

Water. It's what keeps the world alive. As the world's largest manufacturer of irrigation products, we believe it is our responsibility to develop technologies that use water efficiently. Over the past seven decades, our pioneering efforts have resulted in more than 130 patents. From central control systems and automatic shut-off devices to pressure regulating components and low volume drip irrigation, Rain Bird designs products that use water wisely. And our commitment extends beyond products to education, training and services for our industry and our communities.

The need to conserve water has never been greater. We want to do even more, and with your help, we can. Visit **www.rainbird.com** for more information about The Intelligent Use of Water.<sup>™</sup>



#### www.rainbird.com

© 2003 Rain Bird Corporation

Pebble Beach Golf Links, and distinctive images of the course are trademarks, services marks and trade dress of Pebble Beach Company. Used by permission. Rain Bird is the official irrigation supplier of Pebble Beach Resorts.

### Business briefs

#### Welcome to PDI

The GCSAA's new membership standards – known as the Professional Development Initiative – officially took effect July 1. GCSAA members approved the new criteria at the association's annual meeting in Dallas in February 2001.

For grandfathered members of the GCSAA, the date signals the beginning of the renewal cycle. However, new members must now attain certain levels of education and experience to achieve Class A status.

Jeff Bollig, director of communications for the GCSAA, said the association has spent most of the past two years testing various processes and procedures to ensure effective and efficient data management.

#### **RISE wants to prove point**

Responsible Industry for a Sound Environment (RISE) wants to identify the sources of nutrients that may be contributing to surface water pollution.

So the national trade organization that represents producers and suppliers of specialty pesticides and fertilizers is teaming with its member companies to sponsor two university studies on the effects of specialty fertilizer to urban water quality. The total cost of the studies, each taking three years, will be about \$310,000.

To determine the levels of phosphorus and nitrogen from natural sources vs. turf fertilizer, the University of Minnesota and Cornell University will conduct separate experiments in accordance with proper scientific methods.

RISE's Jim Skillen, manager of formulators' issues, said the group knows that turf fertilizers are not generally responsible for excess nutrients (phosphorus and nitrogen)

Briefs continue on page 14

# **Extreme Drought Leads** to Extreme Measures

VEGAS COURSE RIPS OUT IRRIGATED TURF TO COMPLY WITH WATER RESTRICTIONS

#### **By Shane Sharp**

hat the southwestern U.S. is mired in one of the worst droughts in history is no longer front-page news. The extreme measures some golf courses are taking to cope with the worsening conditions and tighter water restric-

tions are worth noting, however. Steve Swanson, superintendent at the Sienna GC in the golf-rich Las Vegas suburb of Summerlin, has removed 14.1 acres of irrigated turf from the upscale daily-fee course to comply with local water restrictions.

For its conservation efforts, Siena received a \$300,000 rebate from the Southern Nevada Water Authority (SNWA). But the rebate may do little to offset the hard times that could remain ahead. If the drought continues at its current clip, Siena could remove a total of 60 acres of turf and spend close to a \$1 million tearing apart a perfectly good golf course.

The question circulating among local superintendents is whether or not golf courses should be the primary target of heavy-handed water restrictions that have essentially left them no choice but to tear out signif-



icant portions of grass. To the voting public, the area's more than 50 golf courses appear to devour more than their share of water. In reality, the golf course industry is responsible for a mere 8 percent of regional water consumption, according to the SNWA. Water use by the metro area's 1.6 million residents, by comparison, accounts for about 65 percent. Swanson says the politics of the situation are inevitable.

"Let's see, you can go after 50 golf courses or 1.6 million people," Swanson says. "It is not rocket science which one you go after. Let's be honest, a lot of this boils down to politics."

Clark County's two main water sources don't discriminate between homes and golf courses, however. Lake Mead, the source of 85 percent of Las Vegas' water, has dropped 74 feet in the past two years and is at 63 percent of its capacity, according to the SNWA. Lake Powell, further up the Colorado River, is down 95 feet and is at 50-percent capacity.

"Things could and probably will

get worse before they get better," Swanson says. "Right now we're restricted to about 8 acre feet of water per acre, per year. That could change to 6 feet in a few weeks."

Swanson says most Siena residents have been tolerant of the course's situation. "We sent out letters informing them of the drought situation and that we were removing turf."

While only 3 years old, Siena was permitted in the mid-1990s shortly before the existing restriction that limits new courses to 5 acres of turf per hole. The Brian Curley/Lee Schmidt-designed course originally contained 150 acres of turf and was conceived as a "parklandstyle course" in the desert. By this month, it could be down to 136 acres of turf. By late fall or early winter, it could be down to 90 acres.

The long-term prognosis for Siena is good, according to Swanson, despite the imminent transition from parkland- to desert-style course. Siena has solid financial backing from its owners, a supportive residential base and a generous maintenance budget. Swanson is also convinced the integrity of the course's design can be retained during the entire process.

"Most of the turf that will be removed will be in areas that aren't in play," he says. "It will change the look and feel of the course, but I don't think it will be more difficult to play."

At least one local water official is convinced that Las Vegas-area courses will come out of the drought fine.

"We have some of the best superintendents in the world, and they will reinvent the way golf is played here," says Doug Bennett, conservation manager for the SNWA.

Swanson appreciates the vote of confidence, but feels it's optimistic.

"I'm worried about some courses," he says. "They will not be able to afford to

do this. When it's all said and done, we will spend \$900,000 of our own money. That and the cost of water going up will force some clubs out of business."

Courses that survive the first few years of tighter water restrictions should eventually be able to recoup their upfront turf removal costs through savings on water. Swanson says he currently pays \$2.27 per thousand gallons. Come Oct. 1, the rate will rise to \$3.

"We are looking at about a four-year payback for the turf removal when you factor in water savings," Swanson says.

Siena is not the only course making a pre-emptive strike on tighter water restrictions. Red Rock CC, a private course in Summerlin, is replacing 14 acres of rough with drought-tolerant plants and xeriscape. South of town, the Boulder City GC is ripping out close to 30 acres of grass.

Sharp is a free-lance writer from Charlotte.



For a smooth and consistent path to the cup

"Feather Touch operation

Non-slip rubber coated drive roller

· Reduces recovery time and inconvenience to golfers after aerifying and top dressing greens

 Optional Eaton hydrostatic or Snow-Nabstedt Power Transmissions

 Consistent green speed green to green and day to day ... just like the tour events!

> Turf ventilator and broom attachments

1 800 661 4942 Toll Free Email: woodbay@greensiron.com www.greensiron.com

### Business briefs

*Briefs continued from page 12* found in the nation's water bodies as claimed by activists.

"Natural sources such as leaves, pollen, soil erosion, flower parts, and pet and waterfowl waste contribute significantly to high phosphorus levels in urban lakes, ponds and rivers," he added.

Skillen said there has not been enough documented research to counter the unsubstantiated claims of activists.

#### **Fisher follows Whitman**

Linda Fisher, deputy administrator of the EPA, resigned in July. Her announcement came one day before EPA Administrator Christine Whitman stepped down from her position.

#### **Novozymes takes Roots**

Salem, Va-based Novozymes Biologicals says its recent acquisition of Roots Inc. in June will strengthen its position in the market for environmental microorganisms, which allow environmentally friendly growth enhancement and disease control for turf.

### **Industry loses top architect**

The golf course industry lost one of its top architects when Robert Muir Graves died in June from from cancer. Graves, 72, began his career in 1955 as a landscape architect before slowly transitioning into golf course architecture full-time in 1960. Graves' design portfolio includes more than 75 new golf courses.

# **Protection Plants**

TURF-SEED TAKES ACTION TO COMBAT CROSS-POLLINATION FEARS FROM SCOTT'S ROUNDUP READY BENTGRASS

### By Frank H. Andorka Jr., Managing Editor

One Oregon turfgrass breeder has planted 250 of what he called "sentinel" plants in farmers' fields that surround test plots of glyphosate-resistant bentgrass being grown by a competitor to see how far the pollen from those plots will travel under open-breeding conditions.

Bill Rose, chairman of Turf-Seed, told distributors at his company's Field Day



Will many golf course fairways be comprised of Roundup Ready bentgrass one day? event that there were 400 acres of glyphosate-resistant turf being grown in Oregon, and he's concerned about the possibility that it will cross-breed with nonglyphosate-resistant turf. So Rose approached farmers he knew in the Madras, Ore., region where the fields are located and asked them to let him plant his "sentinels" to monitor how far the pollen travels. The guard plants will be tested periodically to see if they've become glyphosate resistant.

The genetically modified turf is called Roundup Ready bentgrass and has been developed in a joint effort between The Scotts Co. and Monsanto. The companies have mechanically inserted a gene to modify the plant's DNA and make it resistant to Monsanto's nonselective herbicide Roundup. They hope to someday make it easier for superintendents to control turf weeds, especially *Poa annua*.

Rose says he's also researching how far the prevailing winds can carry pollen from genetically engineered plants at his research facility in Canby, Ore. So far, the trials have confirmed that the pollen will travel at least 1,000 yards, but some tests have indicated that it can travel further, he says. He added that he's working with the Environmental Protection Agency on the tests.

The Scotts Co. disputed Rose's claims.



"We've conducted extensive research regarding pollen flow and outcrossing," the company said in a prepared statement. "First, the only bentgrass being grown in the Madras area is within our Oregon Department of Agriculture-approved control area. There are no other bentgrass fields within 100 miles. That's one of the reasons we chose to plant there.

"Second, bentgrass is not sexually compatible with other grass species, so there is no chance of outcrossing that would transfer the glyphosate-resistant trait to say, fescues or bluegrasses, for example," the statement continued. "Additionally, the new variety is only resistant to glyphosate, so other herbicides can control bentgrass in seed production environments. Even if it does outcross to bentgrass plants growing on ditch banks, those hybrid plants can be controlled with other herbicides or by mechanical removal."

# Floratine...

# "The Real Deal"

I expect quality, value, and service from my suppliers. My turf and the players demand it.

Floratine delivers on all accounts.

I first used Astron at Merion Golf Club after hearing about University of Maryland trial results with it. I went straight Floratine foliars - Astron, Knife, Tiger Turf, Perk Up, FG-20... when we regrassed in 1995 preparing for the 50th U.S. Girls' Junior Championship. The grow-in was flawless despite a hot, humid Philadelphia summer.

What Floratine brought to the table was a holistic approach to soil and plant health. Their program is based on my soil, water quality, environment, and my objectives. The versatility and quality of their products make it work.

Now I'm at Oak Hill Country Club in Rochester, and Floratine has been the cornerstone of my fertility program while preparing for the 85th PGA Championship. Floratine's foliars are the foundation, but Maxiplex and CalpHlex have been instrumental in solving the challenges of difficult soil and water chemistry.

Quality and versatility in their products, reliability and integrity in services... Floratine delivers.

oratine

Invested In The Wonder

They're The Real Deal.

Paul B. Latshaw, CGCS **Oak Hill Country Club** Rochester, New York



© Mary Corcoran 144 Mid South Cove • Collierville, TN 38017 • (901) 853-2898 • www.floratine.com

To celebrate Scottish history on the National Mall, the Smithsonian built a golf hole.

# A Monumental Achievement

### BETWEEN THE WASHINGTON MONUMENT AND THE CAPITOL BUILDING, THE SMITHSONIAN PAID TRIBUTE TO THE BIRTHPLACE OF GOLF

### By Frank H. Andorka Jr., Managing Editor

Frank Morse, construction superintendent for Landscapes Unlimited, could hardly believe his eyes when he went to scope out the firm's latest project on Memorial Day — a 40-yard hole in Washington D.C.'s National Mall.

The hole was part of the Smithsonian Institution's Folklife Festival, held June 25-29 and July 2-6, and was part of a Scottish heritage exhibit.

"I walked down by the White House, the Vietnam Memorial and the Lincoln Memorial, and there was the site for the hole in the middle of it all," Morse says. "On one end of the Mall was the Washington Monument and on the other was the Capitol. I knew I was working on sacred ground."

Each year, the Smithsonian's festival promotes an understanding of domestic and international folk customs, and the featured country in 2003 was Scotland. It originally planned only to feature Barry Kerr of Heritage Golf in St. Andrews, a fourth-generation golf club maker, making wood-shaft clubs. But Kerr called his friend Michael Hurdzan, a principal of the Columbus, Ohio, firm Hurdzan Fry Golf Design, with the idea of creating a hole as a backdrop for his demonstrations.

"I've known Barry for a long time, and when he called me with this idea, I thought it would be cool," Hurdzan says. "So we called the Smithsonian and said we'd like to move some earth on the National Mall to build this hole, and they said OK."

Hurdzan says he loosely modeled the hole after St. An-

# Quotable

"If my math is right, Tiger has three mansions, a couple of seven-car garages and a blond swimsuit model for a girlfriend. Yep, he's in a slump, all right."

— Denver Post columnist Jim Armstrong on Tiger Woods' "slump."

### "Voice mail is for those businesses who want to insult their customers but lack the staff to do it in person."

— T. Scott Gross, author of several books, including Positively Outrageous Service, during his keynote speech at the National Golf Course Owners Association meeting earlier this year.



THE SMITHSONIAN INST

"When I was a younger superintendent, I lost a lot of sleep and stressed a lot over Mother Nature. But I've certainly come to understand that good superintendents have to be able to react to what

cards Mother Nature deals you and do the best you can."

— Chris Ayers, certified superintendent of Lakewood CC in Rockville, Md., on dealing with the wicked curve balls that Mother Nature can throw.

drews' famous 17<sup>th</sup> "Road Hole," replete with three sod bunkers (varying in depth from 4 feet to 6 feet) and an undulating 1,500 square foot green.

"It was fun to watch people come out of the Metro [Washington's subway] station, and the first thing they saw was the hole," Hurdzan says. "You saw them do a double take and scratch their heads as they wondered what in the devil it was."

Morse says the construction disturbed between 6,000 square feet to 7,000 square feet of dirt. The project took four times as long as expected to build because of the rain that inundated the East Coast this spring. Normally, Landscapes Unlimited could have finished the project in *Continued on page 19* 

# We've got seed with VOULT MADE on it

When ordering turf seed, you want to choose from the best varieties, blends and mixtures and tailor them to your specific agronomic needs.

YOUR NAME

YOUR NAME.

OUR NAME

When delivering seed, we want to provide a product that meets those personal requirements while delivering quality above industry standards so you want to order from us time and time again.

With UHS and Signature brand seed, you get the perfect marriage of flexibility and guaranteed quality. If some of the familiar names to the right appeal to you or you want to add your own to the list, give us a call.



For more information, contact your local UHS sales representative

Close Cut 90/10 Mixture **Signature Fescue Plus Super Shade Mixture Signature Grand National Contractors Mixture Signature Heather Links Fast Grass Mixture Division 1 Rocky Mountain Sports Mixture** Signature Royalty Bentgrass Blend **Northeast Tee Mixture Country Oaks Athletic Mixture** Signature Sahara Tall Fescue Blend **Native Grass & Wildflower Mixture Signature Stadium Mixture MarvelGreen Supreme** Signature TourStar Ryegrass **Signature Trilogy Bentgrass Blend Auburn Perennial Ryegrass Blend Central Jersey Shade Mixture Commercial Pro Mixture** Signature Close Cut Bluegrass Blend **Divot Repair** Low Maintenance Bluegrass Blend Wetland Mixture **Signature Open Rough Mixture Maxium Tall Fescue Blend Signature Premium Fairway Mixture Native Grass Seed Mixture Signature Tall Fescue Blend Native Low Grow Mixture Signature Premium Bluegrass Blend New England Sports Turf Mixture** Signature CPR Ryegrass Blend **Play N Shade Mixture** Signature Division 1 **Salt Fescue Mixture Signature Club Choice Ryegrass Country Oaks Fast Grow Mixture Sunny Lawn Mixture** 

Signature MarvelGreen Supreme Ryegrass



**Survivor Mixture** 

www.uhsonline.com





### when it comes to fighting black layer in turf



### The exclusive granular combination for effectively treating problematic turf

Traditionally, treating black layer meant aeration, improving drainage and the use of wetting agents and soil amendments. While these methods are encouraged, they alone cannot alleviate black layer problems.

BLT<sup>™</sup> is the new advanced greens grade granular product with ingredients proven to combat black layer and its effects, providing an alternative to costly reconstruction, renovation or ineffective inputs and practices.

BLT<sup>™</sup> will reduce the severity of black layer for several months after application and a regular maintenance schedule will keep susceptible areas from recurrences.

 Contains these unique ingredients:

 activated carbon

 The activated carbon

 enzymatic system

 enzymatic system

 penetrating agent

 oc

 root stimulants

 the turb to

 soil amendment

The activated carbon in this product is 100 times more active than activated charcoal and adsorbs the hydrogen sulfide present in the soil.

The enzymes in BLT degrade the protective film covering anaerobic bacteria in the black layer, thus restricting their production of toxic gas.

Our premium wetting agent, Respond,<sup>®</sup> provides help in moving the carbon and the enzymes sub-surface to where the black layer resides.

The addition of Prospect<sup>®</sup> fertilizer additive and other bio-stimulants encourage the turf to repopulate the area where the black layer has inhibited root growth.

BLT is placed on a carrier of EcoSand,<sup>®</sup> a zeolite soil amendment, which aids in oxygen movement and absorbs excess water.

For more information, contact your local UHS sales representative

### www.uhsonline.com



#### Continued from page 16

seven to 10 days, but it took four weeks instead, he added.

"It was labor-intensive since we had to build the hole by hand," Morse says. "We couldn't bring heavy construction equipment on to the Mall."

Both Landscapes Unlimited and Hurdzan Fry donated their time and labor to making the project a reality, and other vendors donated materials and equipment to the hole.

So which lucky superintendent took care of this hallowed site? That honor fell to Dean Graves, certified superintendent at the Chevy Chase (Md.) Club and a *Golfdom* Advisory Staff member, who says he considered himself more of an advisor to the project. "It rained so much this spring that the last time I went down to look at it [in late June], it looked like Scotland," Graves says, laughing. "It was neat being a part of the project."

Graves says the grounds superintendent of the National Mall asked questions about how to handle washouts in the bunkers and how to mow the greens so they weren't scalped.

After the festival was over, the hole was plowed under, and the Mall was returned to its former state. But for one brief moment, golf held a place among America's greatest monuments.

"I think that it recognizes that golf is a mainstream pursuit

### Marital Bliss and ... Golf

Love and marriage, love and marriage, love and marriage ... and a round of golf.

Say what?

Get this, author Becky Tirabassi and her husband, sports counselor Roger Tirabassi, have written a

book that says golf *can* help your marriage. Yes, playing golf can help your marriage.

Say what?

The book is called, *The Front Nine: Nine Fundamentals of Golf That Will Improve Your Marriage.* In the book, they explore proven golf principles they say are keys to happier and healthier relationships. The Tirabassis teach men and women how to fit two months worth of counseling into a round of golf. They vow that couples will see that the same mindset used to hit out of a bunker and on to the green works just as well in daily relationships.

For more information, contact www.thefrontnine.com.

in the United States, and its connection to Scotland proves that it's also universal," Hurdzan says. "For the Smithsonian to put golf front and center in this way was a tribute to the reputation the sport has throughout the world."



Irrigation is a major investment...

# Be Sure.

Professional members of the American Society of Irrigation Consultants have passed an extensive peer review and qualification process. Working with an ASIC member gives you the confidence that a highly-qualified irrigation consultant is on the job, helping to protect your interests and your investment.

Contact ASIC to find a consultant near you.



American Society of Irrigation Consultants 111 E WACKER 18th FL CHICAGO, IL 60601 312.372.7090 FAX: 312.372.6160 WWW.ASIC.ORG





t's the antithesis of Augusta National GC. What Augusta is — historic, hallowed and high-falutin' — Golf Plus is not. If Augusta is the glamorous Rolls Royce of golf courses, then Golf Plus is the humble Pinto

with 152,832 miles — and counting.

Golf Plus is a par-three executive nine-hole course and driving range located about five miles from Augusta National. The two courses are located on the same famed Washington Road. But the similarities stop there. Cold.

Regis Costabile is the owner/general manager/superintendent/teaching professional/cash register clerk/phone attendant of Golf Plus. You might think he'd resent the club down the road and all that it stands for — power, money and prestige — but that's not the case at all.

The prodigious Augusta machine helps Costabile's itty-bitty business, especially during Masters week. "Augusta is absolutely *great* for my business," Costabile announces.

Except on this ugly April day. It's Monday of Master's week and what looks like the beginning of monsoon season in Georgia. A steady, hard and chilly rain refuses to let up. And for the first time in 20 years, Augusta cancels the day's practice round and closes the course to spectators.

It's a sad say for the thousands of spectators who showed up to watch some golf. Many drove several hours from Northern states, but were left pimento cheese sandwichless and holding bags from Burger King. "When Augusta closes during Masters week, you know the weather has to be bad," Costabile says.

It's one of those dreary days where everything looks like it's colored in black and white, except Costabile's untucked bright-yellow polo shirt. He sits at a small table in the center of his cluttered, pint-sized pro shop watching the Iraqi war on CNN. A cat naps peacefully on a chair nearby. They are the only souls in the place.

Costabile says Golf Plus, located a pitching wedge down the street from Club Car, would be packed if the weather was as half as sunny as his shirt. There would be a line of people waiting to get on the driving range, and each of the nine holes on the executive course would be fourdeep with golfers.

Instead, his business for the day has gone

# At Opposite Ends of the Spectrum

#### BY LARRY AYLWARD



THE TWO COURSES ARE LOCATED ON THE SAME FAMED WASHINGTON ROAD. BUT THE SIMILARITIES STOP THERE down the drain with the rain. But Costabile, a tall and friendly man who sports silver hair, a well-trimmed mustache, a George Hamiltonlike tan and a Jimmy Buffett-type attitude, doesn't seemed too miffed about the day's lost business and the weatherman's forecast of rain for the week's remainder.

Costabile, who has owned Golf Plus for 13 years, says the business will eventually kick in, even after Masters week. That's when the locals, who normally lay low until the tournament is over, dust off their drivers and head to his range.

"We had a good year last year," Costabile says. "They absolutely beat the grass off the ground. You can always tell how good a year you had by how much grass is left at the end of it."

Although he enjoys wearing his turf maintenance hat, he admits it's no fun fixing the army of divots left on the driving range after a busy day. "The only way to realize how much work it is, is to let 10 people with 100 golf balls each stand on your front lawn and hit them," he says. "Then when they leave you have to repair the turf."

Oh, the pain of running your own business and having to be the jack of all trades. Would Costabile trade in Golf Plus for a gig at the "other" course down the road that's literally located on the other side of the railroad tracks?

Not a chance.

While Costabile agrees with the throngs that say Augusta is one of the greatest courses in the universe, he's content to make his living mowing the turf, keeping the books and doing just about everything else at Golf Plus. There are plenty of miles left on the business.

Costabile is perfectly happy working in the shadow of the giant.

Aylward, editor of Golfdom, can be reached at 440-891-2770 or laylward@advanstar.com.