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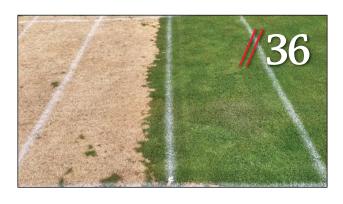
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Expert business advice from industry leaders



EDITORIAL

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

EDITOR Christina Herrick 216-675-6009 / cherrick@northcoastmedi

ASSOCIATE EDITOR Rob DiFranco

ASSOCIATE EDITOR Brian Love

DIGITAL MEDIA SPECIALIST Sydney Fischer

216-675-6002 / sfischer@northcoastmedia.net ART DIRECTOR Pete Seltzer

CONTRIBUTING EDITORS

Karl Danneberger (Science), Alan FitzGerald, Mike Kenna (Research), Jim Moore

BUSINESS

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

GROUP PUBLISHER Bill Roddy 216-706-3758 / broddy@northcoastmedia.r

PUBLISHER Craig MacGregor 216-706-3787 / cmacgregor@northcoastmedia

WESTERN REGIONAL SALES MANAGER Jake Goodman 216-363-7923 / jgoodman@northcoastmedia.net

EASTERN REGIONAL SALES MANAGER Dan Hannan 216-363-7937 / dhannan@northcoastmedia.net

EXECUTIVE SALES ASSISTANT Petra Turko 216-706-3768 / pturko@northcoastmedia.ne

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

MARKETING/MAGAZINE SERVICES

SUBSCRIBER, CUSTOMER SERVICE LIST RENTAL Brahm Schenkman REPRINTS & PERMISSIONS Wright's Reprints

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

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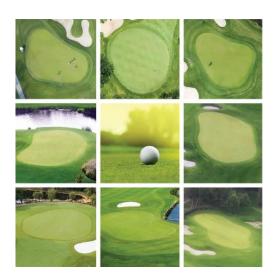
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"And Navin and his crew have done all the work, ranging from regrassing tees with Tahoma 31 to building bridges in-house. ¶ He is the Dye'r Maker."

SETH JONES, Editor-in-Chief & Associate Publisher

Ramble on

would say that it depends on your age if you get the headline on this month's cover. But I'll also say ... it's Led Zeppelin ... they're timeless!

If you know me, you know I'm a music nut. I have a 100-disc jukebox in my garage. I travel to see my favorite bands. I'm that guy who asks the other three players in my foursome if they want to listen to some tunes on the Bluetooth speaker when we're on the golf course. (Apologies to all you golf purists who prefer the gentle sounds of the birds chirping, but I like to rock!)

If you're not down with Led Zepp, I'll explain: D'yer Mak'er



is a classic rock song from Led Zeppelin, from their 1973 album *Houses of the Holy.* (Yes, I'm listening to the song as I write this. I encourage you to ask Siri, Alexa or your assistant to play it right now.)

When writing about this year's Herb Graffis Businessperson of the Year award winner, Chris Navin — a slight misspelling of the iconic song name is truly the perfect title for his story. Because Navin, the superintendent of The Club at P.B. Dye in Ijamsville, Md., has remade the course.

The course people saw when Navin first signed on to be the superintendent in 2016 and what you see today are practically two different golf courses. *Golf Magazine* Top 100 instructor Steve Bosdosh told me the course wasn't fit to host a junior tournament ten years ago. Earlier this

season, Navin and his crew hosted a U.S. Open qualifier, receiving rave reviews.

And Navin and his crew have done all the work, ranging from regrassing tees with Tahoma 31 to building bridges in-house.

He is the Dye'r Maker.

"Early on, sure, it would have been easy just to ask for a few million and dump it all into restoration," Navin says. "However, our owner was losing a lot of money yearly, only to see the business continue to fail more and more each year. We wanted to prove to him that we can do this. That this course can be successful without having to spend hundreds of thousands of dollars only to see failure."

I talked to the course's namesake, P.B. Dye, for the story. Despite a health scare a few years ago, Dye is doing well ("fat and sassy" is how he told me he's feeling). Dye raved to me about the work Navin and his team have accomplished at the course. Just like his late father Pete, Dye has a way of saying things, with a wink and a smile, when discussing golf courses. In this case, Dye compared The Club at P.B. Dye to having an ugly baby.

"When a child is born, it can be pretty damn ugly those first three-and-a-half minutes," he told me. "But then you get the child to grow up and get through those terrible twos, three and fours. Finally, you get them in a coat and tie. The more you're there, the more you groom them, the better they look. And it doesn't take money. It takes work."

Navin tells me they're happy with where they've gotten the golf course over the last six years, but they're still striving to improve and grow. Every year the club's revenue has grown. And more good news: the family owners are committed to the property and continue to invest more into the business each year.

By now, I hope you've put Led Zeppelin on shuffle. Whether you're on *Black Dog* or *Going to California*, I hope you'll check out my cover story on Navin, how he decided to change careers at age 30, and how he's done so well at The Club at P.B. Dye. The story begins on page 12.

It's time to ramble on. @

Email Jones at: sjones@northcoastmedia.net.



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NEWS, NOTES AND QUOTES



INSIDE THE ROPES AT THE JOHN DEERE CLASSIC

BY ROB DIFRANCO // Associate Editor

In his first year as superintendent at TPC Deere Run in Silvis, Ill., Jonathan Graham has lived with an 'if it ain't broke, don't fix it' mentality.

Graham, formerly an assistant at both Deere Run and TPC San Antonio, recently returned to the course and hosted the John Deere Classic.

It was his first as the man in charge, following his move back to western Illinois, and he didn't let the moment get to him.

"More than ever, every decision falls on your shoulders," he said. "When you're in the assistant role, you've got some protection there. That's the biggest, biggest difference. But I've got a really good team around me, and they do their best to do everything they know is right."

The lead-up to tournament week

was dry. From May 14 until June 25, Deere Run didn't receive any measurable rainfall, according to Graham.

"It was playing pretty firm and fast leading into the event," he added. "But (the late-June rain) did allow the rough to release some nitrogen, start growing and be a little more uniform and a little more penal for the players this week."

In addition to the rain, Graham's crew dealt with the fallout from Canadian wildfires that caused air quality to plummet. As a result, some employees stayed home, while others worked on the course with masks to nail down the finishing touches.

"When it was happening here, it was during our last push to get all the details done," he says. "The timing wasn't great for sure. If it would've happened a couple of weeks sooner or after, then would've probably been no big deal for us."

//IN MEMORIAM

REMEMBERING RHONDA SANDE

After a long battle with cancer, Rhonda Sande, a longtime member of the *Golfdom* family, passed away on June 30 at age 60.

Born and raised in Duluth, Minn., Sande served as *Golfdom*'s Senior



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Manager of Production Services for nine years.

"Rhonda coordinated the layout of every issue, collecting advertising materials and working with *Golfdom*'s sales, editorial and design team to receive finished

editorial pages and coordinate the print and digital versions of each issue." Golfdom Art Director Pete Seltzer says. "Her cheerful, positive outlook was something we should all strive to attain."

Sande was an active member of her community's music scene, serving as a member of the Duluth-Superior Symphony Orchestra Chorus, as well as the choir of the Pilgrim Lutheran Church of Superior.

Sande is survived by her husband, Dave; stepson, Glenn; and brother and sister-in-law Thomas Matta and Carrie Baumann-Matta. The *Golfdom* team has made a donation to have three trees planted in Rhonda's memory.

//THE GARDEN STATE

CURTIS CUP HEADING TO PINE VALLEY IN '34

The USGA recently announced that Pine Valley Golf Club in Pine Hill, N.J., will host the 2034 Curtis Cup Match. The club previously hosted the 1936 and 1985 Walker Cup Matches.

"Pine Valley was founded with the mission of celebrating the best in amateur golf," said Jim Davis, Pine Valley GC president. "So it's only natural that we'd want to host the premier event bringing together the best women amateurs of Great Britain, Ireland and the United States."

The 2034 Curtis Cup Match will be the 64th USGA championship held in New Jersey, fourth-most among all states.

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//HERE COMES THE CAVALRY

Women in Turf volunteers bring energy to Pebble Beach

BY ROB DIFRANCO // Associate Editor

As Pebble Beach (Calif.) Golf Links hosted its first-ever women's major championship — the 2023 U.S. Women's Open — Superintendent Bubba Wright had some extraqualified help coming in to reinforce his existing staff.

The Women in Turf team, a group of volunteers from across the country, were on site to bring not only help to Wright but more visibility to women in the industry.

Jill Seymour, CGCS, superintendent at Monmouth County Parks System, N.J., a veteran of the Women in Turf team, entered her third year on the Women's Open volunteer crew. She says this year, those involved are as excited as they've ever been.

"We have 35 women on this crew this year and 11 of us are returning," she says. "We're growing by 50 percent every year that we've done this. It's funny because the very first year we were thinking hopefully we can find some women. And now, we are just spilling out of the woodwork."

The connections made during the event have been invaluable for Seymour, both personally and professionally.

In addition to their work on the course during tournament week at Pebble Beach, Seymour says the group of volunteers will host a First Green event for the first time.

"We're going to have some pros out there too, to do some interactive demos and things like that," she adds. "That's something new. We're hoping it turns into a tradition that we can keep doing at these events. I mean, we're all there, so why not?"



The 2023 Women in Turf team at Pebble Beach featured several assistants, assistants-in-training, assistant mechanics and others in the turfgrass industry.

//TOP OF THE CLASS

CAROLINAS GCSA HANDS OUT TOP AWARD

The Carolinas Golf Course Superintendents Association (GCSA) selected Fred



Fred Yelverton

Yelverton, Ph.D., as the recipient of its Distinquished Service Award.

The award comes as Yelverton, described by peers as "a titan in turfgrass weed science," winds down a career spanning nearly 30 years

at North Carolina State University. Earlier this year, he accepted the **Outstanding Contribution Award from the** GCSAA. In 2021, he became a Fellow of

the Crop Science Society of America. Three of six letters supporting his nomination for the award came from previous recipients.

Yelverton will receive his Distinguished Service Award during a special ceremony at the Carolinas GCSA Conference and Trade Show in Myrtle Beach, S.C. set for Nov. 13-15.

//MAJOR ADDITIONS

AUDUBON ADDS TO ITS BOARD

Audubon International added Henry Wallmeyer, president and COO of



ClubWorks, and Bryan Stromme, vice president of agronomy at Century Golf Partners, to its board of directors. Both joined at the

invitations of Henry DeLozier, board chair, and Rich Katz, vice chair.

Henry Wallmeyer

Wallmeyer joined ClubWorks in July 2022 as its president and **COO.** Prior to joining ClubWorks, Wallmeyer served as president and **CEO** of the National Club

Association. Stromme is vice president of agronomy at **Century Golf Partners**



Brvan Stromme

based in Dallas, Texas, with more than 20 years of experience in the golf industry.

Prior to joining Century, he held positions as regional director of agronomy for Troon, a corporate account manager and regional sales director for Rain Bird and regional director of agronomy for Billy Casper Golf.

//GROWING THE GAME

GCSAA LAUNCHES WOMEN'S LEADERSHIP ACADEMY

The Golf Course Superintendents Association of America recently debuted the Women's Leadership Academy — set for Nov. 7-9 in Lawrence, Kan.

GCSAA says the event will focus on providing women in the turfgrass industry with education, mentoring and networking. It is open to all women in the turfgrass industry, not just members of GCSAA. The event is free to all those selected to attend.

Education at the event is divided into four segments: self-discovery, understanding others, communicating effectively and being an inspiration. In addition to educational sessions, the Women's Leadership Academy will include networking opportunities and discussions on wellness, talent optimization, human resources and more.

//LET'S BE FRIENDS

EWING PARTNERS WITH PGA PROS

Ewing Outdoor Supply will partner with PGA Tour golfers Aaron Baddeley and Peter Malnati and PGA Tour Champions golfer Steven Alker.

"Golf is an integral part of Ewing's 100year history," Douglas W. York, president and CEO of Ewing, said. "We're excited to take Ewing's participation in the game to the next level by welcoming Aaron, Peter and Steven to the Ewing family. Together, we'll raise awareness of how the behindthe-scenes work on golf courses makes a difference for players."

//MULLIGAN

A ONE-STROKE PENALTY

In Seth Jones' July 2023 *Keeping up with the Jones* column, Jones stated the longest hole at the Wee Links course at Heritage Park in Olathe, Kan., is 30 feet long. The longest hole is, in reality, 30 yards long.

Seth regrets the mistake and says he will write his next column during regular business hours, instead of after midnight the evening before the magazine goes to press.

//HANDING OUT HARDWARE

USGA HONORS US WOMEN'S OPEN SUPERINTENDENT

The USGA presented Bubba Wright, Pebble Beach Golf Links' superintendent, with the E.J. Marshall Platter at the conclusion of the 2023 U.S. Women's Open Championship.

The award — first given to Dave Johnson, director of grounds at The Country Club in Brook-



line, Mass. — recognizes leaders in golf course management who demonstrate commitment, expertise and collaboration with the USGA.

The USGA also recognized Wright's crew during an 18th green ceremony. This is the first time the USGA presented the platter to multiple superintendents in a single year. The USGA awarded Chris Wilson of Los Angeles Country Club in May.

Wright, a native of Coarsegold, Calif., is in his ninth year at Pebble Beach — having previously served as an assistant superintendent at The Links at Spanish Bay and at TPC Scottsdale (Ariz.)

"As we've prepared the course for this historic championship, Bubba and his entire team have demonstrated excellence in their profession and their contributions are worthy of this highest recognition," said Mike Whan, CEO of USGA.

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Rob Andrews

@andrews_rp

Assistant Superintendent Ansley GC at Settindown Creek Roswell, Ga.

The sunrise this morning! No filter.

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AOTO RY. BOB ANDREWS

Reigning champ While at the John Deere Classic, Associate Editor Rob DiFranco (left) ran into 2022 Herb Graffis Award winner Alex Stuedemann. The former TPC Deere Run superintendent, now a TPC agronomist with the PGA Tour, was on-hand surveying his old stomping grounds.

The head honchos Current TPC Deere Run Superintendent Jonathan Graham (center) poses for a picture with his two righthand men — Assistant Golf Course Superintendents Andrew Cooper (left) and Jarrett Chapman.

From the back tee During a recent trip to Asheville, N.C., Golfdom Editor-in-Chief Seth Jones visited with Omni Grove Park Inn Superintendent Tim Moore. The two are standing on an area of No. 1 where Moore plans to create a new tee box.

Thanks for the ride! Graham and Chapman were ever so gracious to offer a lift from the shop to the 18th green. After the day was over, DiFranco wasn't lucky enough to snag a ride back though, toughing out the hilly road back to the car.

No need for the Konica Minolta Shot Tracker for this ball When Golfdom Publisher Craig MacGregor unleashed this drive at Royal Niagara GC, in Niagara-on-the-Lake, Ontario, everyone instantly lost the ball. Only when Mac looked down did he see where the ball 'landed.'

Victory cheers North Coast Media President and CEO Kevin Stoltman and his two playing partners, Jones and MacGregor, hoist a beer at Royal Niagara GC, in celebration of winning the annual North Coast Media Sales Team Golf Tournament with a score of 2-under. (It's always a good thing to play well when we're playing with The Boss.)



The Golfdom (F) (F) (S)

FROM THE ARCHIVE

Foxburg (Pa.) Country Club is one of the oldest golf courses in the country still open for play in 2023. The club is doubly unique in that it's also home to the American Golf Hall of Fame. Look back on this October/November 1965 edition of *Golfdom* as the Hall of Fame inducts its first class of 15 golfers. To read the full article visit **golfdom.com**.

Hall of Fame elects first 15 golfers

he American Golf Hall of Fame at Foxburg, Pa., recently held its first annual invitational tournament at the Foxburg C.C. and elected the first 15 giants of the game for installation in its shrine.

Those named were Francis Ouimet, Harry Vardon, J. H. Taylor, James Braid, Charles (Chick) Evans, Jr., Walter Hagen, Robert Tyre Jones, Jr., Henry Cotton, Joyce Weathered, Gene Sarazen,

THE MAGAZINE OF GREAT BUSINESS

Tommy Armour, Byron Nelson, Ben Hogan, Sam Snead and Mildred (Babe) Didrikson Zaharias.

Among distinguished guests of the club for the occasion were Dr. R. Vensel, the first president of the Golf Hall of Fame and the man who secured its charter, along with Congressman Albert Johnson of Pennsylvania.

Congressman Johnson presented Kenneth Christy with a copy of a Congressional resolution extending greetings and felicitations to the Golf Hall of Fame and mentioning the Foxburg Club as the oldest golf course in continuous use in the United States.

(The distinction is disputed. This is also claimed for the St. Andrews Golf Club of Yonkers, N. Y. Both Foxburg and the Yonkers club were founded more than 75 years ago.)

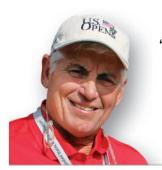
Lowell Thomas was chairman of the Fame nominating committee, which included noted golf course architect Robert Trent Jones; John P. Sawyer, a member of the Royal & Ancient G.C., St. Andrews, Scotland; George Ferrier, former PGA Seniors' President; trick-shot artist Joe Kirkwood; Herb Graffis, executive editor



of *Golfdom*, and Carl T. (Pat) Hogan of the Royal & Ancient.

Lew Worsham won the low pro trophy in the tournament with a 68. Seventy-three-year-old Lowell Thomas posted an outstanding 84. And he did not ride in a golf car as did some younger members. **©**





"Superintendents can be regimental. They go to work at a certain time and come home at a certain time. You need to break that tendency."

MATT SHAFFER, director of golf course operations emeritus Merion Golf Club, Ardmore, Pa.

Managing personal stress

am certainly not professionally trained in giving psychological advice for managing stress, but I can assure you I have had more than my fair share of stress — so that is my basis for these suggestions.

First, you need to understand who you are and how you process stress. If you are a worrier by nature or have a controlling personality, this will be hard for you.

Most people know who they are. However, if you want a second opinion and are married, I am sure your spouse will gladly chip in their two cents. Talk to your parents, brothers and sisters or a good lifelong friend. They will ease the information to you in a more palatable manner.

Once you understand who you are, and accept that there are changes that can be made that will make your job and your life easier, you will have relieved 50 percent of your stress. Yes, I am saying that 50 percent of your stress

For me personally, I tried hard to avoid situations that would cause me stress. I have not reactive. I was also effective at damage control. I know some people work for me and think, 'he has lost his memory.' It is true that I managed grass on the edge and it created a stressful atmosphere for the staff.

However, the members loved it, so I eliminated that area of stress. The GM, the pro and all the employees were happy because the members were happy, thus eliminating other areas of potential stress for my peers.

Still, there was stress from the staff because we always felt like we were on the precipice of losing grass. This is where my management style helps all of us with

our stress load.

Spread the wealth

I am a delegator. I spread the stress over my entire staff. Everyone can handle a little instead of trying to handle it all yourself.

Young supervisors want responsibility. They see it as a way to test themselves and get ready for their own head superintendent job. I feel you have a better golf course when everyone buys in and feels like they are a part of the process, both good and bad. This system is valuable when Mother Nature throws

> a curveball with weather extremes. Now you get great suggestions on how

to tackle the problem because you have buy-in.

Balance your family life and professional life together. Superintendents can be regimental. They go to work at a certain time and come home at a certain time. You need to break that tendency.

Prioritize your time

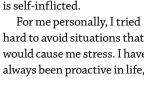
I also think it's critical, if you have children, to live close to your job. That way you can put the kids on and get them off the bus. They can be on the course with you in the afternoon and you can have a good talk with them in a tranquil setting, a perfect place for you to get the pressures of their lives out in the open.

The idea is quality time not quantity time. Be spontaneous. Surprise your wife with flowers. In my case, my wife would say, 'What did you do?' I would say, 'Nothing, just building up goodwill for when I do something bad.'

Do you want to blow all their minds? Take them for a summer vacation, four days of camping. If you are a good mentor and delegator, this shouldn't be a problem.

Hope this helps. It did for me. I never got fired and will soon be celebrating our wedding anniversary (49 years) with my way better half! @

Matt Shaffer, a longtime superintendent, is the owner of Minimalistic Agronomic Techniques (M.A.T.) He was previously the superintendent at The Country Club in Cleveland and is director of golf course operations emeritus at Merion GC, Ardmore, Pa., where he hosted the 2013 U.S. Open. Reach him at matthewgshaffer@gmail.com.







Dye'r Maker

BY SETH JONES

uilt in 1999, The Club at P.B. Dye in Ijamsville, Md., started strong. When it opened it was considered one of the finest clubs in the Washington, D.C.-area. But over the years the course fell into disrepair.

Those who were there to see it don't hold back when describing the condition of the course in 2014 and 2015, calling it "a dog track," and "a nightmare."

"When I first played it many years ago, I said, 'I'm never coming back," says Steve Bosdosh, PGA, one of Golf Magazine's top 100 teachers for 22 years.

But Bosdosh was told he needed to see the course again, because of the positive changes going on.

"A friend of mine, who was the GM, invited me back to

have coffee. He said, 'We got a new superintendent." Bosdosh says. "I came back and played reluctantly. I thought, 'Wow, this is pretty good.' I brought some friends of mine back to play, and everyone is like, 'Wow, this is really good."

It was so good that Bosdosh eventually agreed to move his golf academy to the course. Now, he says that superintendent — Chris Navin — is not only a friend but one of the most talented superintendents he's ever worked with.

"He's done way more with less than almost any other superintendent I've ever been around — and I've been around really good ones," Bosdosh says. "I've been around some very high-dollar places and Chris gets more out of a dollar than anyone I've ever been around."

Continued on page 14





Restoring the rock creek that splits the course's third hole (before and after) was one of the first projects Navin embarked upon. It was symbolic to the owner, Whang Kyun Shin, that the course was on its way back.





This before and after shows how overgrown trees obstructed the view and tee shots on No. 15. The trees made the lower two tees unusable.

Continued from page 13



Babe I'm gonna leave you

Navin sat in his car in the Harford County Public School parking garage for over two hours. In his hand was a typed resignation letter. In his stomach was a knot. He was about to walk away from his career in education and his six years as a 5th-grade teacher.

"I started working on a golf course when I was 15," Navin says. "I was lucky in that my summers, I could go back and work at Maryland G&CC. John Vinson was the superintendent there at the time. He's a friend, and I told him that I had a feeling that I didn't think I could teach forever. That's when he started talking to me about pursuing a career in turf."

Navin had already tried transferring schools to see if it was just the place he was teaching at. He quickly learned it was not.

"I remember several days during those first days of spring, I'd be in the classroom, and I'd just be wondering what the guys were doing on the golf course," Navin recalls. "My last year (teaching), the first 65-degree day, I'd tell the kids, 'Come on, we're having class outside.' I'm just an outdoor cat."

At age 30, the 'outdoor cat' was going back to school. He wanted a new career — one on the golf course.

With a mortgage and a young family, Navin enrolled in the turf program at Rutgers University. Two "grueling" 10-week semesters and two internships later, Navin's new career path Continued on page 16

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2023 HERB GRAFFIS OF THE YEAR

Continued from page 14

was set. He had internships at Maryland G&CC in Bel Air, Md., under Vinson, and another at Bulle Rock GC in Havre de Grace, Md., under Bill Lewis.

"I learned a lot about maintaining turf from John, and a lot about spraying and doing integrated pest management at Bulle Rock, about getting through the summers of the Mid-Atlantic," Navin says.





Trampled under foot

Michael Kim's background is in commercial real estate and investment projects. He worked for the owners of The Club at P.B. Dye, helping them improve their investments. He did not come from a golf background but found himself in one when the owners asked him to step in and help the club bounce back.

His first step was to remove the management company and pull maintenance in-house with a new superintendent.

"I don't want to dwell on the past, but given that we were one of the top golf courses in the D.C.-area, this was a fall from grace and an example of how bad mismanagement can just tear down a course," Kim says. "I was in search mode for a new superintendent, and that's how I met Chris. It's been an incredible story since then." Some of the course problems included:

- 25 percent of greens were unusable because of patchy and dead surfaces;
 - 30 percent of fairways were dead or patchy;
- Green surrounds were thin with *Poa annua* that wouldn't survive the summer months;
- *Poa* was the predominant turf type throughout the course, with 75 percent of the population on all surfaces; and
- Trees were overrunning the course, restricting airflow and interfering with golf shots.

"It was a hot mess, and I'm not overstating it," Kim says. "We had a moment in early August when we uniformly killed every set of tees. We were a laughing stock because of how far we fell from one of the top courses in the area. There was a lot of work to do."

In January 2016, after two years as an assistant, Navin became the new superintendent of The Club at P.B. Dye. Navin and Kim use the same term to describe the task he was hired to do: "a turnaround project."

"It was a failing business — losing lots of money every year," Navin says. "It's a family-owned business and, unfortunately, the original developer passed away a few years ago. The course stayed in the family, and we have full autonomy. We could make the changes we needed to."

$\star\star\star$

Good times bad times

In 2016, Navin had one goal: don't lose grass. He wanted to show the owners that the course could survive a Maryland summer.

Of course, in his first year, it didn't rain from the 4th of July until Labor Day, except for "90 minutes of Hell" on the last Saturday of July when it rained five-plus inches in an hour-and-a-half.

Mother Nature smiled upon the course in 2017 and provided a better weather year, enabling Navin and his team to start cleaning up the course. They also removed out-of-play bunkers. All the projects were done in-house.

"That was the first year we started hearing, 'I haven't been here in six years. I swore I'd never come back, but someone told me to give it another chance!" Navin says. "We had a feeling we were on the right track at that point."

In 2018, rain smacked the course with the wettest year on record with 70 inches of rain. To manage cancellations, the course liberally gave rain checks to outings. Navin and his team continued working on restoring the course, tree removal and general clean-up.

Around this time, new key players entered the fold: Kelsey Young, a young pro in the food and beverage business who Kim promoted based on her outstanding work ethic and attitude; Pete Collins, business development and marketing manager, who brought new ideas to the club to attract more players; and at Kim's urging, Bosdosh relocated his golf academy to the club.

By 2019, it was all coming together. Kim started to see that a new attitude that began with Navin was pervading the club



"The late Whang Kyun Shin, PBD's founder, built the course because of his love of the game and his desire to share it with others," Navin says. "He wanted our guests to enjoy the beautiful design and setting that our course offers. Although we wish he was still with us to enjoy it more than ever, we know Mr. Shin is with us in spirit."

and its personnel.

"We have a really good culture here. In a good way, we're in each other's business, we are watching each other's backs," Kim says. "As an example, we'll have a big outing and Chris doesn't think a thing of it ... he'll have his team come over and help us out at the clubhouse, setting up and taking down."

This year, the course celebrated a mile-Continued on page 18



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2023 HERB GRAFFIS | BUSINESSPERSON | OF THE YEAR



Continued from page 17

stone that truly showed it was back on the map. In early May, the course hosted a U.S. Open Qualifier. The course played at a par 70, 7,100 yards. Only two players broke par, and the feedback was tremendous.



Thank you

The man whose name adorns the course is grateful for Navin's hard work.

"Chris has done a hell of a job, he has given that course a breath of new life," says P.B. Dye, ASGCA. "When I first went around the course with Chris, I gave him a list of things that needed to be redone. I came back a year later and he had accomplished most of them. I was absolutely impressed."

Dye, the son of Pete Dye, is 68 and says he knows how much work it took to get The Club at P.B. Dye back in shape.

"I've been in this business since I was six years old, I was cheap child labor. I know all the problems a course can have and what it takes to make it right," Dye says. "Chris is a hands-on guy. He's not scared to tackle a problem. He's not putting a band-aid on a broken leg; he's fixing it."

Ed Gasper worked 44 years as a superintendent in the Washington, D.C. area, up until last month when he retired. Gasper recalls first meeting Navin and thinking the course had found its ideal superintendent.

"The course was going downhill and they needed that one guy with a vision, and that was Chris," Gasper says. "We would drive around the course and he would tell me what he wanted to do. I could feel his excitement."

Gasper adds that Navin made some smart decisions, like introducing Tahoma 31 to the course's tee boxes, rebuilding bridges inhouse and getting spotty fairways healthy with cultural practices.

Bosdosh raves about the way the course played in the U.S. Open qualifier. He says it proves The Club at P.B. Dye deserves to be on the national stage.

"When I first got here, we weren't even good enough to host a Mid-Atlantic junior event," he says. "We're trying to host bigger events. We're looking at hosting another U.S. Open Qualifier if we can get it next year, possibly a Maryland state championship for the men and an LPGA or Korn Ferry Tour event. It's incredible, and it's a fun place to be. But we can't do any of that if we have poor conditions of tees, fairways and greens. And now, the tees, fairways and greens are as good as anywhere in the Beltway area."

Like Kim, Bosdosh says Navin brings positive energy to the club with his friendliness and eagerness to keep improving.

"In the past, I've had superintendents that maybe didn't talk to me but once a week. Chris stops by every day and asks about my wife and kids," Bosdosh says. "He's so friendly and approachable. In the past, I was hesitant to say anything about the course because I didn't know how the superintendent was going to take it. Chris wants to know what's good, what's bad and what he needs to do better. It's just a different vibe here."

Outings are up, revenue has increased for seven consecutive seasons and, now, a new events center for the club is in the works. The turnaround project is complete.

"I'm truly honored to be selected as this year's Herb Graffis Businessperson of the Year," Navin says. "When I decided to make a career change, I had no clue how it was going to go. I took the leap, and after 11 years, to be honored in this way not only proves validation for me but for our club, which has also embarked on a journey of recovery, renovation and a commitment to the future."

Seeing is believing

As Chris Navin began the restoration project at The Club at P.B. Dye, he was sure to take before and after photos to document the progress. To see additional before and after photos of the positive impact he and his team have had on the course, visit Golfdom.com.

Superintendents describe it as reliable, proven, trusted, consistent and dependable



Brian Aynardi

(4/4) When speaking with superintendents about the use of fungicides for control of Pythium diseases, I often ask, 'What is one word you would use to describe why you use Segway®?' The precise words may vary, but the adjectives used are all similar: reliable, proven, trusted, consistent and dependable. Others simply say, 'It works."

Brian Aynardi, Ph.D. Northeast Research Scientist for PBI-Gordon Corporation





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THE BUSINAL DURANT

INSIDE

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All about the business

When *Golfdom* debuted in 1927, the magazine proudly boasted a simple subhead: "The business journal of golf." That subhead subtly changed over the years; in the 1960s it became "The business magazine of golf," and in the 1970s the magazine saw its name change to *Golf Business* for a spell.

In 2012, *Golfdom* awarded its first Herb Graffis Businessperson of the Year Award, named in honor of the magazine's co-founder. We've presented the award annually in the years since, honoring talented business-savvy superintendents from across the country.

Now, we once again stress the business aspect

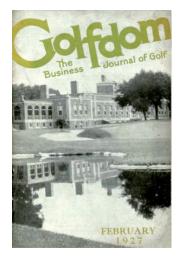
of this magazine with our first Business Journal special insert. The idea stems from that original subhead, with the vision to give industry experts a voice to speak to you directly.

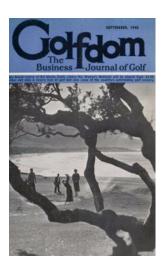
In this section, the editors of *Golfdom* stand back and allow those experts to write on topics that are important to them.

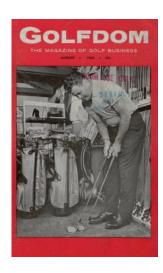
It's an idea we think Graffis, the businessman that he was, would appreciate.

We hope the Business Journal becomes another proud tradition of the magazine. Even more important, we hope the insights shared here, and elsewhere in the magazine, help you become the best you can be in this business. **②**

To learn how to be involved in the 2024 Business Planner, contact Golfdom Publisher Craig MacGregor at cmacgregor@ northcoastmedia.net.







The art of dealing with dealers

Why it's crucial to maintain a strong relationship with your equipment dealer

BY STEVEN JOHNSON

In the ever-changing marketplace with higher manufacturing demands and longer lead times, it's essential to have proper communication between dealers and golf course superintendents.

Without consistent communication and clear expectations, customer service on both sides can fall through the cracks.

A direct line of open and honest communication is the best way to achieve your desired goals and needs for your organization. Knowing all of the information upfront — the good, the bad and the ugly — helps everyone stay informed and provide better customer service.

Keep in mind, this is a two-way street. Assuming everyone is on the same page is a mistake both parties make. Here are a few ideas to help ensure that doesn't happen:

• Form a professional business relationship with your dealer. Once that partnership is established, you

NAME: Steven Johnson COMPANY: Smithco TITLE: Regional Sales Manager YEARS OF EXPERIENCE: 29

can use each other as sounding boards to help both organizations succeed in their business goals.

• Create an open line of communication. By forming a trusted relationship, you have a much-needed partner when you may need it the most.

"Nobody knows your needs like you do. So make sure you overcommunicate information you think your dealer may need to help make more informed decisions." • Make a list of all your expectations and needs. Asking the right questions and giving the proper information most likely ensures you will have a good experience and the

desired result.

Nobody knows your needs like you do. So make sure you overcommunicate information you think your dealer may need to help make more informed decisions.

Dealers serve as a trusted point of contact within the turf management industry. They exist

to be responsive, attentive to your needs, empathetic to your struggles and, above all, make sure that you are satisfied with the result.

The key takeaway here? With higher manufacturing demands and longer lead times, communication is essential to success.

We all need one another in some shape or form. Taking the time to work together helps build a stronger professional working bond that will help make everyone successful in their field of expertise.

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Every year, superintendents face new challenges old solutions can't address. So, when a control product sets a greater standard, the breakthrough can feel instant. A new name. A new active ingredient. The innovation is here.

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the right manufacturer can shake up the market with products that help superintendents succeed.

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FMC puts the resources and the scientific talent necessary into product development to test — and prove — impressive results in the golf market. That doesn't mean taking old active ingredients and dropping them into a new bottle. It means real innovation that moves the needle for golf superintendents.

As early as the mid-90s, FMC revolutionized pest management with Talstar (bifenthrin), setting a new bar for multiple pest efficacy and overall product quality. Over 25 years later, the Talstar brand is still going strong. And the legacy of breakthroughs continues, with FMC's delivery of three game-changing fungicides in three years – the most recent being Serata, a groundbreaking *Pythium* control product with a brandnew mode of action.

This innovation is powered by 600 PhDs worldwide as well as at the 500+ acre Stine research campus in Newark, Delaware. At Stine, researchers are working around the clock to deliver solutions that solve real challenges — researching new modes of action, fighting resistance, and even working on the cutting edge of a biological-fueled future that will enhance turf strength and resiliency beyond what has ever been possible.

Of course, innovation isn't powered by science alone.

That's why FMC has built the entire organization around people you can count on. That reliability starts with multi-disciplinary, experienced R&D scientists making sure everything FMC sells works as promised through laboratory, greenhouse, and field trials. It includes a field sales team and account managers who go the extra mile, listening to your needs so FMC can help you meet ever-evolving business demands — helping by staffing up and designing an EOP that's simple to understand — and delivers real savings for your course.

FMC also stands behind its innovations with Solution Assurance Programs. From the Fairy Ring Assurance for Fame® and Kalida® fungicide, which includes a DMI with no turf regulation effect, to the Echelon® Performance Assurance for Bermudagrass for preemergence control of crabgrass, yellow nutsedge, and other annuals, FMC provides peace of mind.

Throughout it all, FMC has supported its distributors to help customers get products reliably, and at the right price.

FMC knows every year comes with a challenge to golf courses — whether it's a turf disease, inflation, environmental pressures, or something new. That's why FMC will keep investing in innovation and the people who drive it. With industry involvement and programs like the FMC True Champions Program, the Give Back to Local GCSAA chapters Program, and Superintendent Roundtable Discussions — FMC is bolstering the work you do every day.





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How a cart path investment could save time and money

BY A. JOHN HARVEY

There are plenty of options available to evaluate for cart path pavements on the golf course. So, what are some of the most important factors to consider when making a final decision?

- Environmental footprint;
- Permeability;
- Stormwater management ability;
- Life cycle; and
- Overall price point

All of those factors together are important. It makes rubberized permeable pavement for golf course cart paths a wise choice on any course in any climate.

Rubberized, permeable pavement can offer superintendents many advantages over traditional materials, from economic to aesthetic.

For years, recycling consumable products and materials for a second or third-generation has been a conscientious goal of many consumers, governments and industries.

Rubber tires are one of the most consumable products in the automotive industry. According to the Federal Highway Administration and Scrap Tire Management Council, American motorists discard approximately 280 million tires yearly. That's approximately one tire for every person in the country.

Luckily, processed crumb rubber creates an ideal material for cart paths and bunker liners.

Unlike concrete and asphalt, superintendents can stage and mix these materials on-site. They also create less collateral damage to the



LEDGER

NAME: A. John Harvey COMPANY: Porous Pave TITLE: Parks, landscape and golf industry specialist COLLEGE: Michigan State University

YEARS OF EXPERIENCE: 35 FAST FACT: Worked with Robert Trent Jones Sr., and Roger G. Rulewich as a young golf architect.

course, thanks to the use of small equipment and common hand tools during installation.

For all seasons

Another upside comes during the winter season, as high-rubber-content pavement acts like a giant expansion joint. The pavement can eliminate heaving and cracking, especially in climates impacted by dramatic freeze/thaw cycles.

This means, while rubberized and permeable pavement can be more expensive on the front end, typically it's less expensive over its entire life cycle.

Rubberized pavement can be incredibly permeable — allowing up to 5,800 gallons per hour through. This also helps reduce crumbling or fracturing associated with freeze/thaw cycles.

Studies have demonstrated that snow and ice tend to melt more rapidly on rubberized pavements than on concrete or others. In the hot summer months, some permeable rubber

> pavements are cooler than other traditional paving materials.

Added benefits

With water quality and quantity regulations and concerns at a premium in today's world, rubberized pavement can be a smart environmentally-sound solution. In concert with drainage collection systems,

permeable pavements can provide captured runoff for positive reuse in rain gardens, irrigation and bioretention areas. It is also able to release stormwater through the ground profile.

Poured-in-place paving or unit pavers incorporating recycled tires into the mix can also help dissipate point-source runoff discharge by enhancing infiltration into subsoil versus sheet runoff, which can unintentionally transport soil and nutrients into waterways.

Rubberized and permeable paving materials dramatically enhance playability and golfer enjoyment by absorbing ball bounce by up to 73 percent.

Ease of installation is another selling point, as many rubberized pavements can be installed over existing concrete and asphalt cart paths.





All About the Green

No matter the budget, keeping your course up to par is non-negotiable

By Todd Deitz, Mike Daugherty, Matt Wilkinson, Justin Watts | ALBAUGH-PRIME SOURCE

You're at the mercy of your climate and weather, labor shortages, increasing wages, unpredictable fuel costs, issues with water usage, and so much more.

But contrary to the downward trends prior to the pandemic, the increase in rounds played and interest in the game puts us in a golf renaissance that looks positive throughout 2023 and beyond.

However, that doesn't make managing your course maintenance budget any easier.

In fact, it's never been easy — so we visited with a few of the professionals from Prime Source about their past experiences as superintendents and thoughts on the delicate balance that budgeting requires.

Todd Deitz Great Lakes Territory Manager

Do not let the job overwhelm you. Just breathe. You learn you can only push



Mother Nature so far and learn her limits. There's plenty of politics in course management. So, you listen, digest and implement a plan as to how you

can accomplish the overall goal while maintaining the parameters of your budget. It's always good to remember you don't own the course but to treat it like it's your own.

Mike Daugherty

Midwest Territory Manager Learn how to talk to club members. They have a great appreciation



Mike Daugherty

top playing condition and keep it that way. In my 23 years as a superintendent, I believed strongly in taking the Greens committee on tours. Tour the shop and explain the equipment and upkeep. Go out on the course and show them what's working or what needs improvement. Help them understand the impacts of wants

for the game,

but that doesn't

always translate to

understanding how

to get the course in

Matt Wilkinson

Proprietary Products Manager

It's important to realize the excuse of bad weather does not play. You're hired

versus needs as it relates to the budget.



Matt Wilkinson

to fix it with your given budget. It pays to remain flexible and figure out ways to alleviate financial challenges. We're well-trained in the science of growing

and maintaining the course, but people can overlook the value and importance of managing people. As a super, I found building coalitions and relationships helped everybody understand the nature of course management, along with its trials and tribulations ranging from financial concerns to physical labor.

Justin Watts

National Accounts Manager

When you're young and new on the job, you can fall into the trap of thinking you're the expert. You quickly learn there's a lot more you don't know than you know. Keeping all the key



Justin Watts

personnel well informed about costs and outcomes was extremely important, no matter the scale of the job at hand. Managing expectations,

especially when a project played out just as you explained it would, earns you instant credibility.

Sometimes it's more about efficiency than labor. Spending money doesn't mean you aren't saving money. An extra herbicide application can mean you don't have to mow as often. The same goes when it comes to purchasing new pieces of equipment. Instead of the constant dollars being spent on parts and repairs, a new machine can increase productivity.

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Vendor Relationships

BY DAVID TAYLOR

After 20-plus years of doing business with vendors all over the world — and running an international turf equipment company — I have found that one of the most important aspects of running any business or operation is your relationship with your vendors.

I firmly believe that there are a few principles to live by no matter what position of a business or organization you find yourself in:

Never put all of your eggs in one basket. As a golf or business professional, it can be easy to get wrapped up in a big lease package or purchase a contract with a single vendor. The problem with doing this is that when something goes wrong, it tends to snowball into a bigger issue.

If that vendor is low on stock and can't provide products or services, you don't have another vendor to fill the gap. Always diversify where you are getting your materials from. From equipment to chemicals and fertilizers, make sure you are building relationships with as many people as possible so that when you get in a bind, you can make a phone call.

Remember the little guy. It's not always the guy that stops by once a month to give you donuts that will take care of you. What truly matters is that, when you find yourself in a tough spot, they answer the phone and make you a priority. Having a vendor you can trust, will make all the difference for your business.



LEDGER

NAME: David Taylor COMPANY: STEC TITLE: President and CEO COLLEGE: Walford College, Baschurch, England YEARS OF EXPERIENCE: 28

Don't be afraid to branch out. You may have used the same brand of product for 20 years, and sure, it works for you, but what are you missing out on?

Opening your doors and mind to a new vendor or product is not only great for you but also benefits the vendor in many ways. You benefit by learning something new or gaining a product to make your life easier.

At demonstrations and trade show events, make sure to check out the smaller booths, new companies and new vendors. Those folks have worked hard to get there and have a genuine passion for the industry.

They aren't there just for show. They care about you and what you do. Your time and feedback are invaluable.

Have clear and realistic expectations of your vendors.

Explain your needs and give them the opportunity to provide a solution. Provide transparent information about budget constraints or other difficulties you are facing and see if there is a way

they can assist you with tackling those roadblocks.

Honesty is always the best policy in any business relationship. However, understand that everyone is running a business just like you are. Everyone's goal is to make money, so don't always expect something

for nothing. The support from your vendors is always invaluable.

Ultimately, vendor relations are simple; it is about relationships. Connecting with others in your industry and having a great support system of vendors is going to make you successful.

At the end of the day, it takes a team to accomplish a goal. You should consider your vendors a part of your team. If your team is strong, then you will succeed.

If one of us loses, we all lose and recover together. When one of us wins, we all win and the company wins.

How's your team looking?



Informed irrigation decisions

By David Angier | TORO

The decision of whether to invest in incremental upgrades to your irrigation system or completely replace what's there is one that most superintendents will have to make at some point in their careers.

Which makes the most sense for you? It's essential to weigh the pros and cons, but often, your decision will come down to two factors: the age of the current system and the cost of either option.

One step at a time

In many cases, a superintendent can get away with making incremental system upgrades.

An investment in upgrades over time offers many benefits. The most obvious is that it's a lower-cost



David Angier

investment that you can spread out over the year. It also allows for fewer disruptions to course activities.

As an example, say you only need to

replace sprinklers or repair failing field satellites. In these cases, an upgrade of one specific portion of the system is the obvious decision.

New sprinklers will more accurately place water, saving money over time, and new satellites will improve communication back to the central control system and add new capabilities, preventing wasted time spent troubleshooting.

The older the system, the more issues pop up that need to be addressed. Upgrading over time helps to bring definite labor savings, giving

your team more time for tasks like raking bunkers and fertilizing.

All-in approach

The tougher decisions come when, for example, underground infrastructure fails or your water usage suddenly spikes from a leak, which indicates a larger problem.

You should more heavily consider a replacement if you're already planning a temporary shutdown of holes, or if you have upgraded components of the irrigation system many times over the years.

Of course, cost plays a major role in the decision to replace the entire system. The total investment can quickly add up more when equipment, labor and downtime are all taken into consideration.

Do not disturb

Perhaps the most enticing advantage to continual upgrades of an irrigation system over a complete replacement is the lack of downtime. In the case of a sprinkler upgrade, the course won't need to shut down since the process can be done in phases only lasting a matter of weeks.

With a full replacement, the course or various holes may be closed and unplayable for several months, depending on the size of your system and the extent of the project.

The number of sprinkler heads on

a course can range from 500 to over 3,000, and each one may need to be replaced, in addition to installing new piping, satellites or 2-wire modules, a central control system and more.

Sometimes, a full replacement is less about a faulty system and more about a full course redesign. If this is your club's goal, a redesign of the irrigation system is inevitable.

Consider this

No matter which route you choose, there are a few important safeguards to keep in mind.

First, ensure the team installing the system is knowledgeable, experienced and trustworthy. If wire splices aren't done correctly, you'll deal with shorts, grounds and error messages — and figuring out where they're coming from.

Second, remember to take your time. Consider both the positive and negative aspects of each option and if it makes sense for your course to shut down for weeks or months to accommodate a full replacement.

If a full replacement is preferred or required, be sure to consider your ability to upgrade the system in the future when making design decisions. This could help save both time and money in the long run as the course needs to evolve.

Finally, consider an irrigation consultant, who can design the system to minimize water usage and maximize efficiency. Some distributors may offer system design services, too, as another option for guidance.

Only you can decide the right course of action that will benefit your course now and in the future.

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RESEARCH FOR REAL SUPERINTENDENTS

Hosted by Mike Kenna, Ph.D. | mpkenna@gmail.com



Super Science

// A NEW PERSPECTIVE

HOW A NITROGEN SOURCE CAN REDUCE MICHRODOCHIUM PATCH

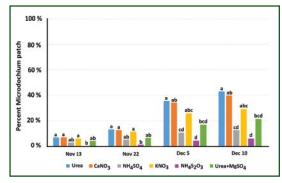
By Mike Kenna, Ph.D.

ue to continued concerns associated with pesticide use, Oregon State University (OSU) researchers continue to evaluate alternative methods to reduce Microdochium patch (*Microdochium nivale*). The disease damages annual bluegrass (*Poa annua* L.) during cool and humid conditions in the Pacific Northwest.

Their past research determined that frequent winter applications of sulfur-containing products reduce disease activity. However, they had not yet evaluated the effects of fall and winter nitrogen sources on Microdochium patch severity, particularly products

containing sulfur.

Researchers conducted this trial at the Lewis Brown Research Farm in Corvallis, Ore., on an annual bluegrass putting green in mid-September 2021. The experiment began to identify differences in Microdochium patch severity using different nitrogen sources and rates applied in the fall and winter.



Effects on nitrogen fertilizer products on Microdochium patch severity on annual bluegrass putting green in Corvallis, Ore. The column means for each date followed by the same letter are not significantly different.

The experimental design

in part by the USGA

Green Section.

was a 6-by-2 factorial design with four replications. Factors included nitrogen source [urea (46-0-0), calcium nitrate (15.5-0-0+19 percent Ca), ammonium sulfate (20-0-0+24 percent S), potassium nitrate (13-0-46), ammonium thiosulfate (12-0-0+26) percent SS] and nitrogen rate (1.0 lbs. per 1000 sq. ft. and 2.0 lbs per sq. ft.) applied monthly from Oct. 1, 2021, to March 30, 2022. They did not apply fungicides during this period and evaluated percent disease every two weeks in November and December.

Analysis of the Microdochium patch data strongly suggests that ammonium sulfate and ammonium thiosulfate suppress Microdochium patch compared to urea or calcium nitrate nitrogen sources (Figure 1).

When applying ammonium thiosulfate, the researchers cautioned that leaf tip burn occurred on a few rating dates. Their results also suggest

that adding magnesium sulfate to urea applications leads to less
Microdochium patch than applying only urea.

This project was funded

This project was funded

This encouraging experiment highlights the potential benefits of applying sulfates in the winter to suppress Microdochium patch.

NEWS UPDATES

QUALI-PRO BRINGS BACK NEMATICIDE

Quali-Pro will rerelease Nimitz Pro G, a nematicide that controls nematodes at all stages: eggs, larvae and adults.

According to the company, Nimitz Pro G increases root quality, turf quality, color, leaf density and sod tensile strength. A split root study from the University of Florida exhibited that Nimitz moved from the granule through the grass plant into a separate container of soil to deliver control of nematodes.

The granule nematicide will be available for purchase in a 40-pound pail. The company recommends application using a rotary spreader on sites including greens, tees and fairways.

I BELIEVE IT WAS THE MOST WIDESPREAD BREAKOUT OF THE DISEASE IN TREATED AREAS OVER THE 18 YEARS I HAVE RESEARCHED SNOW MOLD ..."

Paul Koch, Ph.D.

(see story on page 36)

These results could give turfgrass managers another tool for mitigating Microdochium patch damage. Future work could also incorporate fungicide alternatives with nitrogen sources that contain sulfur. **©**

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//SNOW MOLD BLOODBATH

Why snow mold hit golf courses so hard last winter

By Paul Koch, Ph.D.

now mold is just like real estate ... it's all about location, location, location. For many areas of the southern Midwest and Northeast, the lack of snow last winter resulted in almost no snow mold at all. However, for those in more northern locales and the Rocky Mountain West, it was one of the more damaging snow mold years in recent memory.

In many cases, severe damage occurred on courses that spent tens of thousands of dollars treating their golf courses with fungicide programs that had shown great success in university research, including our own.I believe it was the most widespread breakout of the disease in treated areas over the 18 vears I have researched snow mold at the University of Wisconsin-Madison.

In other words, for many, the winter of 2022-2023 was a proverbial snow mold bloodbath.

WHAT WENT WRONG?

Nearly all areas affected by snow mold experienced above-average snowfall last winter, but not all places affected by heavy snow had severe snow mold damage (Figure 1). The difference between the two situations lies in when much of the snow fell and what else fell during the winter.

Let's use our research trial at Marquette (Mich.) Golf Course as a case study. We tested more than 120 treatments that were a mixture of current products on the market and experimental mixtures that may or may not be on the market in a few years. Marquette GC always has a lot of snow mold and is a strong test of products. In most years, 50 to 75 percent of the treatments we test provide good to excellent snow mold control. This year, that number was more like 10 to 20 percent (Figure 2).

Why did the control drop last

winter? The likely explanation is twofold. First, a couple of rain events occurred in early December — approximately six weeks after our Oct. 27 application date. Based on our previous research, we know that winter rainfall dramatically reduces snow mold fungicide concentrations in the plant and leave them susceptible to snow mold infection.

However, winter rainfalls don't usually lead to a lot of snow mold breakthroughs because the initial fungicide application significantly knocks back the fungal population to the point where it rarely causes disease.

That leads to the second part of the problem at Marquette and many other northern locales this year, heavy spring snowfall. Marquette received 46 inches of snow in March, more than double its average amount of 22 inches.

This late-season snowfall led to optimal snow mold infection conditions months after much of the fungicide dissipated during the December rains. This combination of early winter rains and heavy spring snowfall created an almost impossible scenario for snow mold fungicides. Unfortunately, the result for many was significant snow mold damage.

A very similar scenario with early winter rains and heavy spring snowfall also occurred at our research site in McCall, Idaho. The result was the same. a lot of snow mold in treated areas.

THE EFFECTS OF CLIMATE **CHANGE?**

We don't want to overreact to one bad winter, but some trends related to climate change are starting to take shape.

Continued on page 38



Last year our research site at Giant's Ridge GC in Biwabik, Minn., had a lot of snow mold in non-treated areas but much less breakthrough on treated plots due to less December rain compared to our other sites.



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FIGURE 2

FIGURE 3

Jan

Feb

Mar

Aerial view of our research trial at Marquette GC in Marquette, Mich. Though there are some green rectangles, there is much more disease breakthrough than we typically experience.

Continued from page 36

First, fall conditions are warmer than previous years. This results in less late fall/early winter snow in many locations. It also prevents the plants from fully hardening once the snow arrives. This makes plants more susceptible to snow mold. Second, winter rainfall and snowmelt events are becoming more common, even in northern locales.

As we just discussed, this dissipates snow mold fungicide protection early in the season and makes disease breakthroughs more likely. Third, late winter/early spring snowfall is increasing (Figure 3). This adds to the pressure on snow mold products that were applied 4 to 6 months earlier, also increasing the likelihood of disease breakthroughs.

Many people, including myself, assumed that warmer winters caused by climate change would decrease the overall severity of snow mold across the north. The reality is much more complex and only increases the burden on superintendents to achieve acceptable snow mold control.

GREENS VS. FAIRWAYS

In one of my first years working at the University of Wisconsin, I recall a fungicide sales rep telling me confidently that, "snow mold doesn't occur on putting greens."

I know this isn't true since I've occasionally seen snow mold breakthroughs on greens. But one interesting note from our research this year did reveal the dramatic differences in snow mold pressure between greens and fairways.

One company asked to have snow mold products tested on putting greens last winter, so we worked with the local superintendents at Wausau Country Club in Schofield, Wis., Marquette GC and McCall GC to test a small subset of treatments on a practice or chipping green at each course.

The differences in snow mold severity between the fairway and putting green plots were massive. At Wausau, the snow

Climate researchers from the University of Wisconsin-Madison have shown that total seasonal snowfall for Madison and other Midwestern locations has largely stayed the same over the past 40 years. In the last 10 years less snow has fallen in late fall/early winter and more has fallen in late winter/early spring. Figure taken from: https://news.wisc.edu/new-weather-normals-show-how-madisons-climate-has-changed-over-40-years/

Apr

May

Oct

Nov

Dec

mold severity on fairways was 31.3 percent and on the chipping green it was 0.5 percent; in Marquette, disease on fairways was 72.5 percent and 26.3 percent on the chipping green; and at McCall, we saw 99 percent disease on fairways and 6.3 percent on greens (Figure 4).

In my opinion, the difference in snow mold pressure between greens and fairways was the result of the following three factors.

First, the lower height of cut on greens likely doesn't retain as much moisture in the turf canopy and is less suitable for fungal growth compared to the fairways. Second, the fairways are mostly native soil compared to a sand-based root zone on the greens, which holds more moisture and is usually more conducive to fungal growth. Third, putting greens are more

regularly treated with fungicides later into the fall compared to fairways and this could be suppressing early snow mold fungal growth.

The pressure differences can give us some clues about strategies like moisture management and fungicide application timing. These strategies can improve snow mold control on fairways.

WHAT DID WE LEARN?

Well, we were reminded that Mother Nature always wins. Sometimes we get a winter like last year, which makes it very difficult to achieve good snow mold control. However, there are some important principles we can focus on moving forward.

First, primer fungicide applications targeting snow mold three to four weeks before your regular snow mold application are a great tool to

Research Takeaways

- Early winter rains and heavy spring snow led to significant snow mold development across the northern Great Lakes and the Mountain West.
- Snow mold pressure was much lower on putting greens compared to fairways.
- Climate change may continue to alter the winter environment and make snow mold more difficult to control.

help suppress early snow mold growth. Second, a mixture of active ingredients from multiple fungicide classes is critical to success.

We're noticing across many of our research sites that pink snow mold seems to be increasing in severity at the expense of gray and speckled snow mold, so make sure that multiple active ingredients in your mix are strong against pink snow mold.

Lastly, learning from our putting

green observations it's critical to increase drainage and maximize late fall/early spring sunlight. This will increase plant health and make plants more resistant to fungal infections.

To keep learning I also recommend you keep up with our latest snow mold research. Our program posts the results of all of our snow mold research on the Turfgrass Diagnostic Lab research webpage (https://tdl.wisc.edu/results/).

This research includes evaluations to find the best products for all types of snow mold under any conditions, our research on the development of the snow mold timing model and other related projects. I encourage you to visit the site to better understand the most effective products and strategies for control. If you have questions, email me at plkoch@wisc.edu. **@**

Continued on page 40



Continued from page 39

Acknowledgements

Conducting all this valuable research takes a talented and committed group of people. First and foremost is Kurt Hockemeyer, who manages Wisconsin's Turfgrass Diagnostic Lab and directs our field research trials. This year we again partnered with Eric Watkins and Andy Hollman at the University of Minnesota on snow mold research at two sites.

Lastly, we're so thankful to the incredible superintendents who host our research at their courses: Aaron Hansen at Wausau CC in Wausau, Wis.; Jay Pritzl at Timber Ridge GC in Minocqua, Wis.; Craig Moore at Marquette (Mich.) CC; Matt McKinnon at The Legacy Courses at Cragun's Resort in Brainerd, Minn.; Jeff Simondet at Giant's Ridge GC in Biwabik, Minn.; Rick Mooney and Nick Korthals at

FIGURE 4



Snow mold pressure at McCall (Idaho) GC was much higher on the fairway **(L)** compared to the chipping green **(R)** just 500 yards away. The same difference was also observed at our research sites in Marquette, Mich., and Wausau, Wis.

Whitetail Club and Eric McCormick at McCall GC, both in McCall, Idaho. Thank

you to everyone who makes our snow mold research successful year after year.









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"From my limited perspective, the growth in golf's popularity since the pandemic is shown, to some degree, by the increasing number of turf samples with significant thatch and mat."

KARL DANNEBERGER, PH.D., Science Editor

A new summer agronomic problem

urfgrass growth occurs within optimal ranges of temperature, light, moisture and nutrition. Outside of that range, stress to the plant occurs. Golf course superintendents' management of turf during summer stress management is a continual and changing science.

This summer has been no different, with stress in the form of drought and excessive moisture combined with elevated temperatures dictating adjustments to management strategies. Summer stressors predispose turf to an assortment of diseases compounding an already difficult situation.

While diagnosing turf problems this year, I have noticed an uptick in excessive thatch and organic matter associated with an overall decline in turf. Often, this decline is most associated with golf course greens, although sometimes, it occurs on fairways.

THATCH VS. MAT

The definition of thatch is a tightly intermingled layer of dead and living stems, roots and crowns that occurs between the green vegetation and the soil surface. Mat is another term used in a similar way to thatch, but mat is in a more decomposed state.

Not included in the components of thatch is leaf tissue because leaf tissue, relatively speaking, rapidly decomposes. Thatch is slow to decay because it is comprised of a high proportion of lignin from thatch components that are resistant to decay.

Excessive thatch layers significantly contribute to a saturated upper root zone layer, which associates with oxygen reduction that contributes to a rapid loss of the functionality of roots. Additionally, the saturated zone can contribute to disease occurrence.

Control and management methods for thatch focus on either physically removing thatch or diluting the thatch layer with topdressing to enhance decomposition. The primary means of thatch management consist of coring or versions of verticutting in combination with topdressing.

THE ROOT PROBLEM

As important as thatch management is to turf health and playability, I think the increase in associated turfgrass problems comes alongside a drop in the frequency of coring over the last few years.

Golfers have never liked those

scheduled intensive core cultivation times during the spring and fall. The mechanical activity disrupts greens and fairways, making conditions for golf less than desirable.

There are also potential financial ramifications that come with coring, including temporary course closures; less than desired putting surfaces for an extended time; and the potential for reduced green fees because "the greens have been aerified."

Since the COVID-19 pandemic, pressure to reduce or eliminate coring and other thatch management practices has ramped up, due to increased golf rounds and memberships.

According to the National Golf Foundation, golf rounds in 2021 finished 19 percent higher than pre-CO-VID levels (2017-2019). In 2022 rounds remained high, dropping slightly from 2021 due to weather.

Besides the 19 percent increase in rounds, which is striking, in 2022, just under 26 million people played golf in the U.S. This is 8 percent of the population. When you think about it, that is an amazing statistic.

From my limited perspective, the growth in golf's popularity since the pandemic is shown, to some degree, by the increasing number of turf samples with significant thatch and mat. I can't help but think this is due to increasing pressure to reduce coring and thatch management practices.

For golf courses that have reduced or eliminated coring over the last few years, an increasing overall decline in turf quality is usually present.

To remedy this, we need to communicate, with new and established golfers, about the importance of practices like coring, verticutting and topdressing to the overall health and playability of golf courses. **©**

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

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How to stay on top of ABW outbreaks

An Ohio superintendent shares why it's important to keep your cool when dealing with ABW

By Rob DiFranco

eith Kresina, director of grounds at The Golf Club in New Albany, Ohio, knows exactly when his annual bluegrass weevil (ABW) problem started. In 2019, Kresina brought in sod to patch up his fairways after a wet summer left some low spots

that didn't heal in time for the spring; the rest is history.

"To make a long story short, Keith did a great job of inoculating his golf course with ABW because I



with ABW because I **Keith Kresina** put a little bit of sod here and a little bit

of sod there," he jokes. Years later, Kresina is a seasoned pro at controlling the pest and will share his knowledge with anyone who will listen.

"I like to remind people that it did come in on bentgrass sod," he says. "Everyone thinks, 'Well, I've got bentgrass, so I don't have to worry about ABW.' People want to act a little maverick about it and think they don't need to scout and do their due diligence."

DON'T PANIC

Kresina's No. 1 tip to superintendents who face ABW damage is to stay calm.

"I'll never forget the panic I felt when we first saw the damage," he says. "My heart sank. It was sickening."

His first move — after collecting his thoughts — was to use the resources at his disposal. Kresina made several calls and eventually connected with Ben McGraw, Ph.D., at Penn State University.

"He helped calm me down," he says. "As superintendents, what we want to do when we see the adults crawling around is go out, spray 'em and be done with 'em. But that's far from what you should do with this insect because it's good at getting around with the multiple generations it will go through in a season."

With McGraw's help, Kresina developed a program for control.

"Having that system in place has simplified things for me," he says. "We do it on five fairways where we had



Annual bluegrass weevil struck The Golf Club in New Albany, Ohio, after a sod installtion. The pest then quickly spread from sod squares to the rest of the course.

problems and three more alternating sites just off the fairway next to irrigation heads. It's important to make sure that you're applying these products on that first generation at the appropriate time."

TRUST THE PROCESS

This year, Kresina's ABW control program began in April and concluded in July. He says that isn't a constant, and it could change from year to year.

"If I made the first application on April 15 last year, that doesn't necessarily mean I'm making it on that same day this year," he says. "it depends on what the season is like, not necessarily what the calendar says."

Kresina begins with applications of Syngenta's Scimitar GC (lambda-cyhalothrin) when adult migration is at its peak. This year at his course — just northeast of Columbus, Ohio — that was on April 19.

He followed up his April application with Quali-Pro's Suprado (novaluron) on May 4. On July 5, he concluded the program with an application of Syngenta's Ference (cyantraniliprole).

STAY VIGILANT

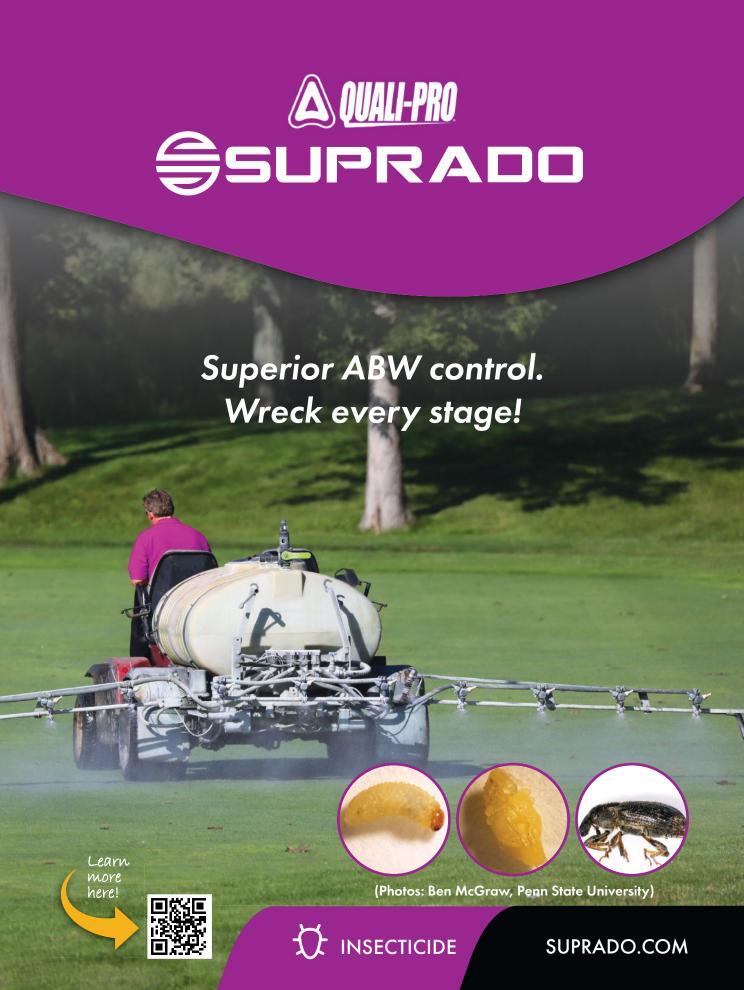
Kresina also stresses it's crucial to stay alert for signs of damage all across your course. He says adults are adept at hitching rides on equipment and making a home wherever they can.

"I'm not taking any chances," he adds.
"Once this insect was on our property, we saw it move rapidly. It's being transported around in grass clippings or on other equipment. There are a lot of factors that can lead to the movement of ABW once you've got it on your course."

The insect has worked its way around quite a bit at The Golf Club. He gives an example of damage found on his 16th tee box, an area nowhere near the sod project that brought the pest to his course.

"Luckily, those are predominantly (bentgrass), but they have some *Poa* mixed in with them," he says. "The adults went in and took out every *Poa* plant to the point where we had to fertilize and get the bentgrass to cover up those spots." (G

PHOTOS BY: CHBIS ALLENIDER





"Making every drop count became a mantra for golf courses seeking to reduce water use. Water regulators and the golf industry worked together on mapping the direction for regulating water use."

MIKE KENNA, PH.D., Research Editor

A timeline of the USGA's water history

ater management on golf courses has been a topic of research and discussion for several decades. The challenges golf facilities face today are not entirely new, sharing similarities with those experienced in the past. The USGA Green Section timeline provides a historical perspective on the evolution of water use in golf since 1931.

In the 1930s, the USGA was already exploring the issue of watering turf. Articles recommended the installation and use of fairway sprinklers. As golf courses started to incorporate more turf, the delicate question of water management arose.

Moving into the 1950s, the importance of water conservation began to gain attention. Golf courses recognized the need to save water and reduce maintenance under government control.

The 1960s witnessed advancements in irrigation technology. Automatic irrigation systems emerged, shifting the focus towards conservation and efficient water use. Golf courses started to explore the concept of water management and the potential benefits of irrigation systems.

ENVIRONMENTAL CHALLENGES

Water conservation continued to be a priority in the 1970s. The drought in Northern California emphasized the

need for efficient water use on golf courses. East of the Mississippi River, Oakland Hills Country Club in Bloomfield Hills, Mich., implemented water conservation measures, demonstrating the industry's commitment to responsible water management.

The 1980s brought a deeper understanding of water conservation and its long-term implications. Discussions revolved around coping with salty water, the efficient use of this natural resource and the relationship between water use and energy consumption.

The 1990s saw an increased focus on the environmental aspects of water management. Golf courses like Ozaukee Country Club in Mequon, Wis., used Audubon certifications as stepping stones to improve the environment.

Water management remained a critical issue in the 2000s. Making every drop count became a mantra for golf courses. Water regulators and the golf industry worked together on mapping the direction for regulating water use.

SIGNIFICANT PROGRESS

The 2010s marked significant progress in water management strategies. The USGA continued to play a pivotal role by funding research to reduce water use. Developing water budgets became an essential aspect of golf course management. The USGA Water Resource Center provides a digital information collection to document golf's water use. Water summits successfully brought together industry professionals to discuss and address water-related challenges.

Recently, the focus has shifted to getting ahead of water regulations. Courses are encouraged to engage in water discussions and implement conservation strategies. The goal is to show the industry's commitment to responsible water use and conservation.

The timeline highlights the ongoing efforts to address water management on golf courses. Strategies to reduce water inputs and promote sustainability include updating irrigation systems, optimizing flow and pressure and using wetting agents and growth regulators.

Eliminating overseeding, condensing the overseeding period and implementing in-ground soil moisture sensors can contribute to water savings. Turf reduction and conversion from cool- to warmseason grasses are advanced techniques offering substantial water savings.

The industry recognizes the desire to change the narrative around golfer expectations regarding turf quality and playing conditions. By managing these expectations and promoting a culture of water conservation, golf courses can further contribute to water sustainability efforts.

Courses engage with water authorities proactively and implement conservation strategies. This highlights their commitment to water conservation and contributes to a more sustainable future for the sport. **©**

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

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AN EXPOSTYLE, BUT SMALLER

Pinehurst Resort's Bob Farren, CGCS, on making connections and relationships at the Golfdom Summit

BY BRIAN LOVE

ince its inception in 2011, the Golfdom Summit has been a place of connection and introduction. At the annual event, golf industry members meet, learn from each other and gain insight. It is a celebration of all that the world of golf can accomplish.

One of the recurring figures of the Golfdom Summit is Bob Farren, CGCS. He appreciates the structure and ability to connect with

many different people. He jokes that the energy of the event feels like speed dating, based on the rapidfire, one-on-one meetings superintendents have with the partners.

Farren, director of grounds at Pinehurst (N.C.) Resort, has served in that role since 2001. Under his leadership, Pinehurst has hosted 14 USGA Championships including U.S. Opens in 1995, 2005 and 2014.

Course No. 2 will take

center stage again when it hosts the U.S. Open in 2024.

Attending the Summit

Farren feels that the importance of attending the Summit comes from its focus on learning more about the industry and the people who work in it.

"When we get there, it's clear that we are there for a reason," Farren says. "The focus of the time spent there is on giving and receiving value. It is about showing

respect for others' work. All of us can see the importance of the invitation."

The ability to make connections at the threeday event is a highlight of the Golfdom Summit, he adds. During this time, superintendents, sales representatives and industry leaders all come together to network and form partnerships.

"When you are meeting people, time goes by fast," Farren says. "It is an opportunity to see these upcoming products and talk to sales representatives. You speak to these people for several minutes before meeting different people. You go to the next site or see the outdoor products demonstrated. It has the style of an expo, but it is a smaller and more intimate group."

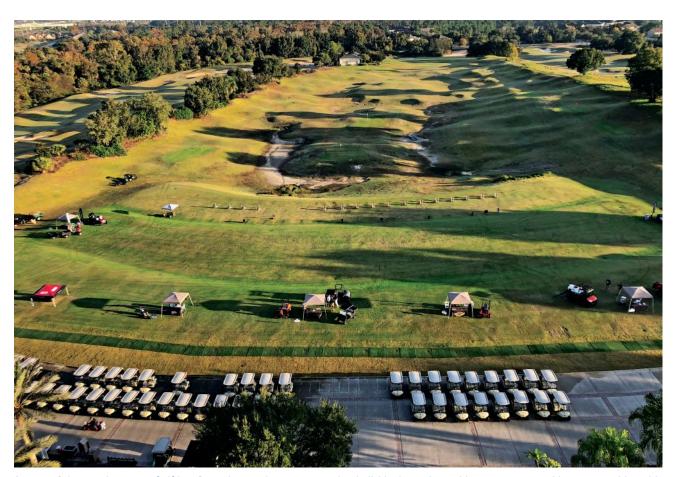
Building connections

Farren says one of the most meaningful relationships he established through the Golfdom Summit is with equipment manufacturer Turfco. The turf maintenance company based in Minneapolis, Minn. manufactures equipment for the golf, sports and lawn care industries. A third-generation



(Left to right) Brian Godwin, Turfco; Bob Farren, CGCS; Scott Kinkead, Turfco; Matt Shaffer and Shawn Emerson pause from the Turfco demonstration for a photo at the 2022 Golfdom Summit.

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As part of the two-day event, *Golfdom* Summit attendees are treated to individual meetings with partners, networking opportunities with other superintendents and, of course, a golf tournament. Pictured above is the driving range at Reunion Resort. Attendees walk from one station to the next to get demonstrations from the various partners.

family-owned company, its equipment includes sprayers, spreaders, aerators, edgers and sod cutters.

Pinehurst, Farren says, purchased several Turfco units following their meeting at the *Golfdom* Summit.

"Because of the Summit, we were able to develop a relationship between the Resort and (Turfco)," he says. "They became available to us through our local John Deere distributor. It has been a really good pairing. We've

done a lot of business with them in the last few years since we met."

Looking forward

Currently, Farren is focusing on the construction of Golf House Pinehurst. The project, which began in the summer of 2022, will include an equipment-testing facility and the visitor-friendly USGA Experience — a 4,000-square-foot exhibit dedicated to the USGA's history. The project

is expected to finish construction by early next year, just in time for the resort's next U.S. Open.

Even with all this work underway, Farren still looks forward to yet another Summit in December.

"I think the Golfdom Summit is extremely beneficial for superintendents because it is an opportunity to connect," Farren says. "We work very well together. We get to share ideas and ways for us

to be successful. The Summit allows us to establish those relationships. I certainly appreciate attending the number of times I have."

(Editor's note: Farren is invited back regularly, along with Matt Shaffer and Shawn Emerson, to participate in the annual Legends panel discussion.)

The 2023 *Golfdom* Summit takes place from Dec. 6 to 8 at Reunion Resort in Orlando. To submit an application to attend, visit **Golfdom.com**. ②

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1 Nimitz Pro G

Nimitz Pro G from **QUALI-PRO** is a novel nematicide containing the active ingredient fluensulfone. The product offers reductions in lance, sting, root-knot and lesion nematodes as well as gains in root length and weight, which leads to visibly healthier turf. The product is easy to apply with less stringent regulatory restrictions and no specialized equipment needed.

ControlSolutionsInc.com

2 Grasshopper BKDST-1010N

The Grasshopper safety glasses from **BRASS KNUCKLE** can quickly transform into standard protective eyewear with a removable dust gasket. The glasses are outfitted with an anti-fog coating that is bonded directly to the lens. In addition to the anti-fog performance, these glasses also offer abrasion, chemical and UV resistance that meet industry test requirements.

BrassKnuckleProtection.com

3 Greensmaster e1026

The Greensmaster e1026 walking greensmower from **TORO** offers a mowing width of 26 inches and reduced noise levels. It is void of any engine exhaust emissions. The new design of the company's greensmower family synchronizes the operator and the machine to eliminate operator error and negative influence on the turf. Operators can adjust the handle in seconds to their unique size and preferences, which increases comfort and reduces fatigue, ensuring a consistent cut.

Toro.com





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4 | Featherweight UltraMax

The Featherweight UltraMax hose from UNDERHILL is a 1-inch hose with NPSH threads for use on golf courses. The hose comes with an outer fabric that will not scuff the turf on greens while also being difficult to kink. This hose boasts a working pressure rating of 300 psi and a burst pressure rating of 1200 psi while weighing about a third of what normal professional hoses weigh in that category, according to the company. Underhill.US

5 AT450 articulating tractor

The AT450 from **BOBCAT** powers a variety of front-mounted, belt-driven attachments and features four-wheel drive. The tractor can navigate slopes as steep as 30 degrees, with attachments following the ground contour. It features a 32 hp, liquid-cooled gasoline engine that produces power for front PTO attachments. The tractor includes a lineup of nine available attachments including AirFX mower decks, a Flex Deck mower, a flail cutter, a V-blade and a turbine blower.

Bobcat.com

6 FDS turf dethatcher

The FDS turf dethatcher from **WOODBAY TURF TECHNOLOGIES** is engineered to handle a variety of surfaces, including the contours and undulations of a golf course. The latest series of dethatchers offers an ATV transportation option and a height/downward pressure adjustment feature of the tines, which allows the operator to go from evenly spreading topdressing to dethatching turf. The dethatcher has spring-loaded tines to help create quality fairway turf conditions and relieve compaction. **WoodbayTurfTech.com**

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Steve Leach

DIRECTOR OF AGRONOMY // Gateway National Golf Links and Stonewolf GC, Madison, III.

Steve, drinks are on me. What are you having?

I'll have a City Wide APA. It's from 4 Hands Brewing Co. in downtown St. Louis.



How far are you from downtown?

From Gateway, you can see the Arch and the downtown city skyline. We're about two-and-a-half miles.

Tell me about your two courses.

I've been at Gateway for 13 years now. It's a links-style course designed by Keith Foster. Right now, we get 40,000 rounds every year. It's the only public bentgrass course in the St. Louis area. It's my third season at Stonewolf. That's a Nicklaus Design located in a housing community. It's a beautiful course and layout. We get between 36 to 38,000 rounds annually.

And you have a family, right? Yes,

sir. My wife, Elizabeth, is a kindergarten teacher. Our two boys are Samuel, 17, and Maxwell, 14. Sam just finished high school and is going to community college this fall. He's interested in studying film. Meanwhile, Maxwell is a freshman in high school.

What does the family do for fun? We

love to go camping. Southern Missouri has some of the cleanest and freshest creeks in the country.

We set up a tent and either float or just sit next to it and have some drinks.

Which do you think is more important — plant health or playability? Playability is No. 1. We want golfers to have the

best experience possible. But health goes along with that because you must have a healthy enough plant to support the playability. In the long run, if the greens are rolling at an eight every day, the golfers are not going to be happy.

shop? My Pogo moisture meter. That is my go-to tool. It helps to keep everybody honest about checking the greens. I have access to the readings on both courses. Sometimes the guys get annoyed when

What's your favorite tool in the

access to the readings on both courses. Sometimes the guys get annoyed when I say, 'Don't forget to upload your readings!' At the end of the day, it's all on me. I like to keep track of it.

You're a big sports fan — what is your all-time favorite sports moment? When the Blues won the Stanley Cup. We just happened to have an outing scheduled that next day for the Blues alumni. Because of that, the Stanley Cup showed up at our golf course. Brett Hull and Kelly Chase ... there were about 45 of them taking photos with it around the practice green. When they were done, our staff got to go in, one by one, for a photo. I've got a great photo of my wife and me kissing the Cup.

As interviewed by Seth Jones, July 6, 2023.

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PHOTO OF STEVE BY: ELIZABETHLEACH; GETTY IMAGES: E+ / EVEMILLA (TENT), ISTOCK-GETTY IMAGES PLUS / F11PHOTO (ST. LOUIS SKYLINE)

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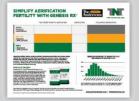
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