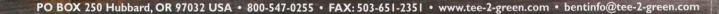
Since the Beginning

Since the introduction of Penncross, superintendents around the world have come to trust Tee-2-Green and the Penn bents.

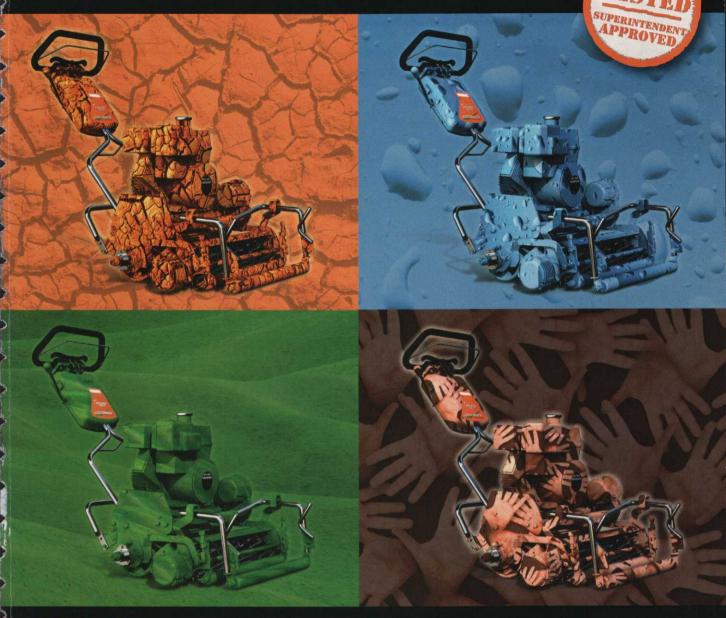
How many superintendents do you know with the Penn bents on their course?



TEE² AREEN

Golf. It's All We Do.

Adapt to their Surroundings



JACOBSEN[®] ECLIPSE[™] WALKING GREENS MOWERS

Like a chameleon, the new Eclipse[™] walking greens mowers from Jacobsen[®] can adapt to any turf, condition, operator or environment. Independently adjustable ground speed, reel speed and FOC give you the unprecedented power to dial in to the exact cut you want. Fifty percent more float eliminates scalping – even on the most undulated turf. An advanced control system takes variability out of the operator equation for a more consistent cut every time. And a variable-configuration platform allows for hybrid or battery power to provide stealth-like quietness, fuel savings and reduced emissions. Field tested and superintendent approved, the Jacobsen Eclipse gives you the power to mow with confidence, precision and superior results – every single day. For more information, call 1.888.922.TURF or visit jacobsen.com.

1.888.922.TURF • jacobsen.com







©2008 Jacobsen, A Textron Company, All rights reserved. Pebble Beach[™], Pebble Beach Golf Links[™], The Heritage Logo, The Lone Cypress[™] and their underlying distinctive images are trademarks, service marks and trade dress of Pebble Beach Company. Used under license.

The Official Turf Equipment Supplier to The PGA of America and The Exclusive Turf Equipment Supplier to PGA Golf Properties.



When Performance Matters.™

Golfcom

Golfdom's Annual Guide On Mainte





34 Right on Line

Sometimes green speed and consistency are easier to feel than measure. **By David Frabotta**



42 Give 'Em What **They Want**

Golfers desire perfect greens. So what do superintendents need from a fertilizer to fulfill their desires? **By Larry Aylward**

50 Makes Sens-ors

New technology gives information to help superintendents make better water-management decisions. By Anthony Pioppi



Real-Life Solutions One-Two Punch

Fungicide fights disease and energizes greens. **By Larry Aylward**



nance

cover story

Golfdom presents its annual guide on green maintenance. Our report focuses on green speed and fertility, among other topics.

About the cover

Golfdom Art Director Kristen Morabito used a series of special effects on this photograph from iStock International to add some perspective to our cover.

columns

- 10 Pin High A Trip Down Memory Fairway
- 26 Shades of Green Environment Still No. 1 Concern for Golf
- 28 Designs on Golf Time to Get in the Right Groove
- **33 Turf M.D.** Spring (and *Poa Annua*) Is in the Air
- 104 Out of Bounds Opening Day

departments

- 8 We've Got Mail
- 12 Big Picture
- 14 Off the Fringe
 - 24 Hole of the Month
 - 94 Top Assistants
 - **100 Leaders**
 - **102 Company Line**
 - **103 Classifieds**

Turfgrass Trends

This month, *Golfdom*'s practical research digest for turf managers discusses how preventive annual bluegrass weevil programs can encourage resistance. See pages 79-93.

66 Marking Our 10th Year: Part II

Colfickom

This industry has "issues." By Larry Aylward

GolfdonGolfde

Teach Your Interns Well

Two superintendents team up for the ultimate program. By Jim Myers

Online Exclusive

News with a hook

14 What Has the 110th

Congress Done?



A Sin to Spray Pesticides? Thanks to Vatican's ruling, expect environmentalists to play God. By Larry Aylward

www.golfdom.com Golfdom 3



Sodding: Apply 25 lbs. of Milorganite to cover 1,000 sq. ft. before laying down sod. Follow up with an additional application of 17 lbs. per 1,000 sq. ft. on top of the sod after the first mowing as a starter fertilizer.

l-800-287-9645 www.milorganite.com

Golfdom.com

EDITORIAL STAFF

Larry Aylward EDITOR IN CHIEF 216-706-3737 David Frabotta SENIOR EDITOR 216-706-3758 Kristen Morabito ART DIRECTOR 216-706-3776

Geoff Shackelford CONTRIBUTING EDITOR 310-451-5877 Joel Jackson CONTRIBUTING EDITOR 407-248-1971 Anthony Pioppi CONTRIBUTING EDITOR 860-344-8895 Mark Luce CONTRIBUTING EDITOR 816-943-1923 Jim Black CONTRIBUTING EDITOR Ron Furlong CONTRIBUTING EDITOR Karl Danneberger SCIENCE EDITOR Mike Klemme PHOTO EDITOR 580-234-8284

CLEVELAND HEADQUARTERS 600 SUPERIOR AVENUE, EAST SUITE 1100 CLEVELAND, OH 44114

OFFICIAL PUBLICATION OF



American Society of Irrigation Consultants P.O. BOX 426 ROCHESTER, MA 02770; 508-763-8140; WWW.ASIC.ORG

GOLFDOM ADVISORY STAFF

Jim Barrett, ASIC JAMES BARRETT ASSOCIATES

Pat Blum COLONIAL ACRES GC

Joe Boe WINDERMERE GC

Terry Bonar, CGCS CANTERBURY GC

David Davis, FASIC DAVID D. DAVIS ASSOCIATES

Tripp Davis ASGCA ASSOCIATE

Shawn Emerson DESERT MOUNTAIN CLUB

Christopher S. Gray Sr. MARVEL GOLF CLUB

John Gurke, CGCS AURORA CC

ASSOCIATIONS

TRAVERSE CITY G&CC Jim Husting, CGCS WOODBRIDGE G&CC

Steve Hammon

Jim Loke, CGCS

Walter Mattison (IN MEMORY)

Steve Merkel, CGCS LANDSCAPES UNLIMITED

Jim Nicol, CGCS HAZELTINE NATIONAL GC

James Simonini ROBERT TRENT JONES II

Brit Stenson IMG GOLF COURSE DESIGN

Bobby Weed, ASGCA WEED GOLF COURSE DESIGN

WEED GOLF COURSE DESIGN

American Society of Golf Course Architects 125 N. EXECUTIVE DR., SUITE 106, BROOKFIELD, WI 53005; 262-786-5960; WWW.ASGCA.ORG



Golf Course Superintendents Association of America 1421 RESEARCH PARK DR., LAWRENCE, KS 66049-3859; 800-472-7878; WWW.GCSAA.ORG



727 "O" STREET, LINCOLN, NE 68508; 402-476-4444; WWW.GCBAA.ORG National Golf Course Owners Association 291 Seven FARMS DRIVE.

Golf Course Builders Association of America

SECOND FLOOR, CHARLESTON, SC 29492; 843-881-9956; WWW.NGCOA.ORG

Responsible Industry for a Sound Environment 1156 15TH ST. NW, SUITE 400, WASHINGTON, DC; 202-872-3860; WWW.PESTFACTS.ORG

Six-time winner of the national Folio: Award for editorial excellence

laylward@questex.com dfrabotta@questex.com kmorabito@questex.com

geoffshackelford@aol.com flgrn@aol.com apioppi@earthlink.net mluce@sbcglobal.net greenkeeperjim@yahoo.com rfurlong5@gmail.com danneberger.1@osu.edu mike@golfoto.com

07-204a-Apr



YOU'LL HAVE TOTAL CONTROL OVER PYTHIUM. GOLFERS NOT SO MUCH.

WITH THE NEW CHEMISTRY OF FLUOPICOLIDE AND THE PROVEN POWER OF PROPAMOCARB COMBINED IN ONE PREMIX, STELLAR[™] FUNGICIDE PROTECTS YOUR COURSE WITH POWERFUL PYTHIUM CONTROL. AFTER ALL, YOUR TURF IS ALREADY UNDER ENOUGH ATTACK, ISN'T IT?

Stellar FUNGICIDE PROTECT YOUR TURE





Good food and lots of exercise equals a long life. We all know we should eat healthy foods and get plenty of exercise. The same goes for our dogs. Healthy living prevents illness, and you won't have to see the veterinarian as often! Reserve treats like dog biscuits or table scraps for very special occasions.

Bailey. Her owner is Michael Cooper, the assistant superintendent at Grand National Golf Course in Auburn, Ala. (Photo by: Kim Lumpkin)



Improving the Way Professionals Care for Turf

Introducing The New Ice Chilled Drinking Fountain from Halsey Taylor...

 No more heavy, bulky coolers to clean & fill!

· Water is chilled through self-contained coils. so water source is never in contact with hands or ice.

- No electrical hookup required.
- · Holds up to 30 lbs of ice for long-lasting service.
- Green polymer cabinet stands up well to the elements & resists rust.

The sanitary and economical solution to cold drinking water on the golf course!

Halsey Taylor. Satisfying Thirsts Since 1912 2222 Camden Court, Oak Brook, Illinois 60523 • 630.574.3500 halseytaylor.com

Golfdom

BUSINESS STAFF

Patrick Roberts PUBLISHER 216-706-3736 proberts@questex.com Petra Turko SALES ASSISTANT 216-706-3768 pturko@questex.com Amber L. Terch PRODUCTION MANAGER 218-279-8835 Rhonda Sande PRODUCTION DIRECTOR 218-279-8821 **Antoinette Sanchez-Perkins** AUDIENCE DEVELOPMENT 216-706-3750 asanchez-perkins@questex.com Kevin Stoltman GROUP PUBLISHER 216-706-3740 FAX: 216-706-3712

aterch@questex.com rsande@questex.com

kstoltman@questex.com

ADVERTISING STAFF

CLEVELAND HEADOUARTERS 600 SUPERIOR AVENUE, EAST, SUITE 1100 CLEVELAND, OH 44114

Gerry Bogdon NATIONAL ACCOUNT MANAGER 407-302-2445 FAX: 407-322-1431

Dave Huisman REGIONAL SALES MANAGER 732-493-4951 FAX: 732-493-4951

Annette McCoy ACCOUNT EXECUTIVE 216-706-3746 FAX: 216-706-3712

Kelli Velasquez ACCOUNT EXECUTIVE, CLASSIFIED 216-706-3767 FAX: 253-484-3080

dhuisman@questex.com

gbogdon@questex.com

amccoy@questex.com

kvelasquez@questex.com

MARKETING SERVICES

Reprints 800-290-5460 ext. 100 golfdom@reprintbuyer.com llene Schwartz CIRC. LIST RENTAL 216-371-1667 ilene@krolldirect.com Subscriber, Customer Service 847-763-9594 chatcher@guestex.com Books, Directories, Current Issues, Back Issues, Photocopies, CD-Rom 866-344-1315; 847-763-9594

CORPORATE



Kerry C. Gumas PRESIDENT & CEO

Tom Caridi EXECUTIVE VICE PRESIDENT & CFO

Robert S. Ingraham EXECUTIVE VICE PRESIDENT

Tony D'Avino EXECUTIVE VICE PRESIDENT

Claudia Flowers EXECUTIVE VICE PRESIDENT, CORPORATE DEVELOPMENT

Don Rosenberg vice PRESIDENT & GENERAL MANAGER

Seth Nichols VICE PRESIDENT, DIGITAL MEDIA

Diane Evans vice president, HUMAN RESOURCES

Gol/dom does not verify any claims or other information appearing in any of the advertisements contained in the publication, and cannot take any responsibility for any losses or other damages incurred by readers in reliance on such content.

Golidom welcomes unsolicited articles, manuscripts, photographs, illustrations and other mate-rials but cannot be held responsible for their safekeeping or return.

Questex Media provides certain customer contact data (such as customers' names, addresses, Questex Media provides certain customer contact data (such as customers' names, addresses, phone numbers and e-mail addresses) to third parties who wish to promote relevant products, services and other opportunities which may be of interest to you. If you do not want Questex Media to make your contact information available to third parties for marketing purposes, simply call 847-763-954 between the hours of 8:30 a.m. and 5 p.m. CT and a customer service rep-resentative will assist you in removing your name from Questex Media's lists.





Know the Sign.



Greater Than Or Equal To.

Quali-Pro products feature formulation quality second to none for performance results equal to the competitive brands they replace.

Quali-Pro T-NEX[®] **1 AQ** — the proven PGR you can rely on. MAXX[®] has met its match. Learn more at **guali-pro.com**.



Professional Turf & Ornamental Products

©2008 FarmSaver.com, LLC. T-NEX and Quali-Pro are registered trademarks of FarmSaver.com. MAXX is a registered trademark of Syngenta Group Company. Always read and follow label directions.

We've Got Mail

LETTERS FROM THE FIELD

New Blood Welcome

Recently, much as been said and written about former Golf Course Superintendents Association of America CEO Steve Mona and his legacy, most of which falls into the category of politically correct. Without a doubt, the golf course superintendent profession has taken great strides in the past decade. However, much of the recognition must also go to the group of GCSAA members who originally identified that our membership would benefit from having a CEO lead our association and promote us as professionals.

Certainly being CEO of the GCSAA is a challenging position, and Mona did his best. It was evident that he feels deeply about this association when he had to choke back tears when saving his farewell to the membership in Orlando. I also believe he is sincere when saying that he will always be an advocate for golf course superintendents.

However, to truly evaluate anyone's tenure as a leader, failures must be taken into consideration along with the accomplishments. It was not long ago, when Mona was spearheading the Professional Development Initiative and the relocation of GCSAA headquarters to Florida, that our membership was more fractured, with more infighting than I have ever seen in it. The reality is that these two issues, regardless of the outcome, were expensive and extremely divisive. Perhaps the best result from this time period was the decision to finally include Class A members in the group of professionals that the GCSAA promotes to the public.

I, for one, feel the association was overdue for a change in perspective. I look forward to a fresh outlook and approach, and in time, I think the change will be healthy for the GCSAA. Perhaps the truth lies in the answer to a question that a wise old man once asked of me, "Does the man make the institution, or does the institution make the man?"

Rick Slattery, Superintendent

Locust Hill Country Club, Rochester, N.Y.

Who Set That Pin?

We've all heard the question after the highprofile tournaments at our clubs. Local knowledge and eyeballing work most of the time for setting holes. But as conditions change on our greens, last week's pin location might evolve into this week's unplayable hole.

What is fair? According to the United States Golf Association, anywhere on the green is permissible, but it might not be fair. Players don't expect an uphill putt to return to them if it lags within 3 feet of a cup. Tournament golfers understand that being above a hole is their mistake, so the ability to stop a downhill putt near the cup shouldn't be a concern.

I've used the "Rule of 3s" to test tournament hole locations for a number of years as a rules official. Recently, I demonstrated and discussed this with an experienced golf course superintendent who liked its effectiveness and simplicity.

He remarked that he was going to teach it to his staff, so I thought I'd share it with you.

Here's the test:

1) Select a potential hole location, and place a coin or a tee on the spot.

2) Drop a golf ball from 3 feet (waist high) about 3 feet below the spot.

3) If the ball rolls more than 3 feet from where it hit the green, then the slope is too severe for the conditions.

An appropriate spot might only be 1 foot away. This method works because it involves all the factors that affect a putt. Green speed, as we know, is influenced by wind speed, slope, grain, irrigation practices (or lack of), height of cut and myriad other cultural practices, including rolling frequency, chemical usage (plant growth regulators) and topdressing practices.

The weather creates additional variables. If the weather is hot and breezy, then the test can be implemented conservatively, like allowing only 2 feet of roll. Conversely, the test can be employed more liberally if conditions are wet and slow. Test this method with some of your current hole locations, and compare the results to the complaints you typically receive around the golf course. Then you can try to curtail those complaints by pre-testing future hole locations.

You might not eliminate every complaint, but the Rule of 3s will ensure that pin placements are consistently fair and appropriately challenging. Alan F. Pritchard, M.D.

Rochester District Golf Association, Sodus, N.Y.

Golfdom's Blog of the Month



Pollution Is a Sin. Pollution?

favors recently when it announced that pollu-

Gianfranco Girotti, told the media that "eco-

offense against God "is not only stealing or

God on their side in their efforts to ban the

5 Minutes to Protect It

50 Years to Replace It





or

Ensure the lasting beauty of your valuable trees.

As the pioneer of micro-infusion, Mauget has been the trusted resource for proven pesticides, fertilizers and micronutrients since 1958. And we're still at the innovative forefront after 50 years. Our completely enclosed application system makes it easy and cost-effective to take care of your trees.

- Environment, staff and member friendly
- Does not interfere with play
- Full season control
- Can do yourself



The Right Way To Treat A Tree

5435 Peck Rd Arcadia, CA 91006 800-TREES Rx 800-873-3779 www.mauget.com © Copyright J.J. Mauget Co.



Proven technology you can trust.

Mauget's micro-injection products are backed by solid research. Studies by the USDA, MSU, and other universities show that Mauget's treatments can effectively control devastating diseases and pests, including Emerald Ash Borer and Asian Longhorned Beetle.





eing *Golfdom's* 10th year of publishing, I decided to take a trip down memory fairway to revisit some of the people, places and things I've written about in this space.

My golf game was the topic for one of the first columns I wrote for the magazine in 1999. It was titled, "What Will You Do to Bring Back the Hacks?"

While the column was about my game, it was also about a lot of people's lousy games. And my aim in the column was to stress that the golf industry needs us hacks to create more rounds in a flat market. Problem is, while we love the game, we sometimes tend to hide our clubs and rebuff the game rather than play. Alas, the challenge for golf owners and operators is to make us feel welcome at their golf courses because they need duffers like me.

It was one of the few times I've written about myself in this space. Often, I like to reserve it for you.

In August 2006, I wrote about Bruce Williams, who was glad to get back to his stressful job as certified superintendent of the Los Angeles Country Club after undergoing a seven-way heart bypass operation (yes, seven) a year before. When I heard Williams had the bypass, a figured the stress of this pressure-packed profession had caught up to him. But, boy, was I wrong. In fact, Williams says he felt more relaxed to get back to work than he felt during the six weeks — the minimum time required by his doctor — he took off to rest after the surgery.

"It was a lot more relaxing for me to be back to see my golf courses and push through the paperwork that had piled up," he said.

Williams loves to work and thrives on the stress his job brings. Nothing wrong with that.

I profiled another superintendent in this space a few months later. He was from Augusta, but not the Augusta you're thinking. Larry Guy is the superintendent of Augusta Municipal Golf Course, a city course located in a city made famous by that other course.

While Augusta Municipal doesn't flaunt flawless-looking fairways or boast perfectly manicured greens, it's *not* a golf course with an

A Trip Down Memory Fairway

BY LARRY AYLWARD



MY GOLF GAME WAS THE TOPIC FOR ONE OF THE FIRST COLUMNS I WROTE FOR THE MAGAZINE IN 1999. IT WAS TITLED, "WHAT WILL YOU DO TO BRING BACK THE HACKS?" identity problem. This Augusta knows what it is, it's proud of what it does, and its superintendent seems as passionate about what he does as any superintendent in the business. "I just love it," Guy said. "I plan to stay here until I retire."

Back to the other Augusta. I've wanted to interview its superintendent Brad Owen for years. But my requests have been dismissed several times because of Augusta's "long-standing policy to not give interviews" to the press.

I wrote a column about this in July 2003. I pleaded with Augusta's communications director that all I wanted to do was talk turfgrass maintenance with Owen. I wanted to ask him about what it's like to tend turf at such a revered track. I wanted him to wax about his agronomic challenges on the course. I wanted our readers to learn from his responses. We're a business magazine, for cryin' out loud, not The National Enquirer! But, still, I wasn't allowed to talk to Owen. What a crock.

One of the classiest guys I wrote about in this space was Danny Quast, back in May 2004. Quast, who spent 12 years at the Medinah Country Club, received the GCSAA's 2004 Distinguished Service Award. During his three-minute acceptance speech for the award, Quast didn't talk about the 12 years he spent at one of the nation's great courses. He talked about his mom, Hazel, who had died weeks before. "She was the most influential person in my life," Quast said.

He said his mother lived a noble life without much recognition. So Quast made his time in the spotlight his mother's time. His action said a lot about how he was raised.

I hope there are more Danny Quasts to write about in the next 10 years. It has been my pleasure.

Aylward can be reached at laylward@questex.com.