

Golfdom

03.22

Say you want a renovation?

Well, you know, we'd all love a better bunker. Six bunker companies share how they can change a superintendent's world.

*Also
GCSAA
Conference
& Show Recap
See page 10*

PLUS

Busting up thatch

New book on superintendent life

Bermudagrass recovery from spring dead spot

SAVE BIG WITH THE SAND STAR E

	GASOLINE ¹	DIESEL ²	SAND STAR E
Annual Fuel/Electricity Cost	\$4,256.00	\$4,070.00	\$165.00
Battery Replacement ³	-	-	\$428.00
Engine Maintenance	\$1,490.00	\$980.00	-
Hydraulic Oil Change	\$220.00	\$220.00	-
Total Annual Cost	\$5,966.00	\$5,270.00	\$593.00

Based on 1000 total hours per year. ¹Gasoline cost estimate: \$3.50/gallon. ²Diesel cost estimate: \$3.70/gallon. ³Battery life expectancy amortization over 7 years

SAVE 90%
ON ANNUAL
OPERATING COSTS

✓ ECO-FRIENDLY

The Sand Star E, equipped with a Lithium Ion battery pack, offers the QUIETEST and most ECO-FRIENDLY groomer in the market.

✓ TECHNOLOGY

The Sand Star E features an industrial-grade motor and controller. The on-board diagnostics EXCEEDS all INDUSTRY STANDARDS.

✓ DURABILITY

Superior construction and materials combine to ensure INDUSTRY-LEADING LONGEVITY across our product lines.

GAS & DIESEL OPTIONS
AVAILABLE IN
OUR SAND STAR
HYDRAULIC
SERIES



121 DEALERS IN 62 COUNTRIES

50 years of exceptional service and products | smithco.com

SAND STAR SERIES



ROBUST LITHIUM ION BATTERY

5-year, non-prorated battery warranty

50 DIFFERENT ATTACHMENTS

Smithco | WE TAKE YOUR
TURF SERIOUSLY



Conference and Trade Show

C&S RECAP

Worth the wait

It was a daunting task — hosting a trade show in California during a pandemic — but for those who made it, the GCSAA Conference and Show was a hit

// 10



The Golfdom Conversation

So you want a renovation?

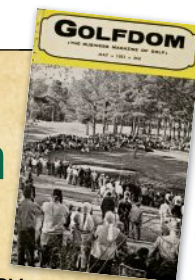
Well, you know, we all want a better bunker. That's why we asked these bunker companies how they can change a superintendent's world

// 18

The Masters & Golfdom through the years

Golfdom and the Masters go way back — all the way back to the inception of the tournament

// 22



COLUMNS

- // 6 **Keeping up with The Jones**—Seth Jones
Jones reflects on the uncertainty leading up to the 2022 GCSAA Conference and the best thing about its return
- // 30 **The Turf Doc**—Karl Danneberger, Ph.D.
Danneberger examines the importance of endowed chairs to the future of the turfgrass industry
- // 34 **Off the Record**—Mike Kenna, Ph.D.
Kenna breaks down the potential negative impact California AB 1910 could have on the environment

DEPARTMENTS

- // 8 **Starter**
- // 36 **The 19th Hole**



// 32

SUPER SCIENCE

- // 26 **Choose the best fungicide spring dead spot species**
- // 27 **Bermudagrass recovery from spring dead spot**
- // 32 **Tips to detatch your thatch**

COVER PHOTO BY: GOLFDOM STAFF

OUR RESEARCH GUARANTEES YOUR CONTROL

Supported by leading products and 10+ years of research, WeevilTrakSM now guarantees control of annual bluegrass weevils (ABW), white grubs and turf caterpillars.



 **Acelepryn**[®]
Insecticide

 **Ference**[®]
Insecticide

 **Provaunt**[®] **WDG**
Insecticide

 **Scimitar**[®] **GC**
Insecticide

92%

of WeevilTrak subscribers said they **time their applications** closely to WeevilTrak recommendations.

88%

were satisfied with their **level of control** in 2021.*

ABW ASSURANCE IN 3 STEPS

- 1 Register at [WeevilTrak.com](https://www.WeevilTrak.com)
- 2 Follow course(s) near you
- 3 Download and follow the ABW assurance program sheet

 **WeevilTrak**SM

 **syngenta**

   @SyngentaTurf #WeevilTrak

*Survey of 255 golf course superintendents conducted via TechValidate in Sept. 2021.

© 2022 Syngenta. **Important: Always read and follow label instructions. Some products may not be registered for sale or use in all states or counties. Please check with your state or local Extension Service to ensure registration status. Scimitar[®] GC is a Restricted Use Pesticide. Acelepryn[®], Ference[®], Provaunt[®], Scimitar[®], WeevilTrakSM, the Alliance frame, the Purpose Icon and the Syngenta logo are trademarks or service marks of a Syngenta Group Company. All other trademarks are the property of their respective owners.**



Shhhhhhhh...

What's the best kept secret in Golf Course Maintenance?

The TDR-X™ from Progressive.

As a key part of the Contour Team from Progressive Turf Equipment, the TDR-X checks all the boxes for Superintendents looking to get the most out of their yearly budget, namely fuel savings and low maintenance cost.

The TDR-X easily follows contours and leaves a championship cut quality and a superior looking finish to be proud of. The TDR-X from Progressive – the way a contour mower should be designed!



The Better Built Choice.™

WWW.PROGRESSIVETURFEQUIP.COM 800.668.8873



Quality built in North America and supported by a world-wide Dealer network.

Golfdom

Seven-time winner of the national Folio Award for editorial excellence

EDITORIAL

EDITORIAL DIRECTOR, EDITOR-IN-CHIEF & ASSOCIATE PUBLISHER Seth Jones

785-542-2627 / sjones@northcoastmedia.net

EDITOR Christina Herrick

216-675-6009 / cherrick@northcoastmedia.net

ASSOCIATE EDITOR Rob DiFranco

216-675-6001 / rdi franco@northcoastmedia.net

DIGITAL EDITOR Joey Ciccolini

216-363-7925 / jciccolini@northcoastmedia.net

ART DIRECTOR Pete Seltzer

216-706-3737 / pseltzer@northcoastmedia.net

CONTRIBUTING EDITORS

Karl Danneberger (*Science*), Alan FitzGerald, Joe Gulotti, Mike Kenna (*Research*), Matt Neff, Mark Woodward

BUSINESS

CLEVELAND HEADQUARTERS

1360 EAST 9TH ST, 10TH FLOOR, CLEVELAND, OH 44114

GROUP PUBLISHER Bill Roddy

216-706-3758 / broddy@northcoastmedia.net

PUBLISHER Craig MacGregor

216-706-3787 / cmacgregor@northcoastmedia.net

WESTERN REGIONAL SALES MANAGER Jake Goodman

216-363-7923 / jgoodman@northcoastmedia.net

EASTERN REGIONAL SALES MANAGER Dan Hannan

216-363-7937 / dhannan@northcoastmedia.net

ACCOUNT MANAGER Chloe Scoular

216-363-7929 / cscoular@northcoastmedia.net

EXECUTIVE SALES ASSISTANT Petra Turko

216-706-3768 / pturko@northcoastmedia.net

DIRECTOR OF MARKETING & EVENTS Michelle Mitchell

216-363-7922 / mmitchell@northcoastmedia.net

MARKETING & EVENT MANAGER Allison Blong

216-363-7936 / ablong@northcoastmedia.net

MGR., PRODUCTION SERVICES Karen Lenzen

216-978-3144 / klenzen@northcoastmedia.net

SR. AUDIENCE DEVELOPMENT MANAGER

Antoinette Sanchez-Perkins

216-706-3750 / asanchez-perkins@northcoastmedia.net

AUDIENCE MARKETING MANAGER Hillary Blaser

216-440-0411 / hblaser@northcoastmedia.net

MARKETING/MAGAZINE SERVICES

SUBSCRIBER, CUSTOMER SERVICE

847-513-6030 / golfdom@omeda.com

LIST RENTAL Brahm Schenkman

800-529-9020 / bschenkman@infofirejerry.com

REPRINTS & PERMISSIONS Wright's Reprints

northcoastmedia@wrightsmedia.com

CORPORATE

PRESIDENT & CEO Kevin Stoltman

VP OF FINANCE & OPERATIONS Steve Galperin

VP OF CONTENT Marty Whitford

VP OF MARKETING Michelle Mitchell

VP OF GRAPHIC DESIGN & PRODUCTION Pete Seltzer

Golfdom 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. The views and opinions expressed by Golfdom's contributors are those of the authors and do not necessarily reflect the official policy or position of Golfdom or North Coast Media.

Golfdom welcomes unsolicited articles, manuscripts, photographs, illustrations and other materials but cannot be held responsible for their safekeeping or return.

North Coast Media LLC 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 North Coast Media LLC to make your contact information available to third parties for marketing purposes, simply call 847-513-6030 between the hours of 8:30 a.m. and 5 p.m. CT and a customer service representative will assist you in removing your name from North Coast Media LLC's lists.

GOLFDOM (ISSN 1526-4270) is published monthly by North Coast Media LLC, IMC Center, 1360 East 9th Street, 10th Floor, Cleveland, OH 44114. **Subscription rates:** For US, Canada and Mexico, 1 year \$58.95 print and digital; two years \$88.95 print and digital. All other countries, 1 year print and digital \$109.95, 2 years \$169.95. For air-expedited service, include an additional \$75 per order annually. Single copies (prepaid only) \$10 plus postage and handling. For current single copy or back issues, call 847-513-6030. **Periodicals postage paid** at Cleveland OH 44101-9603 and additional mailing offices.

POSTMASTER: Please send address change to **GOLFDOM**, PO Box 2090, Skokie, IL 60076. Printed in the U.S.A. Copyright 2022 North Coast Media, LLC. All rights reserved. No part of this publication may be reproduced or transmitted in any form by any means, electronic or mechanical including by photocopy, recording, or information storage and retrieval without permission in writing from the publisher. Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients is granted by North Coast Media, LLC for libraries and other users registered with the Copyright Clearance Center, 222 Rosewood Dr, Danvers, MA 01923, phone 978-750-8400, fax 978-750-4470. Call for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law.



DryJect®



**The revolutionary DryJect service is now even more flexible.
Our most recent innovation allows you to use dry sand
OR wet sand and achieve the same remarkable results.**

DryJect will no longer be limited to the use of only kiln dried sand!

Through extensive research and development, we have engineered a special hopper configuration that includes rotating agitation and staged screening with vibratory assistance to assure effective flow of anywhere from slightly damp sand to wet sand.



Wet Sand, Damp Sand,
Dry Sand, No Problem



Rain or Shine
Capabilities



Cost Savings
Opportunities Now
Available



Injection that Aerates,
Topdresses, and Amends
in One Pass

In The Field!





“My phone started ringing, asking what I had been hearing around the industry, and what our plan was for the show. I told anyone who asked, we were going to be there, and were looking forward to seeing everyone who joined.”

SETH JONES, *Editor-in-Chief & Associate Publisher*

Canceled no more

The last time I wore a wristband for three days, I did it to see Nine Inch Nails, Queens of the Stone Age and The Cure. It was at Lollapalooza in Chicago, 2013.

In 2022 I wore a wristband for a week, but this time it was to prove I didn't have COVID-19, and it was to see John Deere, Standard Golf and Quali-Pro.

Oh, what a difference in events. Both shows rocked, though.

The 2022 GCSAA Conference and Show finally arrived, and yes, we actually went to California and did it. The photos and stories in this issue prove it. I don't have the words to tell you how great it was to be back. It was easily one of the most rewarding conferences I have ever attended. A year of everything being canceled — including an in-person 2021 Golf Industry Show — might make a guy a little sentimental when we finally get the band back together.

Everyone agreed, attendance was light. The show

was smaller. San Diego typically is a down year for attendance, but add in the pandemic, California's mask mandate, the San Diego Convention Center requiring either proof of vaccine or a negative test, the airlines canceling flights ... it all made it easy for people who would normally attend to say, “not this year.”

Go back in time to a few weeks before the GCSAA Conference and Show. A sports story broke that the NFL was considering moving the Super Bowl from SoFi Stadium in Inglewood, Calif., to somewhere, anywhere, in Texas. Suddenly people around the industry got real nervous. If the NFL can't pull off an event in California, how can GCSAA? My phone started ringing, asking what I had been hearing around the industry, and what our plan

was for the show. I told anyone who asked, we were going to be there and were looking forward to seeing everyone who joined. I answered that way because I really wanted the show to happen, to go off without a hitch. Did I know it would happen? Nope. This is still my first pandemic, and I'm riding the wave like everyone else.

The Super Bowl relocation story was squashed a few days later. We still nervously waited to see what would happen with a new variant. And finally, with no one trying to talk us out of it, I got to the airport and was reminded what this show is all about: connecting with people.

As soon as I got through security, I was shaking hands with people who were on my same flight to San Diego, people local to me who work in the industry. Upon landing

in San Diego, I immediately ran into old friends in the Gaslamp Quarter. A common question I was asked: where would the annual Friends of *Golfdom* party be hosted? I gave them an unexpected answer: we weren't having one this year, because we didn't know what to expect in San Diego. We hedged our bets.

It turns out the Friends of *Golfdom* party happened every night, and it just started wherever we were, with whatever group. When my team walked into the Field Irish Pub on Wednesday night — the same venue where we hosted the event in 2019 — we were greeted with a round of applause from the many friends who just went there out of instinct. I'll never forget that moment.

If you missed the show, this issue is for you. I present a recap of some of what I saw and learned at the show on page 10. And we share some photos of the people we saw on page 16. Our short visits with six different bunker companies begins on page 18. And for further coverage of the conference, including video booth visits with more than a dozen companies, visit **Golfdom.com**.

It was great to be back together again. Yes, we had to walk before we could run, but we were walking again in San Diego. Next year in Orlando? It's going to be a full-on sprint. **G**

Email Jones at:
sjones@northcoastmedia.net.



Everything is Connected at TPC Deere Run.

Alex Stuedemann
Director of Golf Course Maintenance Operations
TPC Deere Run



JOHN DEERE

Link with Golf Connectivity Solutions from John Deere.

Real time weather conditions and up-to-the-minute forecasts.
Control of mowing speed, turn speed and a consistent, frequency-of-cut.
Workboard updates, crew hours and maintenance schedules. Efficient and precise spraying. Everything is connected. How do you keep everybody working together, let alone keep everything straight in your head?
Let Golf Connectivity Solutions from John Deere help. TPC Deere Run does. See how. Connect now.

John Deere Golf. **Trusted by the Best.**



[JohnDeere.com/Golf](https://www.johndeere.com/golf)

Starter

NEWS, NOTES AND QUOTES

// HISTORIC LOSS

The cause of the fire that resulted in the complete loss of the structure may never be known.



OAKLAND HILLS CLUBHOUSE DESTROYED

99-YEAR-OLD CLUBHOUSE EXPECTED TO BE A TOTAL LOSS

BY THE GOLFDOM STAFF

➔ It was a hard thing to witness, so much history being burned to the ground. But that's all anyone really could do, as the fire that engulfed the Oakland Hills CC clubhouse in mid-February burned out of control.

The clubhouse, located in the Detroit suburb of Bloomfield Township, Mich., was built over the course of two years, from 1921 to 1922. Completed in August 1922, it included 24 rooms for overnight accommodations. Club member C. Howard Crane was the architect. He also was the architect of Detroit's Orchestra Hall, the Fox Theater and the Capitol Theatre, now known as the Detroit Opera House. The cost of the clubhouse was \$650,000 — \$300,000 over budget.

The cause of the fire may never be

known, Bloomfield Township Fire Chief John LeRoy told the *Detroit Free Press*. The initial call to 911 came from a cook who smelled smoke in the kitchen. The clubhouse sprinkler system could not extinguish the fire. "We'll probably never know what truly happened, the damage is so far advanced," LeRoy said.

No one was hurt. The golf courses, the golf maintenance facility and the pro shop were untouched by the fire, according to WXYZ Channel 7 News. The club announced shortly after the fire that they plan on rebuilding a replica of the clubhouse.

Oakland Hills has hosted 17 major championships. The club will host the 2031 U.S. Women's Open. Phil Cuffare is the director of agronomy at Oakland Hills.

// VARGAS HONORED

MICHIGAN TURFGRASS FOUNDATION GIFTS \$1M TO MSU PATHOLOGY CHAIR

A \$1 million gift from the Michigan Turfgrass Foundation to the Michigan State University (MSU) College of Agriculture and Natural Resources launched a \$5 million campaign to endow the Joe Vargas Chair in Turfgrass Pathology.

"Endowed positions are a cornerstone for recruiting outstanding faculty and supporting innovative research," said MSU president Samuel Stanley Jr., M.D. "We are fortunate to have the Michigan Turfgrass Foundation's partnership in our efforts to advance solutions to pressing challenges in turfgrass science in ways that will improve lives and strengthen communities."

This endowment honors Vargas who has dedicated his 51-year career to improving the quality of turf on every continent except Antarctica. As an international expert on turfgrass diseases, he is a member of the Michigan Golf Hall of Fame.

For more on this endowment, see the latest Turf MD from Karl Danneberger, Ph.D., on page 30.

// OPPORTUNITY KNOCKS

LEWIS JOINS GRADOVILLE AND HERTZING MANAGEMENT

Josh Lewis, a former U.S. Open superintendent at Chambers Bay, as well as the former superintendent at Pasatiempo GC and Bandon Trails, is making a career change.

Lewis will now work as a partner in the professional consulting company of Gradoville and Hertzing Management Group. Founded by Pat Gradoville, CGCS and Robert Hertzing, the company provides a broad range of services in agronomic assessments, pre-construction planning and project management in the Western U.S.

"I've always been fulfilled the most when I get to help people, and there is no better group to help than golf course industry professionals," Lewis said. "I'm looking forward to using my network and experience to help as many people as I can in our industry."



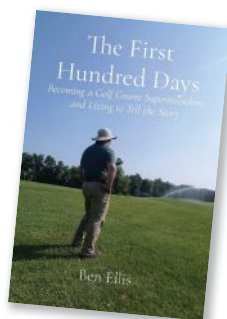
Josh Lewis

PHOTO BY: DANIEL MEARS / DETROIT NEWS VIA AP (FIRE)

// A REAL PAGE-TURNER

Superintendent's journey now a book

BY ROB DIFRANCO // Associate Editor



➔ Ben Ellis' golf journey is as unique as they come. Now, it's immortalized in a book.

Ellis, now the superintendent at Fort Belvoir (Va.) GC, details his first 100 days as superintendent at The Courses at Andrews Airforce Base in his new book, "The First Hundred Days: Becoming a Golf Course Superintendent and Living to Tell the Story."

"I had always wanted to write a book. Once I began to get into the golf business I thought, how great would it be to do a book on what it's like to really take



Ben Ellis

over (as superintendent)," Ellis said.

Ellis began as an assistant at Andrews, before becoming the superintendent. Ellis took over the job full-time after a lengthy search following the retirement of the course's previous superintendent.

That's where his book begins, chronicling the first 100 days of his time on the job and the challenges he faced.

"When a U.S. President comes into office, they have a 100-day plan and I thought, that's the same thing golf superintendents do. I learned a lot. I also questioned a lot of life choices."

Ellis' book is available for purchase at most major book retailers.



#TurfTweetoftheMonth

Follow us @Golfdom

Arianna Roquemore

@plurrianna

Assistant-in-training,
Valley CC, Aurora, Colo.

WHEN I SAY MY HEART
WAS GOING SO FAST
@JordanSpieth

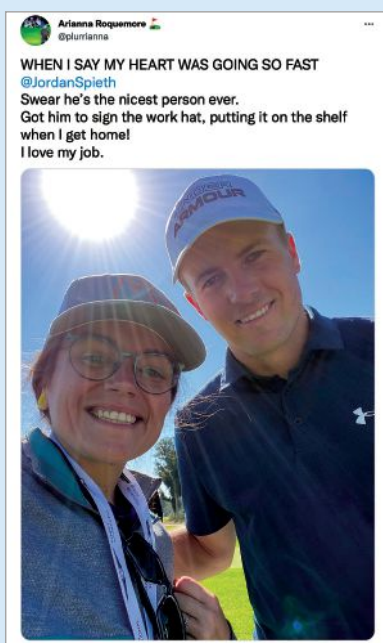
Swear he's the nicest person
ever.

Got him to sign my work hat,
putting it on the shelf when I
got home!

I love my job.

Presented in partnership with:

syngenta®



Ask Thad

BY THAD THOMPSON

Superintendent
Terry Hills GC, Batavia, N.Y.



What did you think of the 2022 GCSAA Conference and Trade Show?

It was everything I expected and more.

I understand from a vendor's perspective that lower attendance is not a great business model and has many companies questioning their return on investment for a trade show of this magnitude and expense. From an attendee's perspective, this was one of the better shows that I've attended. I visited many, many more booths than I have in the past, I had more impactful and meaningful conversations with vendors and not once did I feel as if I was getting the quick 30-second sales pitch while a vendor representative was glancing over my shoulder for someone important to walk into their booth. I asked lots of questions and got a lot of information that will help me make decisions this season or reinforce some of the practices I already have in place. Of the 15 hours that the trade show was open, I was there for 14 hours. I absolutely loved it.

This is the one week out of the year that I get to be with family. My brother Drew, CGCS at East Aurora CC and his son, Brenden, a student at SUNY Delhi are both annual attendees. We see more of each other for that one week at the conference than the other 51 weeks combined. If you run into one of us, the others aren't far behind. Every year is a family affair.

The number of people that I met, in person, who were only acquaintances on social media was unbelievable. I had some great conversations, shared lots of ideas and truly got to know some new friends. My only regret was that I didn't go up to more people and introduce myself. I saw several people that I recognized from social media that I wanted to say hello to but was either too shy to introduce myself or didn't want to bother them. We are all works in progress and there's always next year. See you in Orlando.

Got a question for Thad? Tweet to @TerryHillsMaint and @Golfdom or email Thad at thadthompson@terryhills.com

Worth the wait

BY SETH JONES

It was a daunting task — hosting a trade show in California during a pandemic — but for those who made it, GCSAA Conference and Show was a hit.

The last in-person Golf Industry Show was in February of 2020. So much has changed since then, including the name of the conference itself.

Last month — a span of a full two years between shows — brought back the annual GCSAA Conference and Show, returning to its former name. While attendance was down and the trade show was smaller, attendees, both exhibitors and superintendents, seemed to be unanimous in the opinion that the show was a success.

“I was a little apprehensive about attending for a number of reasons, but I’m glad I attended in person, versus last year’s ‘Internet Covid Conference,’” said John Harvey, ASGCA, president of John Harvey Golf Course Design and a cart path and bunker liner consultant. “Even though the trade show may have been relatively light on attendance, I feel the quality of networking and ensuing discussions were quite valuable to us. Builders, architects, supers, owners and management companies made an effort to stop by our booth and learn about Porous Pave and Sand Guard applications for their projects. It was great to reconnect with people and establish new lines of communication with potential clients. I give the week a 9 out of 10.”

“From an exhibitor standpoint, it was fantastic,” said Tony Kalina, Kalina Turf Consulting. “People were able to share time with us, it was relaxed. It wasn’t rush-rush, with three or four guys lining up saying, ‘hey, I’ve got three other stops to make.’ I love the low (attendance) number. I know no one wants to hear that, but we’re in the personal touch business. This show was incredible.”

Realizing this was a lowly-attended show, *Golfdom* is making an effort to bring this show

to our readers. Along with this report on some highlights we saw at the show, we also took a camera crew around the trade show floor and interviewed more than a dozen companies about what they were showing off at the San Diego show. To see those videos, visit [Golfdom.com](https://www.golfdom.com).

Heavy metal

Any golf trade show report should start with what we saw at the three major iron manufacturers, right?

At the John Deere booth, we met with Brad Aldridge, product manager, reels and rotary mowers. He showed us the 185 and 225 E-Cut Electric Walk Greens Mowers. Before you get too excited, note that these won’t be available until mid-to-late 2023.

They’re 48-volt lithium-ion battery-powered



Attendees scope out the 185 E-Cut Electric Walk Greens Mowers at the John Deere booth.

IMAGES BY: STARLINEARTS / ISTOCK-GETTY IMAGES PLUS / GETTY IMAGES (HEADER);
GOLFDOM STAFF (MOWER)



mowers that put out zero emissions at lower sound levels. And there are no hydraulic fluids on your greens.

“We’re estimating 50,000 square feet on a single charge. Your charge time from zero to 100 is going to be in the 5- to 6-hour range. Most people aren’t going to run it down to zero,” Aldridge said. “If you run it down to 20 percent and want to get it back to 90 percent, it’s an hour or two, a quick charge. The biggest charge time is from 90 to 100 percent — that will be about two or three hours.”

Another new feature on the mowers is adjustable height, with four inches of adjustment range. The mower features the same display from the 2700s and 2750s, so the operator can control mow speed, transport speed, frequency of clip, and there is also a clean-up pass mode.

At the Jacobsen booth, we spoke with Simon Rainger, vice president of turf for Jacobsen. He said that since Jacobsen has undergone a factory consolidation and a factory move since the last in-person

“Even if only 10 people showed up at this conference, we wanted to come to San Diego and be well represented,” said Simon Rainger, vice president of turf for Jacobsen. Pictured are (left to right) Matt Zaremba, director of strategy for E-Z-GO and Cushman at Textron Specialized Vehicles; Bill Roddy, group publisher, *Golfdom*; Seth Jones, editor-in-chief, *Golfdom*; Rainger; Craig MacGregor, publisher, *Golfdom*; Gunnar Kleveland, president and CEO, Textron Specialized Vehicles, Inc.; Danielle Comstock, sustainability manager; Kevin Stoltzman, president and CEO of North Coast Media; and John Collins, vice president and general manager, E-Z-GO.

show, they wanted to have a big presence to show customers that they are still a strong player in the industry.

The Eclipse 360 ELiTE was getting a lot of attention. Powered by a Samsung SDI lithium-ion battery system, the mower provides a high-quality cut with zero emissions, less maintenance, less noise and greater energy efficiency than other models. Rainger told me that the mower is so quiet that when they were doing a recent video shoot, the sound of the overhead drone shooting the video was audible, but the mower was not.

“This mower has been at Bay Hill for a while now, and it’s delivering on performance,” Rainger said. “People who haven’t considered electric, maybe they

have preconceived notions, once they use this mower, they realize it’s the superior machine.”

At the Toro booth, we saw the new ProCore 648S was catching a lot of looks. The guys from Toro told me they were careful not to mess up a piece of equipment that is so beloved in the industry. The new ProCore has 10 new patented improvements, including a “delayed drop” function where you can time precisely when/where you want the tines to go to work. Other improvements include a new information center on the handle that goes so far as to calculate how many cores you just pulled and how much sand you’ll need to fill those cores; and a

Continued on page 12



The Toro ProCore 648S is an improvement upon the original, with 10 new patented improvements to the machine.

Continued from page 11

tighter turnaround by bypassing three-wheel drive.

What's next for Bayer?

The Bayer booth is always a place of high energy and high activity. This year the booth was outfitted like the clubhouse billiards room, but we didn't see anyone taking the time to rack 'em — too much catching up to do.

For example, what's next for Bayer? Last year at this time the company announced it would divest its Environmental Science Professional business, which includes the company's golf portfolio. I spoke to Mark Schneid, head of corporate operations, Americas, for Bayer, to learn what's coming.

"We're excited. We have some incredible potential owners looking at us who share our vision for the future. They share the aspirations we have. And we're staffing up, we're going to be hiring another 200 people globally before day one, about 100 of them in the United States," Schneid said. "We're building up a complete company to run as a standalone with the goal of being a market leader that has the strength of a basic but the flexibility and agility of a midsize company."

Schneid said he expects the announcement of the new owner to come at the end of the year. He said the company will look the same in terms of people and product, but it will have a new name.

"Yes, we are not bringing the Bayer name, we won't have the Bayer name in the future," Schneid said. "But you know

the Bayer name is nothing more than the people, than the products. And all of that will be there. A lot of the brands we had before Bayer took over the ship. We believe we are going to hit the ground running with or without the Bayer name."

No more overseed?

It was time to talk turf over at the West Coast Turf booth. David Doguet, founder of Bladerunner Farms was with longtime superintendent Ken Mangum, CGCS, now a consultant for Bladerunner.

Stadium Zoysia was on display. Doguet says it's more aggressive establishing and is low maintenance. But the big difference is it has the best color in the industry, he says, for a zoysia. But an even bigger talking point is in what it could mean for overseeding.

"We don't think you have to overseed anymore with this grass," Doguet said. "A lot of courses in southern California and some of the desert areas where they do all this overseeding, we think that's a thing of the past. We're saying, at least in our mind, why overseed? You have this grass in this quality and color, you don't need to."

Continued on page 14



(Left to right) David Doguet, John Marman and Ken Mangum, CGCS, show off Stadium Zoysia, a grass Doguet says could eliminate the need to overseed.



Golfers wield clubs.
But you have weapons of your own.

See our ever-growing line of tools and accessories to enhance your course including Accuform™, HiO®, FusionCast® and Miltona.



ParAide.com

© 2022 Par Aide Products Co.



Rees Jones, ASGCA (far right) presented the 2021 and 2020 Herb Graffis Businessperson of the Year awards to John Shaw and Rick Mooney (second and third from left.)

Continued from page 12

"The cost of overseeding, the water, the fertility, the mowing ... we've got courses expecting to save over a million dollars a year, in operating cost, just by changing the grass," Mangum added. "That's a big return on your investment there. Plus, zoysia is the best playing surface in golf year-round."

The first course in the nation to try Stadium Zoysia is Spanish Oaks in Austin, Texas. They'll have it on tees and fairways. Doguet believes more courses will be announced soon, particularly in California

and Arizona.

"We're seeing high-quality clubs convert from older grasses to better technology," Mangum added. "They'll be much more environmentally friendly."

Doguet's parting shot to me: Watch Zoysia for greens, that's the next big deal.

Good things in small packages

Off the beaten path, we saw the Spray Caddie Golf Cup Cover. Instantly I thought of how many times I've looked into the golf cup and seen that morning's spray application looking back at me. I'm not a germaphobe — one look at my golf glove can attest to that — but it still sends me to looking for a place to wash my hands.

Developed by Rob Roberts, an assistant golf course superintendent and licensed spray tech in Washington State with more than 25 years of experience, Spray Caddie shields staff and golfers from touching chemicals and other liquid spray applications that could discolor the inside of the cup. It also prevents the accumulation of sand in the golf hole during topdressing. It also saves your back because the cover is magnetic and comes with a stick that places the cover directly over the cup. Visit SprayCaddie.com to see it in action.




Rob Roberts, inventor of Spray Caddie Golf Cup Cover, gives a demo to Curtis Schriever, superintendent, Terradyne CC, Andover, Kan.

My trade show time was about exhausted by then. I also fit in lots of other meetings, seminars and presentations, including presenting the last two Herb Graffis Businessperson of the Year awards to Rick Mooney and John Shaw. Rees Jones was kind enough to say a few words (another video we'll post on Golfdom.com). And we also recognized Shawn Emerson as the newest member of the Legends Initiative and held a lively panel discussion with him, Matt Shaffer, Bob Farren and Ted Horton. Oh, and I shouldn't forget moderating the second annual FMC Superintendent panel.

As the show wound down, I talked to two more superintendents to get their takes on the return of the GCSAA Conference and Show.

"What you put into it is what you get out of it. I feel like it's up to the attendee as much as it's up to the exhibitor or the class presenter," David Soltvedt, CGCS, The Club at Cordillera, Edwards, Colo., said. "You can walk around the trade show floor like a zombie, or you can engage in conversations and build relationships. I like (the show), there are a few open gaps where there would have been more people. But the big players are here and that's who I deal with mostly."

"I enjoyed it. It was good, it was great to be back," said Steve Shand, The Cliffs at Walnut Cove, Asheville, N.C., who I caught as he was walking by the *Golfdom* booth in the final minutes of the show. "It was light (attendance), but considering what we thought it was going to be, I think the traffic actually seemed to be a little better than what I expected." 

MISSED THE SHOW?

We've got you covered. Visit Golfdom.com to see interviews with company representatives from the following companies:

Porous Paver	Smithco
Kafka Granite	Spilo
Standard Golf	Tru-Turf
DLF Seeds	Amguard
FMC	Aquaritin Turf Solutions
The Andersons	DryJect
Hunter Industries	Par Aide
Quali-Pro	



MIC DROP™

STRENGTH THROUGH MICRONUTRIENT TECHNOLOGY



- ✓ Quick, intense green-up
- ✓ Longer lasting color
- ✓ High carbon formulation for plant and soil health



MIC DROP™ is a blend of comprehensive micronutrients, a proprietary sugar package, root driving sea kelp, and carbon, all powered by our REACTION™ technology. Designed for optimal nutrient absorption. MIC DROP has been university proven to increase a plant's photosynthetic ability. More photosynthesis means more energy and stronger turf!



Empowering You to
Grow Your Business™

Contact us to learn more | info@target-specialty.com

target-specialty.com/mtc |     

Golfdom Gallery



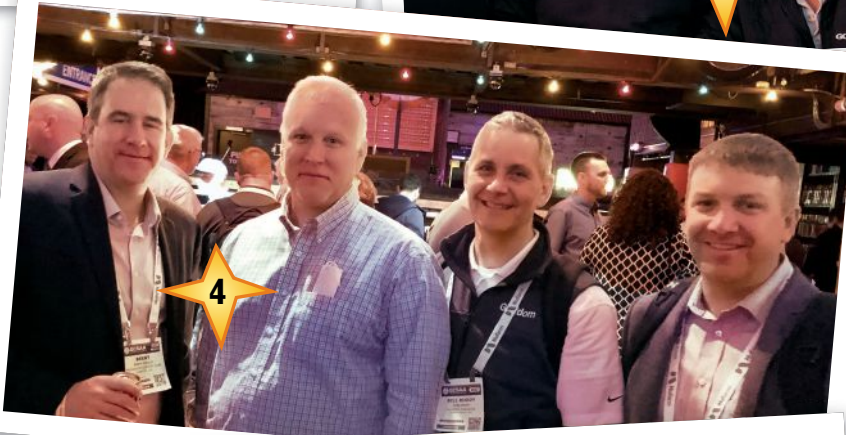
1 Who had 'donkey' on their GCSAA show Bingo card? File this photo under 'things you don't see every day at the GCSAA Conference and Show,' Norman the donkey was chilling outside the Corteva party with *Golfdom* Publisher Craig MacGregor and Editor Christina Herrick.



2 Two Old Tom Morris Award winners That moment when a second OTM award winner stops by your booth to say hello. Col. Mike Hurdzan, ASGCA, 2013 winner of the award (left), with Rees Jones, ASGCA, 2004 winner.



3 Ask Thad (for a round) On evening one — and every evening afterward — we were lucky enough to bump into our beloved advice columnist Thad Thompson (left), superintendent at Terry Hills GC in Batavia, N.Y. Thad's with *Golfdom* Editor-in-Chief Seth Jones (center) and Mike Bugenhagen, assistant golf course superintendent, Nanea GC, Kailua-Kona, Hawaii.



4 VIP subscribers At the Corteva party we spotted some of our most loyal *Golfdom* readers. Brent Palich, superintendent, Brookside CC, Canton, Ohio, Ren Wilkes, golf sales director, WinField United, Bill Roddy, *Golfdom* Group Publisher and Chad Yotter, superintendent, The Mayfield Sandridge Club, South Euclid, Ohio.



5 Just a couple Guinness among friends Andy Kjos, CGCS, Admirals Cove Country and Golf Club, Jupiter, Fla., and Mark Reid, Ocean Course at the Breakers, Palm Beach, Fla., stopped Jones for a cold Guinness.



6 Johnson, Johnson and Johnson Eric Johnson, director of agronomy, Chambers Bay GC, University Place, Wash., with his sons who are following in his footsteps; Reece, assistant superintendent, CC of Salt Lake City, and Ryder, a senior in the horticulture and turfgrass program at Oregon State University.

THEY'RE SUCKING THE LIFE OUT OF YOUR ROOTS.

In recent university trials, tank mixes of OMRI listed **Zelto**® and **Crescendo**™ biological nematicides/insecticides significantly reduced populations of destructive turf nematodes. Now that's getting to the root of the problem. Check out the trial results and more about both products at primesource-albaugh.com.

“

“Tank-mix applications of Zelto and Crescendo show great promise for root-knot nematode management in turf.”

Dr. Billy Crow

Landscape Nematologist, University of Florida

”



**THE SOURCE
MATTERS**

©2022 Albaugh, LLC. Prime Source and the water drop logo are registered trademarks and Crescendo is a trademark of Albaugh, LLC. Zelto is a registered trademark of Marrone Bio Innovations. Always read and follow label Precautions and Directions For Use.





Say you want a renovation?

Well, you know we all want a better bunker. That's why we asked these bunker companies how they can change a superintendent's world

BY SETH JONES

Continuing our theme from this month's cover story, at the 2022 GCSAA Conference and Show in San Diego, we put on a superintendent's hat and walked into multiple bunker booths and asked the same question: If a superintendent is looking to improve his or her course by installing a new bunker technology, why should he or she consider your product?

We got a lot of smiles, a few pauses, and then these thoughtful answers.

Kevin Clark, owner, Bunker Solution: We are an impermeable liner that is very flexible, has very consistent moisture content. It's very club friendly. You can machine rake on it. It will flex with soil movement. We seal the entire bunker to keep all the contaminants from below out, so you don't get much washing from it. I own the patents on it, I started it in 2008 and I've grown it grassroots. I was a superintendent. I have an agronomy degree from Texas A&M. I was at Pebble Beach and then I came back to Dallas to do a course construction and grow-in. We installed a liner during the construction that failed miserably. We tested a bunch of different liners at that point, to try to figure out what we were going to do. We didn't like anything that was on the market then. I came up with a couple of different renditions, I came up with this in 2008 and the rest is history.

Matt Lamb, vice president, Sales and Marketing, Porous Pave: Superintendents like Matt McKinnon from Cragun's Legacy Courses love Porous Pave XLB Sand Guard because it's incredibly permeable, handling more than 9,000 inches of water per hour. Sand Guard adheres to steep bunker faces and the flexible, yet strong, construction excels in areas with significant ground movement and freeze/thaw cycles. Sand Guard is a low-impact



Porous Pave's Sand Guard is an easy install for contractors and maintenance crews.

installation and is easily mixed and installed right at the bunker feature without the need to heat material or concrete trucks. It can be installed by certified golf course contractors or trained course maintenance crews. It's made from recycled tires, it's eco-efficient and effective, dramatically reducing bunker sand contamination and maintenance.

Alan FitzGerald, director of U.S. Operations, Blinder: The biggest reason to try Blinder is cost savings, long term. It's money up front to save money in the future, by not having to replace your sand, saving your drainage, saving your labor. And you're not looking to replace your bunkers again in five or seven years. That's the biggest reason — do the project once and

Continued on page 20

The Smart Investment for Your Club



See what Porous Pave™
and Sand Guard™ can do
to improve your course

“It's been great working with Porous Pave. They're there when I need them. They've answered every phone call right away. The materials showed up on time. The relationship has been great.”

Mike Flanagan - Construction Manager
The Legacy Courses at Cragun's



Porous Pave™ XL The permeable solution with the natural ball bounce for cart paths and other areas around the club – can be poured over existing concrete or asphalt

Porous Pave™ XLB Sand Guard™ The most flexible bunker liner on the market – mixed and installed right at the bunker (without heat) – minimal disruption to the course and play



Visit PorousPaveInc.com to learn more or call 800-448-3873



A rubber based liner, Blinder, is thaw-resistant, flexible and resistant to damage from club strikes.

Continued from page 18

you're done. Blinder is the original rubber-based liner, which makes it flexible, resistant to thaws, and prevents damage from club strikes.

Todd Jenkins, vice president, Better Billy Bunker: The main thing is maintenance savings, especially with labor the way it is these days. The savings that our method offers, after rain events, preventing washouts, allows you to allocate very scarce labor hours to other stuff that is more important than pushing sand back up. And the other thing is playability. Obviously, golfers

are our clientele. They want to have playable bunkers no matter what the weather is.

Tiffany Koss, director of sales and marketing, Kafka Granite: Nobody likes raking bunkers, so if you can cut back on the time spent raking bunkers, everyone appreciates that. We've developed a product, a wax-coated bunker sand, it's crushed manufactured sand that we blend with a polymeric wax that completely seals the sand. It packs kind of like clay so wherever you put it, it stays put. Water will bead up and just run off the top of it. It is not meant to be a playable sand. It's for your driving range or your steep-faced bunkers. You can easily install this product; it won't negatively affect gameplay and it cuts down on maintenance.

John Ammons, vice president, Klingstone: Klingstone is a quick and easy installation process. It's a liquid polyurethane resin that is moisture-cured. Once it's in place, it forms a hard shell. It's a hard-shell bunker liner that forces water to the drain and out of the bunker. It takes 24 hours to cure. You can install it in the morning and play on it the next day. The ease of installation allows it to be all done at once, or one hole at a time, depending on your course's needs. We don't require certified installers so you can hire it out or do it in-house. It pays for itself over time, keeping bunker sand clean and pristine, you don't have to replace it. **G**

PHOTO BY: BLINDER

THE MAGIC OF Evergreen Turf Covers

CONSIDERED THE STANDARD IN THE INDUSTRY



CONTACT: Bill Thompson, 1-800-388-7871 | evergreenturfcovers.com | @EvergreenCover



ACCELERATE AERIFICATION RECOVERY WITH

GenesisRx[®]

Applying fertilizer before, during and after mechanical aerification all provide unique options for ensuring your turf recovers quickly. The Genesis Rx line of products is designed to help you determine the right fertility approach for your aerification program. These blends represent the most comprehensive fertilizers we have ever produced, offering single-product solutions designed to simplify aerification fertility and accelerate turfgrass recovery.

GenesisRx[®] Zeolite+ 3-4-3

- A 50/50 physical blend of Genesis Rx 5-7-5 and zeolite
- Delivers balanced NPK, secondary and minor elements plus humic acid and zeolite
- SmartPhos[®] DG provides plant-available P over an extended period of time, resulting in superior availability and lower use rates than traditional sources
- Zeolite improves soil CEC levels and improves water retention
- Includes a full spectrum of more than two dozen beneficial soil microorganisms
- Contains MUtech[®] slow release nitrogen, Mg, Fe, and Mn

GenesisRx[®] 5-7-5

- Comprehensive fertility + soil amendment
- All-in-one product solution
- Ideal for construction, renovation, aerification, and seeding
- Simplifies fertility program complexity
- Reduces application time and effort
- SmartPhos DG provides plant-available P over an extended period of time, resulting in superior availability and lower use rates than traditional sources
- Humic DG[™] delivers soil microorganisms the carbon-rich food they desire
- Soil/USGA Specified Media Amendment

Learn more at [AndersonsPlantNutrient.com/Aerification](https://www.AndersonsPlantNutrient.com/Aerification).

 @AndersonsTurf |  AndersonsPro

©2021 The Andersons, Inc. All rights reserved. Genesis Rx, MUtech, and SmartPhos are registered trademarks of The Andersons, Inc. Humic DG is a trademark of The Andersons, Inc. HZ1



TurfNutritionTool.com

Use the TNT to compare aerification application strategies.

The Masters & *Golfdom* through the years

BY ROB DIFRANCO

Golfdom and the Masters go way back — all the way back to the inception of the tournament

Ever since the launch of the prestigious tournament at Augusta National Golf Club in 1934, *Golfdom* has brought its readers behind-the-scenes coverage. From interviews with an Augusta superintendent to pictures of some of history's greatest golfers in action, *Golfdom* readers have enjoyed some of the most interesting stories Augusta National has to offer through the years.

Ahead of the 86th edition of the tournament, *Golfdom*, in partnership with Quali-Pro, looks back at the best Masters coverage from our 95-year history.

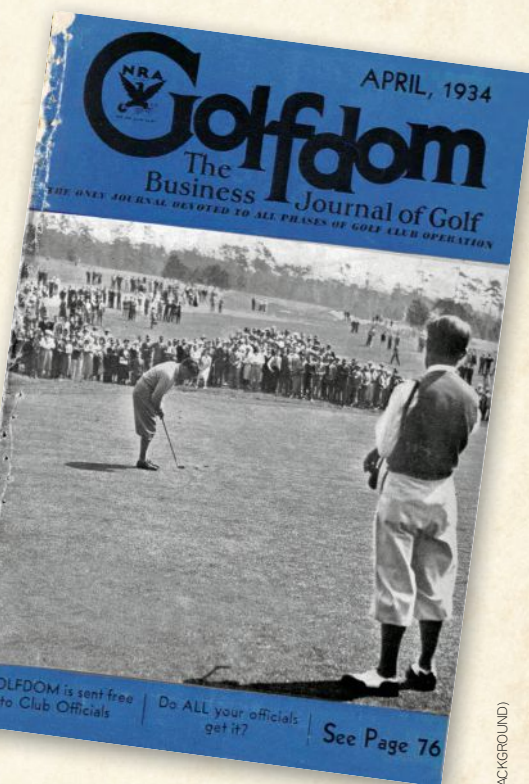
Quali-Pro will sponsor *Golfdom*'s annual "Meet up at the Masters" on Tuesday and Wednesday of the tournament, as well as our in-person coverage of the major. To learn more, visit Golfdom.com or follow us on any of our social media channels. And we hope to see you in Augusta!

The first Masters

Golfdom had coverage of the first-ever Masters — then officially known as the Augusta National Invitational — in 1934.

Bobby Jones — one of the tournament's co-founders — highlights that *Golfdom* cover. Jones also co-designed the course alongside Alister MacKenzie.

Jones, a lifelong Georgian, unretired to play in the inaugural tournament at the age of 32 following a successful career. Jones won four U.S. Open titles and three British Opens, taking home both championships in 1926 and



1930, before retiring from the game in 1930. He finished the first Masters' tournament tied for 13th at six-over-par, missing the \$100 prize. Jones played in the first 12 tournaments before his declining health forced him to stop in 1948.

Horton Smith, the first-place finisher, shot

Continued on page 24

BROUGHT TO YOU BY

QUALI-PRO

QUALI-PRO

SUPRADO

Superior ABW Control

*Start now to stay ahead of ABWs.
Wreck every stage!*

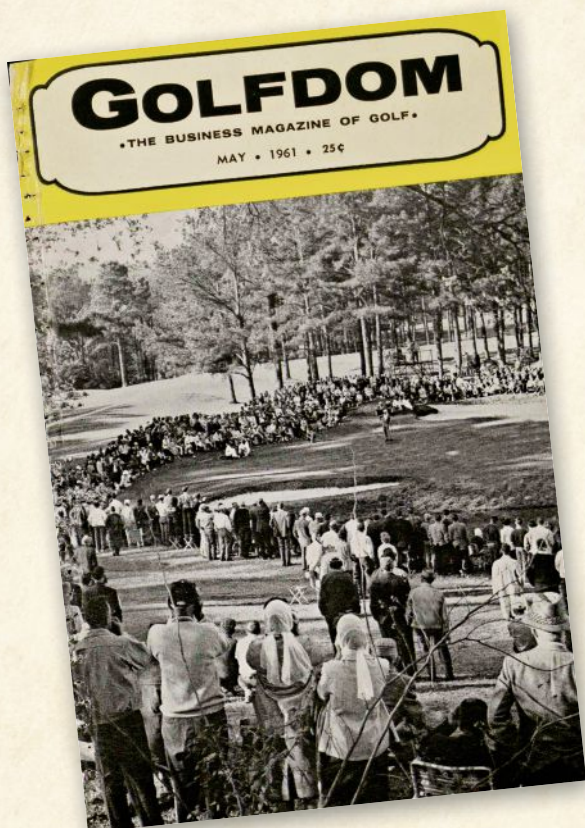


(Photos: Ben McGraw, Penn State University)



INSECTICIDE

SUPRADO.COM



■ The May 1961 issue of *Golfdom* wrote about the growing TV effort at the Masters. The cover image was of a single camera tower looking over No. 16 green, the same hole where Tiger Woods would make his famous chip-in 44 years later.

Continued from page 22

four-under, earning \$1,500. For reference, the winner of the 2021 Masters tournament, Hideki Matsuyama, took home more than \$2 million.

Smith also won the tournament two years later in 1936, becoming the first multi-winner.

Paul Runyan, who is in the foreground of the cover image watching Jones birdie the fourth hole, tied for third at two-under-par, earning \$550.

The King in his kingdom

The May 1961 cover shows the two runners-up at the 1961 tournament, Arnold Palmer and Charlie Coe.

Both Coe and Palmer finished one stroke behind Gary Player, who picked up his first green jacket with an eight-under-par score. The '61 Masters marked the 25th anniversary of the tournament.

The May 1961 issue of *Golfdom* highlighted the growing television coverage of the major.

“During the tournament, the electrical output of the equipment was enough to light all the homes in Augusta, a city of 80,000. Twelve cameras were trained on the play and of these, nine were equipped with a new type of zoomer lenses, each valued at \$9,500.”

The number of cameras increased drastically in the six decades

since that tournament. At the 2021 Masters, CBS had 110 cameras covering the action at Augusta, with ESPN adding to that number with its 3D cameras that added depth to the broadcast.

What makes the Masters green?

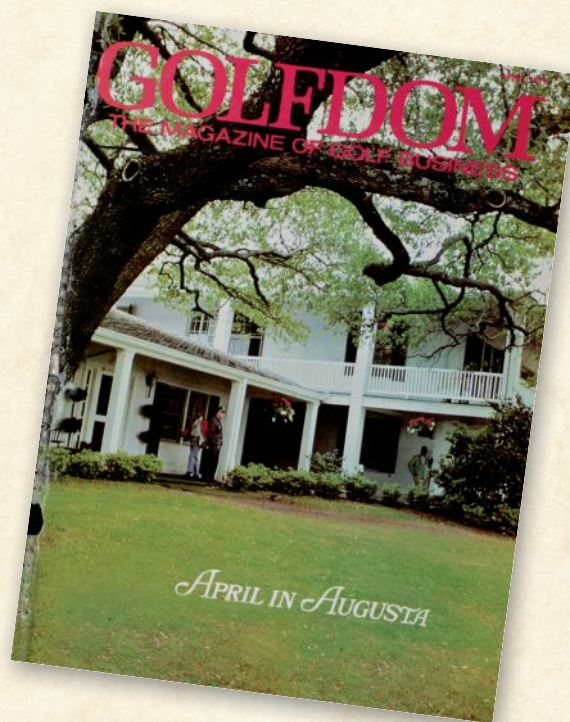
In 1975 *Golfdom* spoke with Augusta superintendent James “Bubba” Luke about how he dealt with the pressure of leading the course that hosts the Masters

“I’d be lying if I said there wasn’t more pressure here than at other courses,” he said. “I’m not trying to sound boastful or anything, the fact is that we have more problems here because of the Masters. Some things have to be done differently because of the Masters; it comes down to having the course better manicured than most. Hadley (Plemmons) and I don’t have anything on most superintendents, we don’t do anything most superintendents couldn’t do, but our standards have to be a little higher because of the Masters.”

Luke details his routine in the conversation with *Golfdom* saying, “If a superintendent does not run soil samples, there is no way he can tell by looking the shape his turf is in.”

The 1975 Masters marked the first year the course featured its iconic white bunkers, filled with spruce pine sand. Luke told *Golfdom* that at that point in the history of the course, crews still hand raked Augusta’s 44 bunkers and that he had just begun experimenting with an electric rake.

He also called the bunkers “one of the most expensive areas of the course.”



■ The April 1975 issue of *Golfdom* highlights the work that goes on behind the scenes at Augusta. The issue features an interview with superintendent James “Bubba” Luke and touches on the most expensive areas of the course, the bunkers.

Time. Our greatest invention.

Creating a perfectly breathtaking course requires your passion and knowledge. It also takes something you don't always have: Time. At Turfco, we're always looking for ways to free-up your time. Ways like saving up to two hours per day with the Torrent 2 Debris Blower. Reducing up to 720 passes on your greens per year with the WideSpin Topdresser. And seeding more quickly to achieve better results with the TriWave Overseeder. We bring innovative technologies that improve performance, while giving you back what matters most. Your day.

It's worth your time to see the difference. Schedule your demo today at www.turfco.com or call 800.679.8201

Torrent²
DEBRIS BLOWER



WideSpinTM 1550
BROADCAST TOPDRESSER



TriWaveTM 45
45-INCH OVERSEEDER



Schedule your demo today at www.turfco.com or call 800.679.8201





SuperScience

// EFFECTIVE TOOLS

CHOOSE THE BEST FUNGICIDE SPRING DEAD SPOT SPECIES

By Wendell Hutchens, Jordan Booth, Kevin Hensler and David McCall, Ph.D.

O*phiosphaerella herpotricha* and *O. korrae* are the two most common fungal species that cause the detrimental bermudagrass disease spring dead spot (SDS) in the Transition Zone of the U.S.

Previous research has shown that they differ in aggressiveness, response to fertilizer type, ability to grow at specific pH ranges and sensitivity to certain fungicides. The purpose of this project was to determine how natural populations of *O. herpotricha* and *O. korrae* respond in a field setting to various fungicides and fungicide groups.

We established two trial locations for this study. The first was a Tifway 419 hybrid bermudagrass fairway with a natural population of *O. korrae* and the second site was a Vamont bermudagrass fairway with a mixed population of both *O. herpotricha* and *O. korrae*.

The fungicide treatments were applied either once at full label rate or as a half-rate twice (three to four weeks apart) in the fall of 2019. The products tested are listed here.

- DMIs: Maxtima (mefenitruconazole), Eagle (myclobutanil), Banner Maxx (propiconazole), Torque (tebuconazole)
- QoIs: Heritage (azoxystrobin), Fame SC (fluoxastrobin), Insignia (pyraclostrobin)
- SDHIs: Xzemplar (fluxapyroxad), Kabuto (isofetamid), Velista (penthiopyrad), and Posterity (pydiflumetofen).

Plots were assessed three times in the spring and early summer of 2020 for percent necrosis. We transformed the data to the area under the progress curve (AUPC), and means were separated statistically.

We found that the spring dead spot was suppressed more than the non treated control in the mixed population on Vamont fairways than in the *O. korrae* population on Tifway fairways. This result occurred for nine of the eleven fungicides tested.

Kabuto, Maxtima, Velista and Posterity generally provided the best SDS suppression, and the SDHIs were overall the most effective fungicide class against SDS.

Our data suggest that certain fungicides are more efficacious than others against SDS and that you should select a fungicide SDS based on the *Ophiosphaerella* spp. population present.

It is difficult to determine the *Ophiosphaerella* species because they seldom produce spore fruiting bodies. Researchers from Ecuador and Oklahoma State University developed a molecular assay to accurately identify the fungal species in the genus (See "A new tool to ID spring dead spot" in the February 2021 issue of *Golfdom*). ©

Reference

Hutchens, Wendell; Booth, Jordan; Hensler, Kevin; McCall, David. 2021. *Ophiosphaerella* species that cause spring dead spot to respond differently to fungicides *Virginia Turfgrass Journal*. January/February, p. 24.



MORE ONLINE

A graph depicting fungicide efficacy will be depicted in the online version of this article, visit Golfdom.com.

NEWS UPDATES

NUFARM MAKES NEW GOLF APPOINTMENTS

Nufarm has made three key appointments to its business segment leadership, including the promotion of Cam Copley to golf segment lead. Nufarm also promoted Heidi Warner to ornamental segment lead and Jamie Heydinger to lawn care segment lead.

"Cam, Heidi and Jamie have established themselves as leaders and trusted



Cam Copley

advisers in their respective segments through their vast expertise and dedication to customer success," said Blaine Pinkerton, Nufarm vice president for turf and ornamental.

"This reorganization will position Nufarm well for future expansion, including several upcoming new product launches across the next few years."

Copley, Warner and Heydinger will direct the activities surrounding Nufarm's turf and ornamental business segments and lead market specialist teams, while working closely with sales as well as marketing, portfolio and regulatory staff. Nufarm said this collaboration will allow its customers to access innovative and foundational plant protection products.

“WE OFTEN OVERLOOK RECOVERY STRATEGIES FROM DAMAGE IN THE SPRING AND EARLY SUMMER.”

WENDELL HUTCHENS,
MIKE GOATLEY PH.D
AND DAVID MCCALL, PH.D
(see story on page 27)

//TACKLING SDS

Bermudagrass recovery from spring dead spot

By Wendell Hutchens, Mike Goatley, Ph.D. and David McCall, Ph.D.

Hybrid bermudagrass (*Cynodon dactylon* × *C. transvaalensis*) is one of the most desirable turfgrasses for golf courses in the Transition Zone because of its aggressive growth habit, traffic tolerance, uniformity and color (5,7).

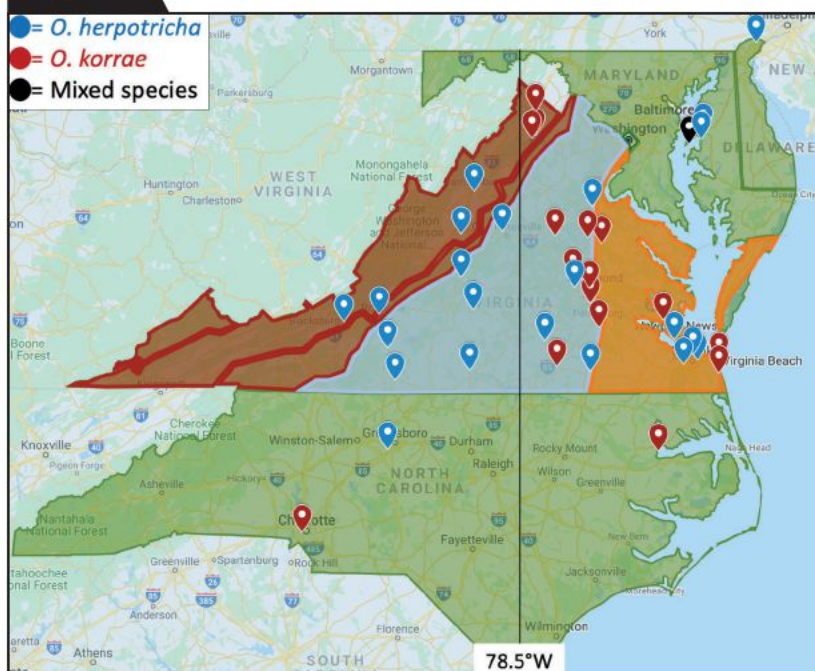
Spring dead spot (SDS), caused by *Ophiosphaerella* spp., is one of the most devastating diseases on all bermudagrass (*Cynodon* spp.) grown in areas where winter dormancy occurs. Spring dead spot has a wide distribution throughout the U.S., with 24 states reporting the disease (5,6).

As the name implies, symptoms of SDS first appear in the spring when bermudagrass begins to green up. Circular patches or rings of turf remain dormant and eventually die. Spring dead spot does not directly kill bermudagrass, but the fungi can attack the roots, rhizomes and stolons in the fall, increasing susceptibility to cold and freezing injury during the winter (2,7,8,9).

O. herpotricha and *O. korrae* are the two predominant species that cause SDS in the Mid-Atlantic region of the U.S. (5,6). *Ophiosphaerella* spp. was found within the three geographic areas of Virginia and the surrounding states (Figure 1).

Locations west of Charlottesville (78.5 degrees W) had more *O. herpotricha* than locations east of that longitude, whereas areas east had more *O. korrae* (5). Moreover, *O. herpotricha* and *O. korrae* frequency of occurrence can also be influenced by cultivar (6). Due to the geographic variability of species, we recommend submitting SDS samples to a diagnostic clinic for

FIGURE 1



Ophiosphaerella spp. distribution in the Mid-Atlantic. Species were determined using real-time PCR, and regions are color-coded: Red=VA Mountains; Blue=VA Piedmont; Orange=VA Coastal Plain; Green=DE, MD, and NC.

accurate identification.

Spring dead spot is a challenge to manage in Virginia. Most research efforts for SDS recommend employing preventive practices such as fungicide applications and other cultural practices in the fall. We often overlook recovery strategies from damage in the spring and early summer.

Previous research at Virginia Tech University evaluated fraze mowing for recovery and long-term suppression of SDS (7). Frazzle mowing removes most surface plant material and thatch, which provides a smoother playing surface.

Frazzle mowing was conducted on May 29, 2015, at 0.16 and 0.32-inch

Research Takeaways

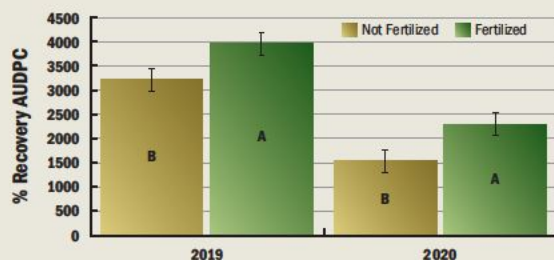
- *Ophiosphaerella herpotricha* and *O. korrae* are the two predominant species that cause SDS in the Mid-Atlantic region of the U.S.
- Two spring applications of urea (a total of 2 lbs. N per 1,000 ft²) enhanced NorthBridge hybrid bermudagrass recovery from spring dead spot (SDS) in the first year.
- Solid-tine aerification and verticutting did not improve SDS recovery in the spring.

depths. Granular broadcast applications of urea and ammonium sulfate (0.5 lbs. N per 1,000 ft²) followed trial initiation and every seven days

Continued on page 28

FIGURE 2

Effect of Fertility on Percent Bermudagrass Recovery AUPC



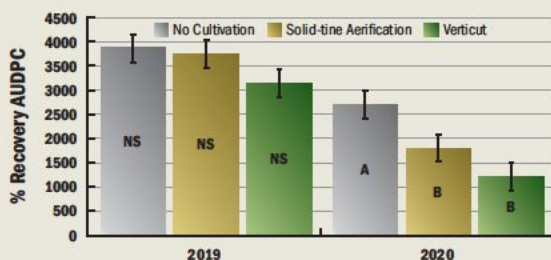
Main effect of fertility on bermudagrass recovery area under the progress curve (AUPC). Means are compared within years and colored bars represent different fertility practices. Bars within the same year with distinct letters are significantly different ($P = 0.05$).

Continued from page 27

afterward for six weeks. Visual and reflectance data show fraze mowing treatments yielded higher turf quality, and plots treated with ammonium sulfate recovered faster than plots treated with urea, regardless of depth (7).

FIGURE 3

Effect of Cultivation Practices on Percent Bermudagrass Recovery AUPC



Main effect of cultivation on bermudagrass recovery area under the progress curve (AUPC). Means are compared within years and colored bars represent different cultivation practices. Bars within the same year with distinct letters are significantly different ($P = 0.05$). *NS represents not significant.

Our objective was to evaluate other cultivation practices for their impact on bermudagrass recovery from SDS. We conducted a field trial from May 30 to Aug. 12, 2019, and repeated from June 25 to Aug. 6, 2020, on NorthBridge bermudagrass in Blacksburg, Va. There were six treatments in the study:

- ① Non treated control
- ② Two applications of urea two weeks apart totaling 2 lbs. N per 1,000 ft²
- ③ Verticutting
- ④ Solid-tine aerification
- ⑤ Verticutting plus two applications of urea two weeks apart totaling 2 lbs. N per 1,000 ft², and
- ⑥ Solid-tine aerification plus two applications of urea two weeks apart totaling 2 lbs. N per 1,000 ft²

We evaluated plots for percent SDS throughout the study. Data were analyzed as percent SDS change relative to an initial assessment to measure bermudagrass recovery from SDS. The data were then converted to area under the progress curve (AUPC) to encompass bermudagrass recovery over time.

The main effect of fertility increased bermudagrass recovery by 19 percent in 2019 and 33 percent in 2020 compared to the non-fertilized plots (Figure 2). However, the main effects of solid-tine aerification and verticutting inhibited bermudagrass recovery in 2020 by > 32 percent compared to non cultivated plots (Figure 3). There was no effect of cultivation on bermudagrass recovery in 2019.

This field experiment suggests that urea applications in the late spring or early summer are sufficient for optimizing bermudagrass recovery from SDS damage. In contrast, cultivation practices such as verticutting and solid-tine aerification early in the growing season, particularly without fertility, can inhibit bermudagrass recovery from SDS damage. The result is surprising since general recommendations to improve

Hydration A-Plus®

Low rate Solubilizing Surfactant built to perform beyond your expectations.



Every Spray is an A-Plus®!



PLANT FOOD
COMPANY, INC.
The Liquid Fertilizer Experts

Connect With Us
@PlantFoodCo




www.plantfoodgolf.com | 800-562-1291

SDS recovery include cultivation practices (4, 7).

Over the last 30 years, research results strongly recommend nitrogen applications in the spring to enhance SDS recovery (2, 3, 4) and agree with previous fraze mowing experiments (7). An older experiment in Maryland evaluated several different nitrogen sources in combination with potassium chloride (2, 3). All nitrogen treatments helped speed recovery from SDS in the first year. Fertilizer with ammonia (NH₄-N) reduced SDS occurrence in the second and third years of the trial. The soil pH data indicate that soil acidification by ammonia nitrogen helped reduce SDS severity over time.

Our recommendation is to fertilize with 2 lbs. N per 1,000 ft² in the spring if the bermudagrass suffers damage from SDS. We also recommend delaying traditional cultivation practices such as verticutting and aerification until the damaged areas have recovered. Future research will focus on other cultivation methods and the effect of various fertilizer types on bermudagrass recovery from SDS. **G**

Wendell Hutchens is a Ph.D. graduate student at Virginia Tech University and can be reached at wendelljh@vt.edu. Mike Goatley, Ph.D., and David McCall, Ph.D., are faculty at Virginia Tech University.

The full peer-reviewed article of this work can be found in *HortScience* <https://doi.org/10.21273/HORTSCI16235-21>

References

1. Beck, L.L.; Cooper, T.; Hephner, A.J.; Straw, C.M.; Henery, G.M. 2013. Effect of pre-emergence herbicides on bermudagrass recovery from SDS. *Golf Course Management*. July 81(7): p. 80-85. <https://archive.lib.msu.edu/tic/gcman/article/2013jul80.pdf>
2. Demoeden, Peter H. 1991. Reducing Spring Dead Spot Severity. *Golf Course Management*. March. 59(3):68,70,72,74,80. <https://archive.lib.msu.edu/tic/gcman/article/1991mar68.pdf>
3. Demoeden, P.H.; Crahay, J.N.; Davis, D.B. 1991. Spring Dead Spot and Bermudagrass Quality As Influenced by Nitrogen Source and Potassium. *Crop Sci.* 31:1674-1680.
4. Dowling, Elliott L. 2017. Spring Dead Spot. *USGA Regional Update*. May 5, 2017. 2pp. <https://tic.msu.edu/tgiff/united?RECNO=312972>
5. Hutchens, W.J., Henderson, C.A., Bush, E., & McCall, D.S. 2019. Geographic Distribution of Spring Dead Spot Species in the Mid-Atlantic [Abstract]. ASA, CSSA and SSSA International Annual Meetings (2019), San Antonio, TX. <https://scisoc.confex.com/scisoc/2019am/meetingapp.cgi/Paper/120049>
6. Hutchens, W.J., Henderson, C.A., Bush, E.A., Kerns, J.P., and McCall, D.S. 2021b. Geographic Distribution of *Ophiosphaerella* Species in the Mid-Atlantic United States. *Plant Health Prog.* <https://doi.org/10.1094/PHP-04-21-0076-S>
7. Shelton, C. D.; McCall, D. S.; Miller, G. L. 2016. Impact of fraze mowing on bermudagrass recovery from spring dead spot. *Proceedings of the First Annual Meeting of the Northeastern Plant, Pest, and Soils Conference*. p. 44. http://www.newss.org/proceedings/Proceedings_NEPPSC16_Vol1.pdf#page=70
8. Tomaso-Peterson, Maria. 2009. The Efficacy of Spring Fungicide Applications Plus Organic Fertilizer for Controlling Spring Dead Spot of Bermudagrass. 2009 *USGA Turfgrass and Environmental Research Summary*. p. 11. <http://archive.lib.msu.edu/tic/res-sum/2009/11.pdf>
9. Walker, N.R., Mitchell, T.K., Morton, A.N., and Marek, S.M. 2006. Influence of temperature and time of year on colonization of bermudagrass roots by *Ophiosphaerella herpotricha*. *Plant Dis.* 90:1326-1330. <https://doi.org/10.1094/PD-90-1326>

WITH SPECTRUM® TECHNOLOGIES, YOUR GRASS IS ALWAYS GREENER.

Create turf envy at your course by letting data drive the decisions you need to make to maintain green, playable and healthy turfgrass while saving on labor and supplies.

Weather Monitoring at Your Fingertips.

Monitor microclimates using real-time data to effectively irrigate or treat for pest pressure.



- WatchDog® 3250 Wireless ET Station measures temperature, relative humidity, rainfall, wind speed & more. SpecConnect Cloud Solution reports conditions from desktop or smartphone.

Premium Protection With Integrated Pest Management.

Stay proactive with turf measurement tools that protect your turf from disease and common turf pests.



- Our Disease & Insect Forecast Model Package 1-year subscriptions use field-tested and validated algorithms to warn of turf enemies.

Superior Soil Moisture Solutions.

When it comes to keeping turf in top shape, rely on data to drive what course turf needs to thrive.



- FieldScout® TDR 350 Moisture Meter with Infrared Temperature Sensor measures soil moisture, electrical conductivity & turf surface temperature.

Next-Level Nutrient Management.

Measure elements such as NO₃⁻, Na⁺, K⁺, Ca²⁺, NDVI, pH and EC to analyze soil and produce high-quality turf.

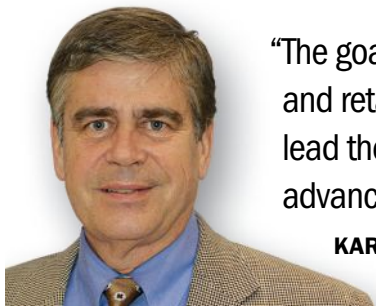


- FieldScout® GreenIndex+ Turf App & Board instantly measures plant health via the chlorophyll content (relative greenness) of turf using a smartphone camera.

Spectrum Technologies, Inc.

800-248-8873
www.specmeters.com

To Measure Is to Know.



“The goal is the same. To attract and retain world-class faculty that lead the effort to make significant advancement and changes in study.”

KARL DANNEBERGER, PH.D., *Science Editor*

A high honor for turf

Endowed chairs are both unique and rare within the world of academia. A professor who holds the chair has the potential to change the direction and progress of research in the discipline that the endowment is directed.

Across the country, only a few university endowed chairs exist in turfgrass science. The major reason is the significant cost associated with a chair that often requires millions of dollars. Given that, the recent announcement from East Lansing, Mich., of the Joe Vargas Chair in Plant Pathology is truly exciting. The Michigan Turfgrass Foundation made an initial gift of \$1 million.

With the creation and funding of the endowed chair, Michigan State University will remain a leader in advancing and changing the direction of turfgrass pathology into perpetuity. The goal endowment for the Joe Vargas Chair is \$5 million.

CAMBRIDGE CONNECTION

The most famous, and probably the oldest chair in the world is the Lucasian Chair of Mathematics at Cambridge University (north of London, England). Henry Lucas bequest Cambridge University, “a yearly stipend and salary for a professor [...] of mathematical sciences.” In 1663, because of the Henry Lucas bequest, the Lucasian Chair was founded.

As a point of interest, the oldest endowed chair in the United States is the Hollis Chair of Divinity established in 1721 at Harvard University.

Since 1663, there have been 19 professors hold the Lucasian Chair. Included in those 19 famous mathematicians and physicists are Isaac Newton, who interestingly was not the first holder of the chair but the second; the 15th holder, Paul Dirac who described antimatter before it was detected; and Stephen Hawking, the most famous contemporary physicist of our time.

A HIGH HONOR

An endowed chair is the highest honor a college or university can bestow on a faculty member. And as such, the pinnacle within academia to a professor can achieve. Stephen Hawking once stated in an interview he assumed he was in the Lucasian chair because he was expected not to live much longer and his “work would not disgrace the standards expected of the Lucasian chair.” His statement reflects the honor and humbleness he viewed in holding Lucasian Chair. He also held the chair from 1979 until his retirement at 67 in 2009.

Not all endowed chairs attract the next Dirac, Hawking or Isaac Newton. However, whether the chair is in chemistry, medicine, physics or turfgrass science the goal is the same. To attract and retain world-class faculty that lead

the effort to make significant advancements and changes in study.

FUNDING THE FUTURE

The creation of the Joe Vargas Chair in Plant Pathology, and chairs like the Ralph Geiger Chair in Turfgrass Science at Rutgers University allow the professor who holds the position unique opportunities to research new ideas that may seem risky through traditional funding mechanisms. For students, both at the undergraduate or graduate level, it sets the direction for education and research by funding scholarships and stipends.

Donors who fund endowed chairs range from individuals to organizations to companies and combinations of the three. Reasons for donating often range from personal to an attachment to the program. Regarding the Ralph Geiger Chair in Turfgrass Science, Ralph Geiger was an avid golfer who wanted to support Rutgers' turfgrass science program. In the case of Joe Vargas Chair, Michigan Turfgrass Foundation is leading the effort to sustain the legacy of Professor Joe Vargas.

I wish I could write that endowed chairs in turfgrass science are as common as dandelions in a home lawn. However, turfgrass endowed chairs are rare. They take a vision, hard work, time, donor(s) and luck.

In the future, creating endowed turfgrass chairs — beyond what we have now — will be a measure of the health and well-being turfgrass research. All while meeting the challenges facing the industry in the future.

When we look back 50 or 100 years from now, we will find the most consequential agronomic issues for the golf course industry will be researched and shaped by future professors holding endowed chairs. **G**

Karl Danneberger, Ph.D., *Golfdom's* science editor and a professor at The Ohio State University, can be reached at danneberger.1@osu.edu.

The background of the advertisement is a composite image. On the right, a large lighthouse is shaped like a red and white striped jug, with the word "COASTAL" and "HERBICIDE" written on its side. A small flag at the top of the lighthouse reads "EAST COAST". On the left, a smaller version of the jug-lighthouse is visible in the distance, overlooking a golf course and a residential neighborhood. The sky is dramatic, with dark clouds and bright sunlight breaking through, creating rays of light. Several birds are flying in the sky. The overall scene is a mix of nature, golf, and suburban life, with the jug-lighthouse as the central focus.

Coastal

HERBICIDE

PROTECTING SOUTHERN TURF FROM COAST COAST

Turf professionals across the South are calling it the most all-encompassing and easy-to-use herbicide for southern turf available today. Coastal™ can be used safely on all four of the major warm-season turf grasses, and with three active ingredients, it provides superior control of *Poa annua*, crabgrass and other tough weeds with no tank-mixing required. It can be used successfully in a single or sequential application program 6–10 weeks apart. Talk to your Sipcam Agro representative to learn more, or visit sipcamagrousa.com.



Always read and follow label directions. Coastal is a trademark of Sipcam Agro USA, Inc. ©2021 Sipcam Agro USA, Inc.



Turf before and after dethatching shown (left). Superintendents use verticutting to dethatch the turf and help encourage the natural exchange of nutrients from the atmosphere and the soil.

Tips to detatch your thatch

TO MINIMIZE THATCH GROWTH AND ACCUMULATION, SUPERINTENDENTS MUST BEAR IN MIND THEIR "BIG PICTURE" DRIVERS.

By Chris Lewis

According to Doug Soldat, Ph.D., professor in the department of soil science at the University of Wisconsin-Madison, there is nothing wrong with having some thatch on your golf course. In fact, a small amount is normal.

However, if your course has excessive thatch growth, it's likely that something is out of balance. It may be growing rapidly, due to excess fertilization. Or it might be decomposing too slowly, as a result of an acidic soil environment.

Whatever the cause, superintendents can successfully contend with thatch by reducing their fertilization amounts; liming, which increases pH and in turn, leads to microbial breakdown; and managing their thatch layers with more aggressive cultivation and topdressing practices.

"Superintendents must remove excess thatch as quickly as they can, or else it will bind pesticides that are intended for the root zone," Soldat says. "Once this occurs, surfaces will become soft and spongy, while rooting will become shallow, among other problems."

As superintendents prepare to contend with excess thatch, they must also remember that thatch accumulation occurs on a seasonal cycle. It always accumulates the fastest


during times of active growth (during the spring and fall for cool-season grasses). And it decomposes the fastest during the summer.

Thatch can also occur with any type of growth habit. However, it is much more severe in grasses that have stoloniferous growth habits, as stoloniferous grasses produce a lot of biomass above soil surfaces.

"These grasses include most of the warm-season grasses, along with creeping bentgrass," he adds. "Areas with short, cool growing seasons are prone to thatch accumulation though, as thatch breaks down faster in warm temperatures."

While focusing on these growth and accumulation trends, superintendents should consider utilizing certain enzymes, such as laccase, along with products (like molasses) that stimulate microbial activity and, consequently, reduce thatch.

Although these enzymes and products are certainly worth investigating, Soldat believes superintendents must not forget about the "big picture" drivers behind their thatch accumulation.

"Is the fertility rate too high? Is the pH too low? Should the topdressing and cultivation program be more aggressive?" He asks. "Chemicals should be secondary to good cultural practices. Focus on enhancing your cultural practices — and your excess thatch will be removed." 



Doug Soldat

Bluebird Turf

CHRIS DURIG

Vice president,
sales and marketing



Healthy turf requires adequate water, an exchange of oxygen and nutrients, and a level of microbial activity in its soil. A thatch layer (an accumulation of roots, crowns and grass clippings that creates a dense mat of vegetation at the soil level) acts as an insulator, as it keeps soil temperatures low and helps retain moisture. However, when thatch build-up becomes excessive, it can prevent the exchange of water and vital nutrients from the atmosphere to the soil, thereby decreasing the turf's ability to thrive and fight disease and dehydration.

Dethatching, also known as combing or power raking, is a process that removes unwanted thatch. It's recommended to dethatch twice a year — once as the grass just begins its growing season, and again just before it enters dormancy, in order to provide turf a better chance of recovery after combing. It's also important to ensure the blades of your comb are not set too deeply.

John Deere

BRAD ALDRIDGE

Product manager, Golf reel
and rotary mowers



The best way to contend with thatch on a golf course is to perform frequent, light topdressing. Many courses are now performing topdressing once a week to incorporate sand into the canopy a little at a time, while additional brushing helps work it into the course. Regular grooming with a fairway tender conditioner or greens tender conditioner to slice rhizomes and stolons also helps promote new vertical growth (and less lateral growth).

To be more aggressive with slicing rhizomes and stolons, I also recommend regular verticutting. With today's verticutters, you won't see the lines right after you mowed, so playability is really high. Depending on grass type, you may need to consider catching grass on fairways to prevent thatch. While not performed as often as topdressing and verticutting, aeration is always an important practice to keep thatch off the golf course too. Finally, scalping — when transitioning out of dormancy and collecting the material — can help reduce thatch build-up as well.

DryJect

JOHN PADDOCK

Owner and president



The rate at which thatch accumulates in turf is highly influenced by the inputs of the superintendent. Careful attention should be given to only apply enough fertility and water to produce a uniform, healthy playing surface. Excess inputs will magnify thatch accumulation.

Thatch levels can be manipulated by encouraging healthy biological activity (decay) through the incorporation of the native soil back into the top portion of the thatch, via core aeration and dragging. Topdressing or injection with either a blended soil/sand mix or sand alone are other options superintendents should consider.

By incorporating these materials, superintendents can create a "hybrid thatch" or mat, which firms it up and encourages robust microbial activity and decay. Regular incorporation of the desired soil medium will provide the necessary dilution to this organic matter. On sand-based putting greens or sports turf, the injected or topdressed sand should be close to matching the sand in the soil profile.

Maredo B.V.

MARINUS REINCKE

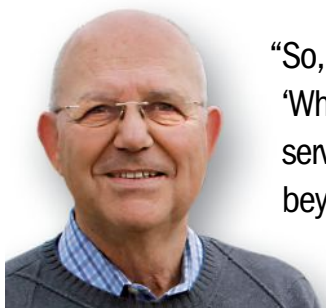
CEO



Typically, thatch is removed by using a verticutter, which cuts a continuous slit in the ground that takes a long time to heal. Not to mention, verticutter blades don't cut thatch and turf nicely, as damage to healthy turf leads to a longer recovery — even if topdressing is applied.

However, if superintendents use lightweight triplex greens mowers and attach GT230 HiSpeed-Coring heads to them, they will pull approximately 4 million cores per hour. Eighteen average-sized greens take about four to five hours to core. In addition, since the heads only pull thatch plugs, they can be easily blown off the green.

By utilizing these heads, superintendents can also transform their triplex greens mowers into innovative high-speed greens corers, which can reach a maximum depth of one inch. And since they use 0.25-inch (ID) hollow tines, along with micro hollows, solids and slicer tines, the GT230 HiSpeed-Coring heads offer superintendents an alternative to verticutting — one that doesn't damage healthy turf, thus minimizing recovery considerably.



“So, the USGA asked the question ‘Who receives the benefits or ecosystem services that golf courses provide beyond golfers who use the facility?’”

MIKE KENNA, PH.D., *Research Editor*

Kill the bill

The anti golf bill in California is back in the news.

Authored by Christina Garcia, California Assembly

Member from Bell Gardens, Calif., AB 1910 proposes to convert municipal golf courses to low-income housing.

The USGA funded a project with the Natural Capital Project team at the University of Minnesota to determine the benefits of golf courses. The Natural Capital Project integrates the value nature provides to society when making major land-use decisions.

Urban ecosystem service assessments are critical to ensuring that the value of nature becomes a standard component of urban planning. Ecosystem services include outputs, conditions or processes of natural systems that directly or indirectly benefit humans or enhance social welfare.

So, the USGA asked the question, “Who receives the benefits or ecosystem services that golf courses provide beyond golfers who use the facility?” The scientists developed a method to evaluate the ecosystem services that golf facilities provide.

The researchers quantified the ecosystem services of the 135 golf courses in the Twin Cities metropolitan area, including St. Paul, Minneapolis and surrounding suburbs. Each land use has different values for the model parameters used to make

comparisons. The footprint of the golf course is replaced with other land use to see how removing the golf course would change the ecosystem service under evaluation.

The researchers analyzed three specific ecosystem services provided by vegetative land cover: 1. Urban cooling (reduction in temperature from the urban heat island), 2. Pollinator

“The bottom line is, converting municipal golf courses to urban residential, as proposed in AB 1910, would increase temperatures and stormwater nutrient runoff and decrease pollinator abundance.”

abundance and 3. Stormwater nutrient retention (nitrogen and phosphorous).

Golf courses provide the greatest amount of cooling compared to other land uses. Golf courses have a similar cooling improvement to natural areas or city parks. In contrast, golf courses have considerably more cooling when evaluated against conversion to suburban residential, urban residential and industrial development.

Golf course pollinator abundance was similar to suburban residential development, but conversion to city parks and natural areas would increase pollinators. However, conversion to urban residential and industrial would decrease the pollinator abundance.

Natural areas and city parks export less nitrogen and phosphorus than golf courses in stormwater runoff, while suburban and urban residential developments export more nutrients.

The bottom line, is converting municipal golf courses to urban residential, as proposed in AB 1910, would increase temperatures and stormwater nutrient runoff and decrease pollinator abundance.

While Assembly Member Garcia also believes golf courses are a waste of government funding, municipal golf courses provide funding for parks and recreation departments throughout the state. Craig Kessler, Southern California Golf Association, said that \$12 million every year goes into the coffers of county parks and recreation, which subsidizes those swimming pools, trails, picnic areas and soccer fields that don't pay for themselves.

So, kill the bill, save golf! ☺

Mike Kenna, Ph.D., retired director of research, USGA Green Section. Contact him at mpkenna@gmail.com.

Reference

Lonsdorf, Eric V.; Nootenboom, Chris; Janke, Ben; Horgan, Brian P. 2021. Assessing urban ecosystem services provided by green infrastructure: Golf courses in the Minneapolis-St. Paul metro area. *Landscape and Urban Planning*. 208 (2021) 104022. <https://doi.org/10.1016/j.landurbplan.2020.104022>



Think you need tons of manpower to keep your pond clean?

Think again.

It's not manpower you need to keep your pond clean—it's solar power! PondHawk®, our unique subsurface aeration system, harnesses the power of the sun to keep water healthy. Install a PondHawk®, and go tend to your course. PondHawk® will be your most productive employee, quietly keeping your pond healthy and clean—no electricity required.



Learn more at PondHawk.com or call
888-755-1950 for a personalized quote.


PondHawk
by LINNE INDUSTRIES

The 19th Hole

Jason Fuertes

SUPERINTENDENT // Industry Hills GC at Pacific Palms Resort, Fullerton, Calif.



Jason, drinks are on me — what can I get you? I go straight to a neat whiskey. I like to stay warm after the round.



How long have you been married?

Three years now. I married my high school sweetheart, we've been together roughly 15 years now.

Tell me about the golf course. It used to be a landfill. It opened in the 1970s, it's a 36-hole facility, with big resort grounds. Everything that falls under grounds, I look after. It's a great location with amazing views ... it's California! A lot of people have probably seen the course in movies and golf commercials. They film a lot out



// BEST ADVICE

“DO WHAT YOU'RE AFRAID TO DO. PUT YOURSELF OUT THERE. I HAVE A LOT OF MENTORS, AND THEY'VE ENCOURAGED ME TO GO AFTER WHAT I WANT.”

here. You've seen it, you just aren't aware of it. I even catch myself watching TV and I say, “Oh, there's Industry Hills!” I get to work with the film crews all the

time, just making sure they don't break anything or drive on the greens.

What's your favorite tool? My go-to has always been a simple pocket knife. You always have to have one. I use one called the RoverTac. It has a bunch of gadgets. And of course, my trusty ice pick for ball marks — a superintendent's worst nightmare.



If you're going over to mom and dad's place, what do you hope is on the menu? My mom makes the best chile rellenos. It's basically a poblano chile filled with cheese, battered with egg whites, fried up. And the salsa she makes with that is amazing. And some Mexican rice on the side. I'm there in a heartbeat, I'll never say no to that and I'll take some with me to go.

Give me a Spanish phrase everyone should know, for the crew? I could go on and on, but one of the main ones:

cuidado con los bolazos (watch out for golf balls). A lot of guys get so focused on their work, the last thing we want is for them to get hurt by a golf ball.

How was your recent experience at Cypress Point? It was perfect, I can't put it any other way. No wind, no clouds, sunny all day. By the second hole, I took off my sweater. And my brother and I played well, he's an assistant at Spyglass. We played against a couple guys here from the pro shop. And we beat them by the 13th hole, so you know — we got on a good birdie train.

As interviewed by Seth Jones, February 17, 2022.



How did you get into the industry?

My dad was a superintendent, I'd always come out with him when I was young, to drive the golf cart. I started getting my hands dirty around 15, in the summer-

BROUGHT TO YOU BY



PHOTO OF JASON BY: GOLFDOM STAFF; GETTY IMAGES / ISTOCK-GETTY IMAGES PLUS / GRANDIRIVER (CHILE RELLENOS), (GORISS (WHISKY), SUCHARAS WONGPETH (CLAPPERBOARD)



**EROSION RESISTANT
MAINTENANCE FREE
EASY TO INSTALL
DUSTLESS**

Natural Crushed Stone Wax Polymer Pathway Material

Cut down on maintenance while preserving a natural look and feel with Kafka's patented Wax Polymer Pathway Mix. The ease of installation and limited maintenance makes our Wax Polymer Pathway Mix a top choice for beautiful, yet resilient, pathways on courses throughout the United States.

Natural Stone. Groundbreaking Solutions.

LET US PROVE IT.

Mention this ad for a **FREE** trial of our Wax Polymer Pathway Mix.

kafkagranite.com/golf
800-852-7415

IN THE FIGHT AGAINST SPRING DEAD SPOT AND DOLLAR SPOT...

THERE'S A WARRIOR ON YOUR SIDE:



KABUTO® FUNGICIDE SC

An invasion of Dollar Spot and Spring Dead Spot can destroy your turf and your budget. Defeat them with **Kabuto™ Fungicide SC**.

Kabuto delivers exceptional control of Spring Dead Spot, and both preventative and curative control of Dollar Spot, including carboxamide-resistant Dollar Spot. And Kabuto can be applied up to eight times per year as part of a resistance management program.

PBIGordonTurf.com

 **pbi/gordon**
CORPORATION
Employee-Owned

Always read and follow label directions. Kabuto® is a registered trademark of Ishihara Sangyo Kaisha, Ltd. 7/19 05771