is mandatory. The old electro-mechanical controllers can be made to work, but they become labor intensive when you must constantly adjust for moisture requirements. The new computerized controls will make infinitesimal adjustments to allow for local environmental changes.

Each green should have *at least* two manual hose connectors for hand-watering isolated dry spots, and a separate mist system of small heads for quick cool-down syringing in addition to the heads necessary to water the putting surface and the slopes.

#### STAFFING

A qualified, professional, assistant superintendent is essential to manage bentgrass. The care and attention that it requires will burn out one manager. The staff should be able to lead a "normal" life to produce a quality product. I was at the golf course 358 days my first year until I hired a good assistant. Managing bentgrass became tolerable after that.

## A Requiem for Bentgrass

### Green Side Up



*Joel D. Jackson*

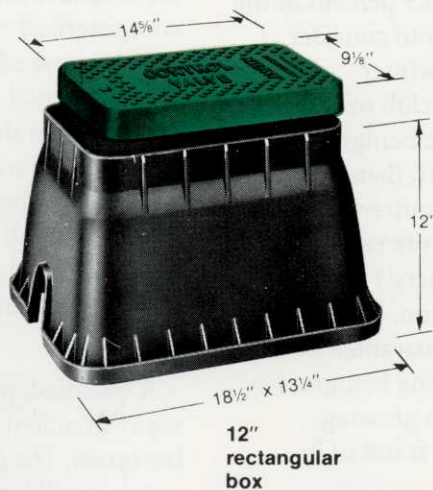
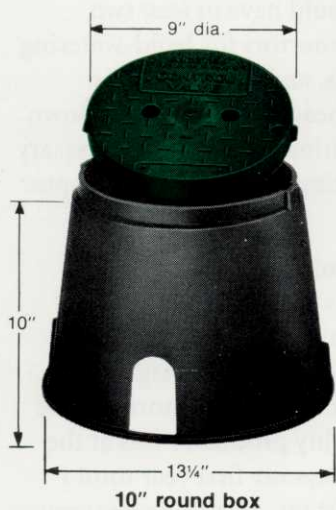
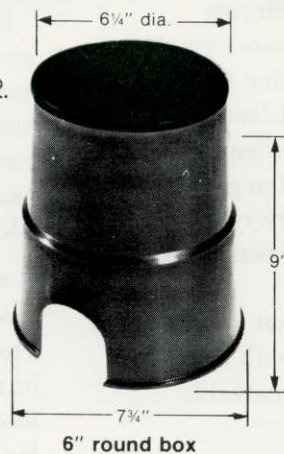
Joel D. Jackson, CGCS

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## AFTERWORDS

### CLUB COMMITMENT

Even with the first four items in place there will be hard times and disappointments.

Bentgrass is a cool season grass.

Hot, humid days up North tend to get balanced by cool nights. Hot humid days in Florida are followed by warm, muggy nights. Therefore, the time zone for problems with bentgrass is expanded by warm springs and falls. The club must understand that and be flexible in its demands for grooming during stressful periods. Also, the club that plans to use bentgrass should be one that has light play or no play in the summer (Augusta National, for example), and no more than 20,000 rounds per year — 15,000 is better.

The title of this piece is "A Requiem for Bentgrass." A requiem is a song, or dirge, or mass for the dead. Bentgrass has departed my life, but is still alive for others. Dan Jones, CGCS, recently tested 24 bentgrass cultivars for Dr. Milton Engleke of Texas A&M. Dan was to treat the bentgrass no differently from bermudagrass and take no unusual actions to preserve it. Dan returned eight cultivars which survived the native conditions and neglect. Dr. Engleke will continue to test and select the hardiest cultivars for possible development.

So there you have my professional opinion about bentgrass in Florida! I spoke at the 1990 Wisconsin Turfgrass Symposium about growing bentgrass in Florida, and they gave me "The Living on the Edge" award!

It is a very special grass that requires some very special conditions to be successful. If all the conditions controllable by man *are not* met, I will guarantee problems. If those conditions *are* met, I will still promise you some tough days and turf loss while trying to grow a grass variety out of its natural range.

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9. Cypress® has a prostrate growth habit.

10. Seeding rates for Cypress® are 1/3 that of Perennial Ryegrass due to the high seed count per pound. 2,070,000 seeds/lb. vs. only 265,000 seeds/lb. for Ryegrass.

11. Ease of transition in the Spring. Cypress® is not adapted to hot conditions. As the weather warms, Cypress® will die out when it is suppose to!

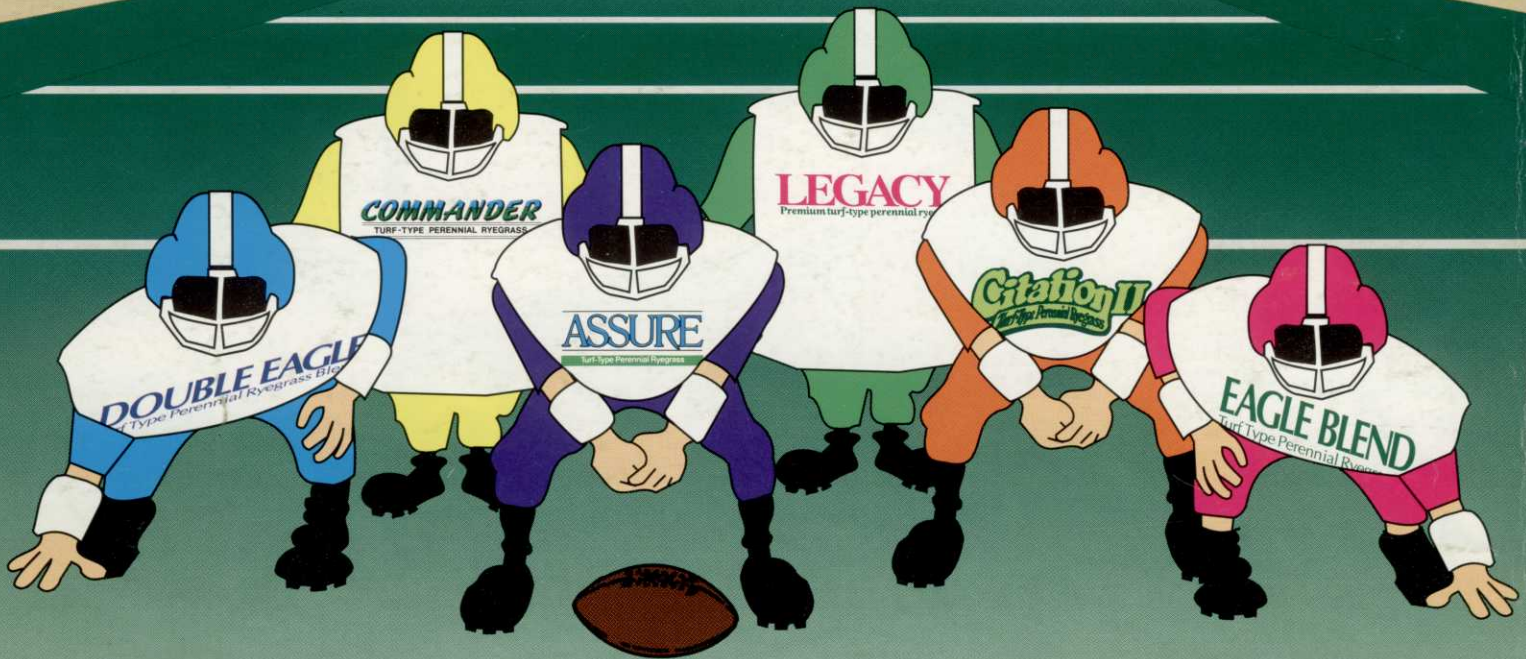
12. Cypress® is available alone or blended with Creeping Bentgrass and Streaker Redtop Bentgrass to create Cypress Greens® Overseeding blend.



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Assure, with its fine leaf texture, excellent dark green color and density, is among the most popular turf-type perennial ryegrasses available today. You'll enjoy its high endophyte level (96%), improved heat and drought tolerance and quick germination.

Legacy has dark green color, very good density, and a dwarf growth habit. It features improved mowing quality and high endophyte level (94%) for improved resistance to insects.

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LESCO Eagle Blend contains three premium LESCO turf-type perennial ryegrasses and is adaptable to a wide variety of climatic and soil conditions. Benefit from its tolerance to heat, drought, disease, and traffic.

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# BEST DEFENSE IN THE LEAGUE

When insects go on the offensive, turf professionals go to the toughest defense they can find. More and more, they're looking to The Seed Pro, LESCO, for perennial ryegrass.

LESCO offers the best perennial ryegrasses bred today, including Legacy, Commander, Assure, Citation II, Eagle Blend and Double Eagle Blend. Each variety contains high endophyte levels, making it your best defense against insect damage and environmental stress.

LESCO Turf-Type perennial ryegrass is broadly adapted where turf pros enjoy its dark green color and competitive nature. In the South, LESCO ryegrasses make ideal overseeding grasses for bermudagrass areas.

Put your best insect and stress defense on the field, LESCO's perennial ryegrasses. Legacy, Assure, Commander, Citation II, Eagle Blend and Double Eagle Blend are available from your LESCO Sales Representative, your nearby LESCO Service Center or by calling toll free (800) 321-5325.

**LESCO — Turfgrass seed exclusively for professionals**

**LESCO**

ESTABLISHED 1962

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Rocky River, Ohio 44116

**Fertilizers, Seed, Control  
Products, Equipment, Parts**

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