

elongate, causing the downward curvature of the root.

Researchers have speculated that the transport of IAA is facilitated by a gene that acts as a pump to redistribute the hormone up and down root cells as needed. The EIR1 gene isolated by the research at the Whitehead lab may represent this pump.

The Whitehead findings could lead to the design of new classes of compounds targeted at plant-specific genes like EIR1. But so far, according to a DuPont spokesperson, this is "not currently a major focus."

Many questions and challenges remain, including concerns about mutant weeds somehow being released into the environment. Although any EIR1-type herbicide product would ideally destroy any weed before it could reproduce, skeptics are as abundant as dandelion shoots.

"A concern I might have is that whatever weeds this gene could be inserted into might be released into the wild and possibly cross with other species (possibly crops or endangered species), which could reduce their fitness to survive," says Tom Lanini, a weed ecologist at the University of California, Davis. "In the current state of genetically mutated organisms, I doubt the public would want to see this gene released into a field setting."

Genetic manipulation is a popular concern, even among superintendents eager to reduce or eliminate the use of conventional herbicides.

"It sounds almost too good to be true," says Cary N. Lewis, superintendent at Renaissance Vinoy Resort in St. Petersburg, Fla. "It'll be a great day when we could manage our turf without the need for herbicides. If this EIR1 gene is the tool to lead us to that day, fantastic.

"But I'm not a fan of changing the genetic makeup of things and turning them loose in the environment, although I support continued research and I would love to reduce chemical use in turfgrass management," Lewis adds.

Still, most superintendents are intrigued by the possibilities presented by the research, however remote an actual product may be.

"The ability to genetically control weeds in turfgrass would revolutionize the way we treat our turfgrass," says Joe T. Boe, superin-

tendent of Coral Oaks GC in Cape Coral, Fla. "I haven't found a herbicide on the market that kills weeds and has no adverse effect on turfgrass."

Reliance on herbicides as the primary weapon in the weed wars is tempting and understandable. The active ingredients in herbicides enters plants through their crowns, roots and shoots. The major site of physiological activity is within developing plant tissues found in the growing points of roots and shoots of susceptible plants, where the mode of action disturbs or inhibits mitotic cell division, development and growth.

However, overreliance on herbicides adds one more toxic chemical to the environment already soused with insecticides, fungicides and liquid fertilizers. About 175 chemicals, comprising the active ingredients in several hundred formulations of herbicides, are currently available for control of weeds in Florida, for instance.

All of the herbicides at superintendents' disposal have such an impact on surrounding turfgrass that fertilizers or micronutrients need to be added so the turfgrass plant retains its vigor and is able to fill in the area where the weeds were present.

"The main problem I can see is that this product will probably have to be spot-sprayed so the surrounding turfgrass will retain a healthy root system — which, as all superintendents know, is our main means of job security," Boe says.

Even though gene isolation may be a step in the direction of a lasting solution to the weed problem, some observers fear losing touch with the fundamentals of turfgrass health.

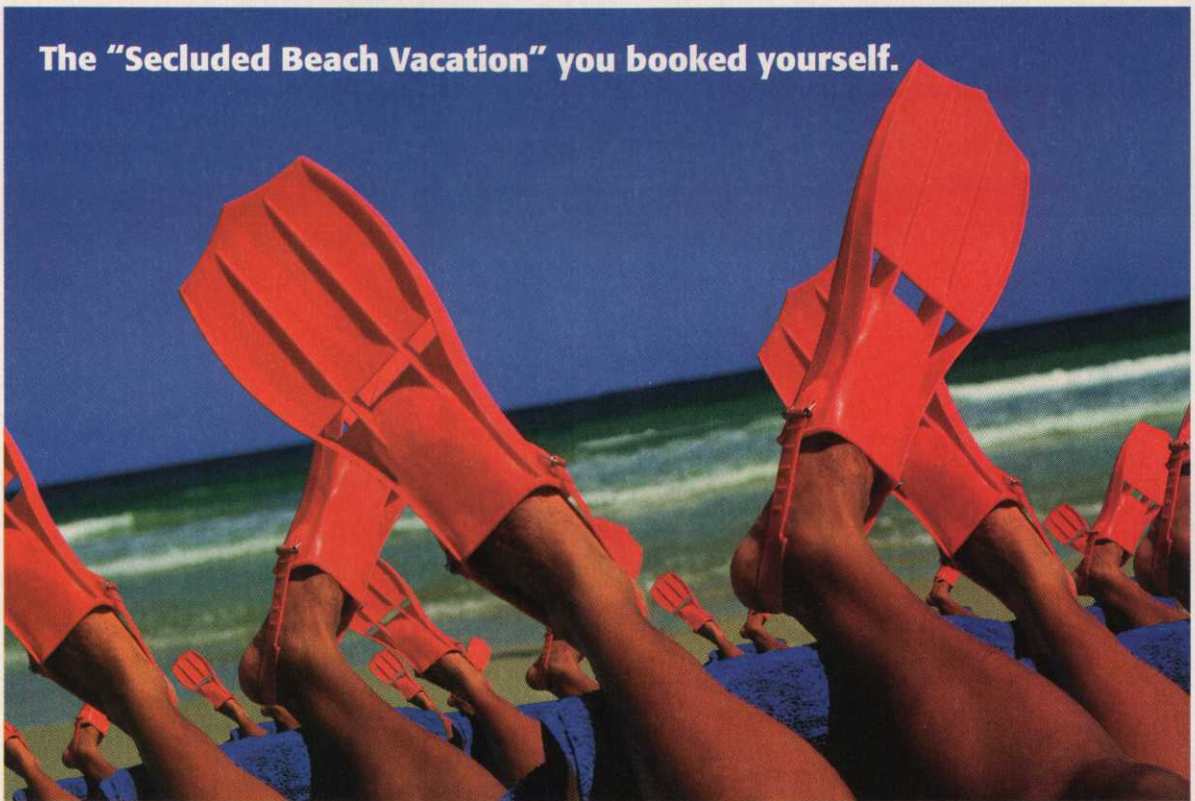
"Many people attribute our downfall to the continual quest for shorter grass or faster greens, but I think the real challenge of the future lies in managing traffic," says Jeff Carlson, president of Wild Side Golf Consulting in North Eastham, Mass. "Our desire to use less water and nitrogen and our fascination with low-impact grasses work well until confronted with 30,000-plus rounds." ■

"It sounds almost too good to be true."

CARY LEWIS, *Superintendent*

Page is a free-lance writer specializing in science from Redondo Beach, Calif.

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Golfdom

April 2000

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| 05 <input type="radio"/> 50 City/State/Municipal | 12 <input type="radio"/> 100 Others Allied to the Field |
| 06 <input type="radio"/> 55 Other Golf Courses
(please specify) _____ | (please specify) _____ |

2. Which of the following best describes your title? (fill in ONE only)

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| 14 <input type="radio"/> 15 Assistant Superintendent | 21 <input type="radio"/> 75 Builders/Developers |
| 16 <input type="radio"/> 25 Owner/CEO | 22 <input type="radio"/> 55 Architect/Engineer |
| 17 <input type="radio"/> 30 General Manager | 23 <input type="radio"/> 60 Research Professional |
| 18 <input type="radio"/> 35 Director of Golf | 24 <input type="radio"/> 65 Other Titled Personnel |
| 19 <input type="radio"/> 70 Green Chairmen | (please specify) _____ |

3. What are the types of turf on your:

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| A. GREENS | B. TEES | C. FAIRWAYS |
| 25 <input type="radio"/> 1 Bent | 29 <input type="radio"/> 1 Bent | 34 <input type="radio"/> 1 Bent |
| 26 <input type="radio"/> 2 Bermuda | 30 <input type="radio"/> 2 Bermuda | 35 <input type="radio"/> 2 Bermuda |
| 27 <input type="radio"/> 3 Rye | 31 <input type="radio"/> 3 Rye | 36 <input type="radio"/> 3 Rye |
| 28 <input type="radio"/> 4 Other (please specify) _____ | 32 <input type="radio"/> 4 Fescue | 37 <input type="radio"/> 4 Fescue |
| | 33 <input type="radio"/> 5 Other (please specify) _____ | 38 <input type="radio"/> 5 Zoysia |
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4. What is your facility's annual maintenance budget?

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| 40 <input type="radio"/> A More than \$2 Million | 44 <input type="radio"/> E \$300,001-\$500,000 |
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| 43 <input type="radio"/> D \$500,001-\$750,000 | |

5. If you work for a golf course, how many holes are on your course?

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| 47 <input type="radio"/> A 9 | 49 <input type="radio"/> C 27 | 51 <input type="radio"/> E Other (please specify) _____ |
| 48 <input type="radio"/> B 18 | 50 <input type="radio"/> D 36+ | |

6. Are you the person responsible for golf car purchasing/leasing?

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| 52 <input type="radio"/> A Yes | 53 <input type="radio"/> B No |
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7. Are you directly involved in purchasing decisions for your facility?

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| 54 <input type="radio"/> A Yes | 55 <input type="radio"/> B No |
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7A. If yes, which of these products do you specify, buy or approve?

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| 56 <input type="radio"/> A Aerators (pond) | 71 <input type="radio"/> P Insecticides | 86 <input type="radio"/> 5 Sod |
| 57 <input type="radio"/> B Architectural Services | 72 <input type="radio"/> Q Irrigation Systems | 87 <input type="radio"/> 6 Soil Analysis |
| 58 <input type="radio"/> C Batteries | 73 <input type="radio"/> R Irrigation Parts | 88 <input type="radio"/> 7 Sprayers |
| 59 <input type="radio"/> D Biostimulants | 74 <input type="radio"/> S Landscaping | 89 <input type="radio"/> 8 Spreaders |
| 60 <input type="radio"/> E Construction Services | 75 <input type="radio"/> T Lubricants | 90 <input type="radio"/> 9 Tanks/USTs |
| 61 <input type="radio"/> F Chain Saws | 76 <input type="radio"/> U Mowers | 91 <input type="radio"/> 10 Tires |
| 62 <input type="radio"/> G Course Accessories | 77 <input type="radio"/> V Nematicides | 92 <input type="radio"/> 11 Tools |
| 63 <input type="radio"/> H Cultivation Equipment | 78 <input type="radio"/> W Pond Management | 93 <input type="radio"/> 12 Tree Care |
| 64 <input type="radio"/> I Drainage Supplies | 79 <input type="radio"/> X Pumps/Stations | 94 <input type="radio"/> 13 Turf Markers |
| 65 <input type="radio"/> J Erosion Control | 80 <input type="radio"/> Y Rakes | 95 <input type="radio"/> 14 Uniforms |
| 66 <input type="radio"/> K Fertilizers | 81 <input type="radio"/> Z Range Supplies | 96 <input type="radio"/> 15 Utility Vehicles |
| 67 <input type="radio"/> L Fungicides | 82 <input type="radio"/> 1 Safety Products | 97 <input type="radio"/> 16 Weather Systems |
| 68 <input type="radio"/> M Generators | 83 <input type="radio"/> 2 Sand | 98 <input type="radio"/> 17 Wetting Agents |
| 69 <input type="radio"/> N Golf Cars | 84 <input type="radio"/> 3 Seed | |
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| 106 | 118 | 130 | 142 | 154 | 166 | 178 | 190 | 202 | 214 | 226 | 238 | 250 | 262 | 274 | 286 | 298 | 310 |
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7A. If yes, which of these products do you specify, buy or approve?

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| 112 | 124 | 136 | 148 | 160 | 172 | 184 | 196 | 208 | 220 | 232 | 244 | 256 | 268 | 280 | 292 | 304 | 316 |

Putting the Kibosh on Clover

As this weed rears its ugly head, here are tips on how to control it

By Frank H. Andorka Jr., Associate Editor

Clover stealthily infests a course until it takes over and squeezes out healthy turf.

Clover is the stealth bomber of weeds. It sneaks up under superintendents' radar screens, showing up in little clusters that don't seem an imminent threat. If those clusters are left to their own devices, however, clover can suddenly take over a course.

The weed germinates even when the grass is dormant, and it's a tenacious competitor for nitrogen when turf wakes up from its winter slumber. Here are tips for superintendents who are readying to do battle right now:

Understand your grass varieties. Peter Dernoeden, a professor at the University of Maryland, says the choice of herbicides with which a superintendent can

kill clover depends on a host of variables, including the type of grass.

Feed the grass, kill the clover. "Healthy turf is the best defense against clover," says Bob Brame, director of the north-central region of the USGA Green Section. "Don't starve your grass of nitrogen. If you do the clover will snatch up whatever nitrogen you put down and leave nothing for the grass to live on."

Brame says he encounters superintendents who feel low nitrogen provides for the best turf, but his advice for those superintendents is to be on the watch for clover. "If you're seeing a lot of clover, then you might want to re-evaluate your feeding program," Brame says.

Look for the earliest signs of a clover infestation. If it's not possible to do a pre-

Continued on page 86



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Continued from page 85

emergent treatment, keep a close eye on your course for the first signs of clover, which include circular patches that may not seem like an imminent threat to the course, Brame says. It's a mistake to ignore them.

"If you're not careful, those little circular patches will continue to radiate out and then you'll end up with an entire

golf course full of clover," Brame says. "Golfers hate that."

Just because the leaves are gone, don't assume you've solved the problem. If a superintendent uses a clover control product that kills only the leaves, it will not effectively control the infestation, warns Dernoeden.

"Clover germinates all the time, and therein lies the problem," Dernoeden

says. "If you don't kill the stolons where the germination takes place, you're wasting your time."

Rotate the herbicides you use, even within the golf course. Jerry Coldiron, superintendent at Boone Links/Lassing Pointe GC in Florence, Ky., says it's a good idea to rotate herbicides, particularly pre-emergents.

"We have our pre-emergent herbicides on a nine-hole rotation," Coldiron says. "It prevents our clover from becoming resistant to any one herbicide."

Test different herbicides on small patches of grass before using them wholesale. Not every herbicide works in all regions of the country effectively, Miller says. Rates are going to vary, so it helps to have a test site.

"Don't be afraid to tweak the rates to fit your specific area," Miller says. "Superintendents should always maintain a flexibility so they can adjust on the fly."

Use a "sticker" that will allow the herbicide to stay on the clover long enough to take care of the problem. Charlie Ulevich, superintendent at Hayfields CC in Hunt Valley, Md., says he uses seed oil with his herbicide.

"The sticker allows me to reduce my rates with the herbicide so it can be less toxic to the overall environment," Ulevich says. "That's an important consideration, no matter where you are."

Aerate on a regular basis. A good aeration program will keep a thatch layer from building up and trapping enough nitrogen to encourage clover, Brame says.

Create a nursery to replace turf in places where herbicides are not an option. Around tees and greens, wholesale spraying of herbicides wouldn't be the prudent course of action, so you need to have a turf nursery on your course to deal with those areas, Brame says.

"It's always amazing to me when I go out to a course and the superintendent doesn't have some sort of nursery, particularly when it comes to greens grass," Brame says. "Once you've got a clover infestation, you need a nursery and you need it now." ■

CORNY SOLUTION

As environmental restrictions on herbicides tighten, golf courses find themselves asked to do increasingly more with less. Choosing organic products over traditional chemicals presents an environmentally friendly alternative, but there has to be proof the products perform. Nick Christians is dedicated to giving superintendents that proof.

Christians, professor at Iowa State University, discovered the herbicidal properties of corn meal in 1986. Christians was testing corn gluten meal as a growth media for microorganisms.

"We didn't go into this research thinking about discovering an organic herbicide," Christians says. "We were just looking to encourage Pythium fungi growth to study it"

While plots treated with the Pythium-infected corn meal grew the fungi as expected, Christians and his team found the fungi didn't grow in the plots where untreated corn meal had been used.

"We had sprayed some of our gluten formula on a golf green, and we noticed that broadleaf weeds didn't grow where the compound had been sprayed," Christians says. "It became clear that something unusual was going on beneath the surface."

Further investigation revealed that the corn gluten contained a chemical that killed weeds at the root level by inhibiting root growth. Corn gluten meal is 60 percent corn protein and 10 percent nitrogen, with 40 percent other materials included. It's a byproduct of the wet-milling process and is sold as the main ingredient in a variety of livestock, fish and dog foods.

Christians says the nitrogen, combined with the corn meal, produces the added advantage of encouraging the growth of healthy turf. Christians says healthy turf itself is an effective inhibitor of weed growth.

Though the substance initially exists as a fine yellow powder, Christians says pellets make its application on the soil far easier.

Corn gluten meal affects a series of broadleaf weeds, including clover and dandelions. It also controls crabgrass, Christians says. Unlike chemical herbicides, the organic meal has little effect on established grass when it's applied, he says.

Christians recommends a rate of 20 pounds per 1,000 square feet to reduce crabgrass infestation in Kentucky bluegrass by 50 to 60 percent in the first year, and that a slow increase in rates can bring total control. As with synthetic herbicides, timing is important. The turf needs to be wet to activate corn gluten meal's herbicidal properties, but extended wet periods can reduce its effectiveness.

But Christians warns superintendents not to think of corn gluten as a solution for post-emergent weed control.

"You have to put this substance down before the weeds start to grow," Christians says. "Otherwise, the whole process will be a waste of time."

Corn meal gluten is being marketed under a variety of different names across the country. For a complete listing of vendors and brand names, visit www.gluten.iastate.edu.

The sprayable form of the herbicide is not terribly stable, and Christians says further research into nonsprayable forms is continuing.

— Frank H. Andorka Jr.

HERBICIDES ON PARADE

Here are some products you can use to control pesky weed problems

The hand-held Weed Pro by **Standard Golf** is a cost-efficient alternative to the normal hand-spraying methods for herbicides. Weed Pro is 31 inches long to allow for convenient handling and holds a premeasured amount of herbicide concentrate and water.

The operator simply locates the weed and applies the necessary amount of herbicide with the spring-loaded sponge at the end of the applicator.

CIRCLE NO. 211

Rohm and Haas Co.'s Dimension now has a supplemental label that allows superintendents to overseed with perennial ryegrass eight weeks after the application. Previously, superintendents were required to wait 90 days.

CIRCLE NO. 212

BASF Specialty Products offers Drive herbicide

for weed problems, including crabgrass and dandelions.

The active ingredient, quinclorac, is a new chemistry for the turf herbicide market and can be used on a number of turf species, according to the company. The product is registered with the Environmental Protection Agency.

CIRCLE NO. 213

Barricade is a pre-emergence herbicide that offers low rate, season-long control of 30 grassy and broadleaf weeds, including crabgrass, goosegrass and *Poa annua*, in turf and ornamentals. Offered by **Novartis**, it's known for its non-staining active ingredient and application flexibility.

CIRCLE NO. 214

SENCOR from **Bayer** offers effective control of tough weeds on dormant and actively growing bermudagrass turf. One post-emergent application of SENCOR in the spring will usually provide control through the fall.

SENCOR can be tank mixed with MSMA to control crabgrass, nutsedge, barnyard-

grass, common yellow woodsorrel, sandbur and dallisgrass.

CIRCLE NO. 215

Dynaweed from **Soil Technologies Corp.** provides an alternative to chemical herbicides. It offers pre-emergent control of crabgrass and other persistent, annual grassy and broadleaf weeds. Dynaweed granules are derived from a by-product of the wet-milling process for corn syrup. Dynaweed pre-emergent weed control stops annoying crabgrass and other persistent weeds before they start, according to the company.

CIRCLE NO. 216

Professional landscape managers in both warm and cool climates are discovering the advantages of Confront, from **Dow Agro-Sciences**, for post-emergence control of broadleaf weeds in almost every type of turf. Confront is close to 100 percent effective against dandelion, clover, plantain and oxalis, as well as other problem species, according to the company.

CIRCLE NO. 217

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CIRCLE NO. 120

www.golfdom.com **Golfdom 87**

Tips:

Spreader Calibration

So the new assistant you hired needs retrained on spreader calibration. Don't worry. It's easy to teach and simple to learn, says Rich Hoopes, superintendent of the New Course at Grand Cypress GC in Orlando, Fla. Hoopes and Dan Haizlett of North Manchester, Ind.-based Spyker Spreaders, offers tips for proper spreader calibration:

■ **Accuracy.** First and foremost, make sure your settings are calibrated correctly. "The critical part of calibrating is that applications must be extremely accurate," Haizlett says. "Take the time to calibrate properly."

■ **Keep records.** Keeping records of what products are applied is vital, Haizlett says. Track how much product was applied on how much area and when it was applied.

■ **Read the label.** Make sure you're reading manufacturer's labels for fertilizer and pesticide correctly, Haizlett says. Remember that the calibration numbers on the bags are not the actual settings. They are starting points for calibrating.

■ **Size it up.** Remember that particle sizes change continuously, and this affects calibration.

■ **Mind the law.** If you're spreading pesticides, abide by the manufacturer's label. "It's the law," Hoopes notes.

■ **Set a pace.** Keep in mind that walking speed has an effect on the width of your spread pattern and effects the rate of material applied, Haizlett says.

Adds Hoopes: "When you're walking and calibrating, you're trying to duplicate the speed you'll use on the golf course. Then, you try to maintain that speed. Obviously, there's some human error, but you just do the best you can."

■ **Add a tray.** Haizlett points out that trays can be used to catch product during the calibration process. Spyker offers a new line of spreaders equipped with calibrator trays to make the process easier.

Finally, superintendents and their crews should assume that environmental restrictions are only going to get tougher. With that in mind, accurate calibration and record-keeping is that much more important.

"In Europe, there's very tight documentation of all products applied, even on homeowner's lawns," Haizlett says.

If the turf doesn't need it, you're not allowed to apply it, including nitrogen, phosphorous and potassium. "Tighter restrictions on fertilizer and pesticide use will continue in the United States as well, and if you can't demonstrate that you properly calibrated the spreader you're using, you may be asking for problems," Haizlett says.

For a set of calibrating instructions, visit the Spyker web site at www.spyker.com.

— Larry Aylward

Leaders

■ PEOPLE ON THE MOVE



Gary Grigg, former president of GSCAA, left Royal Poinciana GC to become president of Greenscape,

Robert Trent Jones Jr.'s construction division.

Las Vegas-based Walters Golf named **Sue Blitzstein** director of business development. The company also added **Larry Wright** as director of group and outing sales.

The National Golf Course Owners Association elected its new officers and board

members: **Bill Stine**, president; **Walt Lankau**, vice president; **Meriam Leeka**, treasurer; **Mark Seabrook**,



secretary; board members **Charlie Birney** and **Charlie Floyd**.

Ed McLaughlin was named director of golf at the Swan-e-set Resort & CC in Pitt Meadows, British Columbia.



Coral Canyon GC in St. George, Utah, named **Gary White** its director of golf.

The GCSAA elected its new officers and board members at its show in New Orleans: **R. Scott Woodhead**, Valley View GC, Bozeman, Mont., president; **Tommy Witt**, StillWaters, Dadeville, Ala., vice president; **Michael Wallace**, Hop Meadow CC, Simsbury, Conn., secretary/treasurer; and directors **Ken Magnum**, Athletic Club, Atlanta, Ga.; **Jon Maddern**, Elk Ridge GC, Atlanta, Mich.; and **Dave Fearis**, Blue Hills CC, Kansas City, Mo.

Steve Burns, of Burns Golf Design in Fernandina Beach, Fla., was awarded a 1999 Excellence Award by *The Boardroom* magazine.

Jacklin Seed/Simplot Turf & Horticulture named **Larry Perotti** as technical services manager.

Michael McMahon was named director of marketing for Naples Grande GC in Naples Fla.

The Ohio Turfgrass Foundation announced its new officers and trustees for 2000. They include, **Randy Tischer**, president; **Len Dunaway**, president elect; **Mark Heinlein**, vice president; **John Mowat**, treasurer; **Mark Rawlins**, trustee; **Ted Durchik** and **Mark Jordan**, members of the Board of Directors.

Steven J. Petersen joined Gowan Co. as its Turf Division sales manager.

White Plains, N.Y.-based Starwood Hotels & Resorts Worldwide hired **Tighue Shields** as vice president of golf management operations and **John A. Williams** as vice president of golf operations to develop the Starwood golf management team.

Joe Louis Barrow Jr., director of The First Tee, was elected chairman of the National Golf Foundation.

The Golf Course Builders Association appointed **Lee Hetrick** as its executive vice president.

DEATHS

Paul Frank, superintendent at Wilderness CC, died last month. He was a 40-year member of the GCSAA. Frank was a pioneer in new grasses and other technology, his greens were frequently used by scientists at the University of Florida for nematode research and other projects.

Let us know about your people on the move. Send information/color photos to *Golfdom's* Frank H. Andorka Jr. at 7500 Old Oak Blvd., Cleveland, 44130. Fax information to 440/891-2675 or e-mail to fandorka@advanstar.com.

The Company Line

■ PRODUCTS & SERVICES



▲ Hauler

Textron Turf Care And Specialty Products offers the Jacobsen Hauler, designed for the hauling and towing demands common to golf course maintenance.

Two models are available:

- The gas-powered 1110 hauler features a two-cylinder, four-cycle engine that produces 11 horsepower.
- The electric hauler has a 2.5-horsepower, 36-volt motor powered by six, six-volt deep-cycle batteries.

The 1110 hauler offers 1,200 pounds of total capacity and up to 1,000 pounds of cargo capacity, according to Textron. The electric hauler features heavy-duty storage batteries with high-efficiency, solid-copper windings.

For more information, contact 888-922-TURF, www.ttcsp.textron.com or

CIRCLE NO. 201

Tines

JRM offers a new line of SuperQuad aerification tines. The SuperQuad is offered in two lengths: the standard Quad length of 3.5 inches and a longer 4.5-inch length.

As compared to a standard Quad, the SuperQuad is about one-third larger with a slightly thicker wall and should be considered for those situations where the superintendent wants to go a little deeper and/or pull up slightly more material, according to the company.

The SuperQuad should be an ideal option for times of drought and stress or with newer more fragile greens, according to the company.

For more information, contact 888-JRM-7007 or

CIRCLE NO. 202

Eliminate dew

The Whole Nine Yards offers the Fairway Snake to eliminate morning dew the easy way and in less time, according to the company. The flexible, weighted rope can be customized to fit your fairways.

For more information, contact 516-537-7252 or

CIRCLE NO. 203

Software applications

Robert McNeel & Associates and CadEasy formed a product partnership to jointly release bundled applications, including AccuRender, Faade and EasySite.

Under the agreement, the two companies will work to insure seamless integration and transfer of 3-D faces, textures, and rendering features; will co-market the applications; and create bundled packages of EasySite/AccuRender, EasySite/Faade and EasySite/Accurender/Faade.

EasySite is a powerful conceptualization and presentation tool that brings site modeling to AutoCAD users who may have little or no knowledge of 3-D CAD or who may not be experienced in creating digital terrain models. AccuRender is the rendering application for AutoCAD.

For more information, contact 800-627-3279, www.cadeasy.com or

CIRCLE NO. 204

Fire ant control

AgrEvo Environmental Health offers free literature featuring information on the control of red and black imported fire ants. The literature offers detailed descriptions of red and black imported fire ants, their life-cycle, the mounds in which they live, the damage their stings can cause, eating and mating habits and several detailed control recommendations.

The fire ants nesting activity can damage fairways, roughs, equipment and structures, according to AgrEvo. The company says its Deltagard and Turcam products can control the pests.

For more information, contact 201-307-9700 or

CIRCLE NO. 205



▲ Mowers

New Holland introduces its MC Series — three compact commercial front mowers geared to high-production mowing. The mowers range from 22 horsepower to 35 horsepower and are designed for greater productivity with more power, maneuverability and operator comfort, according to the company.

All models feature a diesel engine and two-range hydrostatic transmission. They also have a multi-disc independent PTO clutch and wet disc brakes.

A low center of gravity makes MC Series mowers more stable and their compact size makes them more maneuverable, the company says.

For more information, contact 717-355-1371, www.newholland.com/na or

CIRCLE NO. 206



◀ Post-hole digger

Snake River Tool Co. offers the Holey-Moley, a labor-saving post-hole digger.

Simply attach the Holey-Moley to a water source, allow the water to moisten the ground for a few seconds and let the tool go to work. Applying only slight pressure on the tool and a circular up-and-down motion is all that's needed.

It can dig a 4-foot deep hole in 40 seconds, the company says. The water loosens the dirt and the Holey-Moley follows the flow.

The Holey-Moley hooks up to an ordinary garden hose and works with as little as 15 psi.

For more information, contact 208-743-5355, www.holey-moley.com or

CIRCLE NO. 207

Bunker rakes

Smithco's bunker rakes are designed and built to give superintendents the best bunker playability under all conditions. The rakes are engineered for long life, maximum power, operator safety, environmental compatibility, cost-efficient operation and low maintenance, according to the company. The bunker rakes feature:

- Three-phase raking and finishing system for smooth, firm playability.
- Fiberglass body construction.
- Hydraulically operated, center-mounted cultivator to loosen and level hard and wet sand.
- Hydraulically operated, rear-mounted finishing rake to deliver smooth sand surface.
- Hydraulically operated or manual front-mounted plow to move sand into place.

Smithco also introduces two improved models of its Spray Star 1600 Turf Sprayer. Among the new features is the choice of 25-horsepower hydraulic drive or 20-horsepower mechanical drive, an even lower profile spray tank and wheeled spray booms.

For more information, contact 610-688-4009, www.smithco.com or

CIRCLE NO. 208

Fungicide

The Rohm and Haas Co. offers a new formulation of Fore fungicide. Called Fore Rainshield, the new formulation improves Fore's ability to resist wash-off because of heavy rains or irrigation, according to the company. This improves the product's efficacy without the need of using a spray adjuvant.

In recent tests, Fore Rainshield demonstrated curative control of brown patch, gray leaf spot and Helminthosporium leaf spot, all at competitive costs per applications of other products, according to the company. Fore Rainshield also treats pythium blight, dollar spot, slime mold, snow mold, rust and algae.

For more information, contact 215-592-3000, www.rohmmaas.com or

CIRCLE NO. 209

Gloves

Gempler's disposable nitrile gloves are ideal for jobs like soil handling and mechanic work. The gloves offer comfort, protection and tear resistance, according to the company. They also protect against some chemical splash.

For more information, contact 608-424-1544, www.gemplers.com or

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