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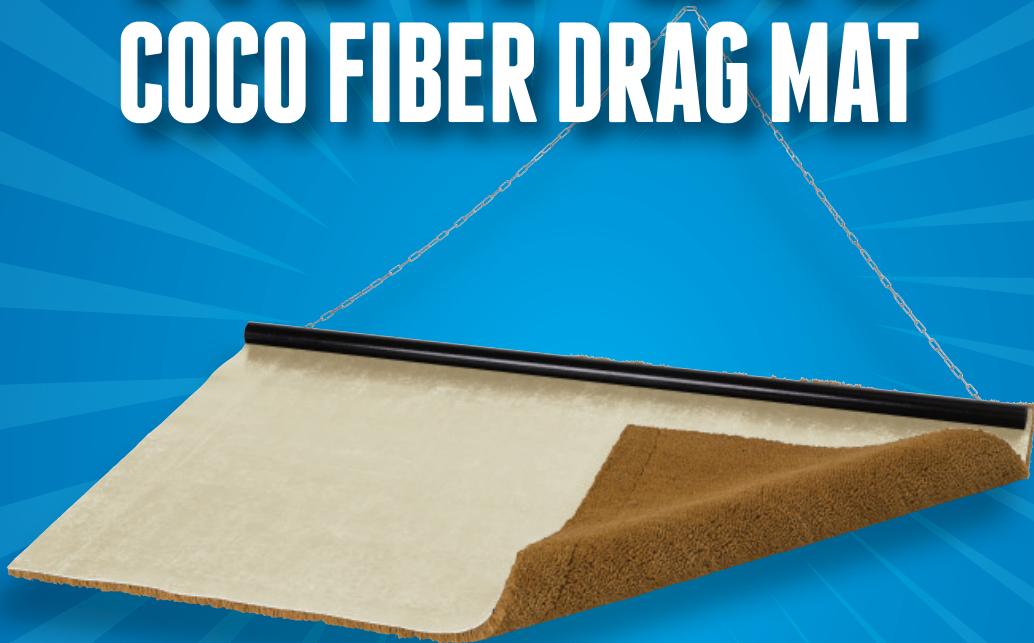
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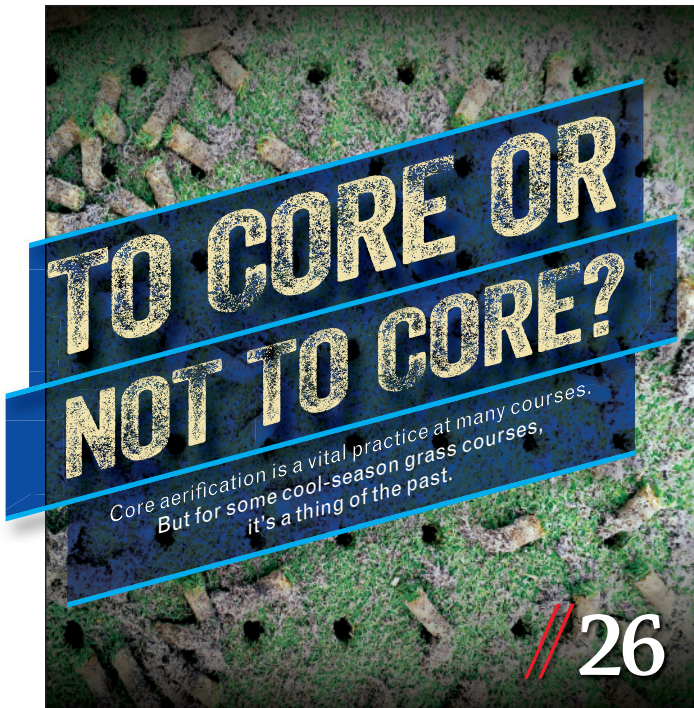
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“You can bet the exhibitor with an up-close view of two concrete walls is going to be mad and rant at me when I ask how the show is going. Surprise! That wasn’t the case.”

**SETH JONES**, *Editor-in-Chief*

# I’ll remember the Alamo show

I will remember a few things about the 2015 GIS in San Antonio outside of the great food and lousy weather. ¶ I ran into “Turf’s Most Interesting Man,” Bob Farren, CGCS at Pinehurst Resort, at the John Deere party. He told me that his first GCSAA Conference and Show was the last time GCSAA was there, in 1978. ¶ *T.M.I.M.* didn’t remember much detail about that ’78 show. But one thing we both agreed on: it was good for the GIS to be back in San Antonio.

An example of why the GIS is a one-of-a-kind, must-attend event: I hadn’t even sat down on my flight from Kansas City to Dallas yet and I was already making new business connections. Sure, it helps to have a monthly column and a recognizable face, but my Southwest flight got me a connection as well as an invitation to an event I’d thought about hitting for a few years now.

Or, how about this one: after moderating a panel discussion, two gents from the great state of South Dakota approached me. They had read my January column, where I

mentioned having never visited a few northern states, and cordially invited me to the fall South Dakota GCSA chapter meeting. (And guys, if you’re still willing to take a rookie quail hunting, I’m in.)

Want to get even more geographically diverse? Neil Cleverly, superintendent of the Rio Olympics golf course, did an unexpected one-on-one interview at our booth.

The show wasn’t just a success for me. Everyone I spoke with, without a single exception, raved about the 2015 GIS.

I had one booth visit located at what turned out to

be the furthest reaches of the trade show (bad planning on my part — I should have assigned that meeting to Grant “Buddy” Gannon, the new guy). You can bet the exhibitor with an up-close view of two concrete walls is going to be mad and rant at me when I ask how the show is going.

Surprise! That wasn’t the case. I would consider this “parts unknown” of the Henry B. Gonzalez Convention Center, and the guy stuck there was still smiling, telling me this was his best show in eight years. That, my friends, is saying something.

The weather was awful. I

didn’t see the sun the entire time I was in San Antonio. It was cold and wet and most of the time I wasn’t appropriately dressed.

But that’s OK — I was there for meetings, not sight-seeing boat rides on the River Walk.

The GIS returns to San Antonio in 2018, and I’m excited to go back. I think it’s a great convention city, and a great city in general.

If there is a detriment to San Antonio, it’s the labyrinthine convention center and the questionable weather at that time of the year.

Good news: The convention center is set to undergo a \$325 million renovation, so the ’18 GIS will be in a new, modern convention center. No more of that feeling that you’re walking through the Pac-Man video game maze, and can exit out one door to find yourself in a totally different and unexpected part of the show.

The weather? I was there for the Sports Turf Managers Association show in January 2014, and an ice storm hit the city, bringing out the sheriffs and their road flares to close down I-37. So I’m 0-for-2 when it comes to San Antonio and weather. But a little weather in a convention location won’t dissuade me.

The ’15 GIS was a smashing success, one to remember. I’ll see you back there in ’18, but in the meantime, make plans to see us in San Diego (’16) and Orlando (’17).

Email Jones at: [sjones@northcoastmedia.net](mailto:sjones@northcoastmedia.net).

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# Starter

NEWS, NOTES AND QUOTES



## // LESS WATER A DAY



Tom O'Toole Jr. (right) and Mike Davis speak at the USGA's annual meeting. The pair spoke on the association's 2015 initiatives.

## USGA'S O'TOOLE AND DAVIS TALK 2015

ASSOCIATION FOCUS AND RESOURCES GEAR TOWARD SUSTAINABILITY; SOME SUPERINTENDENTS QUESTION MODEL

BY GRANT B. GANNON // Associate Editor

→ Environmental sustainability “is probably the No. 1 challenge (golf) has,” according to United States Golf Association President Tom O'Toole Jr.

O'Toole and USGA Executive Director Mike Davis spoke about the association's initiatives with reporters recently after the association's annual meeting. Resource management, sustainability and participation were among the topics O'Toole and Davis addressed.

“I think our industry gets caught up in looking at data about participation,” said O'Toole. “We're looking at that, but we're trying to get what makes the game

more sustainable. That's really where we're going to place our resources.”

The focus of the USGA's leaders is on course maintenance and long-term sustainability, not participation. Water consumption is the specific problem that Davis has his eye on long-term.

“We're already seeing water rates in terms of the cost of it, the availability of it, the quality of it, it's changing substantially,” said Davis. “We really believe in terms of resource management that less water on a golf course is a very good thing.”

Jason Hooper, superintendent at

*Continued on page 9*

## // NEW SHERIFF IN TOWN

### AQUA-AID HIRES WESTERN US TERRITORY MANAGER

There's a new Western US territory manager in the town of Aqua-Aid, Inc., and his name is Brian Daniel, CGCS.

Daniel, a Texas Tech Red Raider, brings an extensive background in the turf management industry to the position. He worked for 25 years as a superintendent, and was actively involved with both the West Texas and Lone Star chapters of the GCSAA. For the last five years he served as a territory manager and manufacturer representative. Daniel will be based out of Lubbock, Texas, where he helped start Texas Tech's turfgrass program.

“Brian brings a wealth of real world experience to our team. We believe that with his background and knowledge he will offer a high level of service and performance to our distributors and end users to continue to grow our product lines,” said Sam Green, director of business development for Aqua-Aid.

## // ROYAL MEMBERS

### ROYAL AND ANCIENT ANNOUNCES FIRST FEMALE MEMBERS

After more than 260 years of existence, the Royal and Ancient Club Golf Club has announced their first seven female honorary members, among them are World Golf Hall of Famers Annika Sorenstam and Louise Suggs.

“This is an historic day for the club and we could not be more proud to welcome women who have distinguished themselves in golf over many years,” said George Macgregor, captain of the R&A. “They... will become ambassadors for the club as they have been for the sport of golf throughout their careers.”

Since the vote to end male-only exclusivity in September, multiple women have become members of the club, with more to follow in the coming months, according to a release from the club.

Joining Sorenstam and Suggs as honorary members are Princess Anne, Laura Davies, Belle Robertson, Renee Powell and Lally Segard.

// FROM THE WEB

## Mr. Casper and me

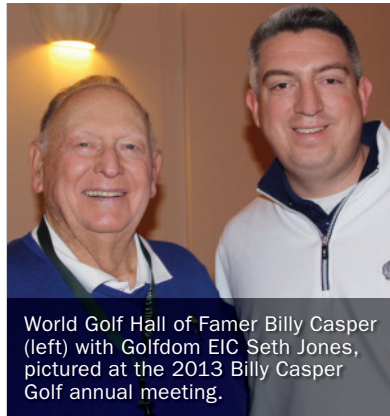
*Editor's note: This story was first posted to our website last month.*

➔ I had the pleasure of meeting Billy Casper for lunch in 2013. He was a true gentleman.

I was working on my August 2013 cover story, "Behind the curtain," where I took a look at what Billy Casper Golf is trying to accomplish as a management company.

I did get a putting tip from Mr. Casper, one that I'm still not sharing, because consistent putting is about the only thing I ever contribute to a four-man scramble team. But I will retell this part of the story: When I asked for a putting tip, it was one of those awkward moments when someone else said something at the exact same moment. And that guy was prepared to keep going with his part of the conversation.

But Mr. Casper stopped and said, "Hold on, hold on... I think this young



World Golf Hall of Famer Billy Casper (left) with Golfdom EIC Seth Jones, pictured at the 2013 Billy Casper Golf annual meeting.

man was just asking for a putting tip!" And Billy got the conversation back on the topic he was more interested in: a couple philosophies he had on the art of putting.

So here at *Golfdom*, we tip our cap to Mr. Casper, who passed away at the age of 83. Thanks again for your time and for that putting tip... I promise to put it to good use.

*Continued from page 8*

Quilchena G&CC in Richmond, British Columbia, Canada is on board with Davis and the USGA's plan.

"I'm in big favor of the direction they are going," said Hooper. "I think it's just being cautious what we are setting as examples and making sure all the golfing population knows that everything is very site-specific."

When Davis looked back on the 2014 U.S. Open at Pinehurst No. 2, he said one of the successes of the tournament was the quality of the course even after reducing its water consumption from 55 million gallons annually to 15 million gallons.

But Tony Nysse, superintendent at Pine Tree GC in Boynton Beach, Fla., said to replicate what Pinehurst did was not possible for him because members want to see a green course.

He added that he felt the USGA had to praise Pinehurst and critiqued the association's inconsistency.

"The USGA hung their hat on what happened at Pinehurst but their other tournaments were not like death on TV," said Nysse. "During last year's Amateurs at Atlanta Athletic Club the course did not look like that. If they are going to praise it they need to do it for all of their tournaments, not just the biggest one with the highest TV ratings."

Davis noted the feedback from non-American players about Pinehurst was "almost a unanimous we loved it," but the American response was split. The American vision that the best golf courses are difficult to play and have lush, green turf is going to have to change for the USGA's hopes to come true.

// WELCOME ABOARD

### GOLFDOM ENHANCES SALES TEAM

North Coast Media named Jake Goodman account manager for *Golfdom* and *Landscape Management* magazines.

Goodman graduated from Marshall University with a Bachelor of Business Administration in Marketing from the Lewis College of Business. He previously held a variety of positions in the sports and entertainment industry, mainly in business development.

"Jake is a perfect fit for our team and our industry," said Pat Roberts, publisher of *Golfdom*, associate publisher of *Landscape Management* and VP of sales for North Coast Media. "*Golfdom* and *Landscape Management* brands have many exciting initiatives planned for 2015."



Jake Goodman

// MULLIGAN

### A TWO-STROKE PENALTY

In the February issue of *Golfdom* we misquoted Scott Kinhead, executive vice president of Turfco Manufacturing in his interview with Clark Throssell. An example he provided for sand application read 40 cubic yards of sand per 1,000 sq. ft. but should have been 40 cubic feet of sand per 1,000 sq. ft. We apologize to Scott and he should expect a drink from us at the 2015 Summit.

## THEY SAID IT

### BRIAN DEWEESE

SUPERINTENDENT, HANGING ROCK GOLF CLUB, SALEM, VA.

To *The Roanoke Times*, on what he thought of the 8 to 9 inches of snow left by a recent snowstorm.

**"I work at a golf course, so I don't like the snow. No one can play. But my wife loves it. She's tickled pink."**

# Golfdom Gallery



**1**  
WE CAME.  
WE SAW.  
WE TOOK PICTURES.

**1 YEE-HAW!** This apparently wasn't Jacobsen's first rodeo, but it was ours. Attendees at Jacobsen's Golf Industry Show VIP party were treated to plenty to eat, drink and an honest-to-goodness rodeo.

**2 Home state advantage** We hit a lot of chapter parties at the GIS, including the Lone Star party, held at Pat O'Brien's. We drank a few hurricanes, were invited to some great golf courses and took this pic of Rodney Crow, CGCS at the Battleground at Deer Park, Deer Park, Texas; Joe Todaro, department chair at Texas State Technical College and superintendent at James Connally GC, Waco, Texas; and Brian Cloud, GC-SAA's field staff representative for Texas.



**2**



**3**

**3 Mow with your eyes closed** We met "Jazz," a Patriot PAWS service dog, at Jacobsen's Certified Pre-Owned booth. Jazz and her fellow Patriot PAWS dogs are trained to help disabled American veterans at no cost. She looks pretty comfy on that mower, eh?

**4 Don't mess with this Cowboy** No. 3 ranked MMA fighter Donald "Cowboy" Cerrone was at the Cushman booth, signing autographs and telling people how tough their new Hauler Pro is.



**4**



**5**

**5 Retirement party** After 28 years of working at GCSAA, Penny Mitchell, certification manager (center, with Lisa Wick, manager of e-learning, GCSAA and Golfdom EIC Seth Jones) recently retired. CGCSes around the world wish you their best, Penny!

**6 Drawing a crowd** The 2015 Herb Graffis Businessperson of the Year award was presented to Bill Larson, CGCS, at the Golfdom booth. This shot, taken from over Bill's shoulder, shows what we already knew: Bill has a lot of friends in the business.



**6**

PHOTOS BY: MARTY WHITFORD (1); SETH JONES (2, 3, 6, 7); JO UHLES (4); LAURA RUSSELL (5)





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The AutoPedal™ system features ergonomic twin pedals that control both forward and reverse direction, as well as engine RPMs, eliminating the need for a separate throttle. Similar to a car, the further the pedal is pressed, the engine speed and travel speed of the unit increases.



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The front internal wet disc brakes on our new A Models have no brake linkages or need adjustments, reducing the need for routine maintenance. And throughout the machines there are enhanced corrosion resistance features.



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Getting on and off these machines is now a breeze thanks to the conveniently placed fore and aft steps (4-wheel units only). And nothing could be more comfortable than getting in the seat. There's more leg room, a wider front platform, tilt steering, and a deluxe seat.



### Efficient maintenance = increased uptime

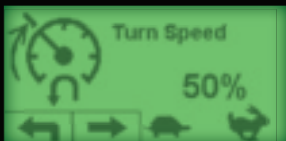
With our Quick Adjust cutting units, adjustments take mere minutes. And when you consider all the diagnostic features of our TechControl display, your technician can better manage service timelines and keep your fleet up and running.

# The power to control your course is now in your hands.

The passcode protected TechControl display lets you precisely set mow, turn, and transport speeds. You also have the ability to instantly see any operational alerts and set service timers. Simply set the mow speed precisely for your conditions, have the mower slow down during turns while cross cutting to protect against turf scuffing and preset the top transport speed. Plus, the TechControl display is an on-board visual diagnostic tool allowing quick and easy machine diagnostics, maximizing up time.



With the Mow Speed screen, you can set the mowing speed simply and quickly. Unlike a speed limiting system using a bolt, once the speed is locked in, it stays locked in. Similar to the Mow Speed screen, the Transport Speed is set electronically. You determine the speed at which your operators mow and transport just by pressing a button.



This is something superintendents will really love: the Turn Speed screen lets you slow down a mower to a percentage of the mowing speed as the cutting units are lifted after a pass, greatly reducing scuffing. The mower then resumes its normal speed after the reels are lowered back down for the next pass.

To see the TechControl simulator, go to [JohnDeere.com/Golf](http://JohnDeere.com/Golf)



The Mow Engine speed screen allows the superintendent to reduce the throttle settings for when the PTO is engaged. With our E-Cut Hybrid mowers, you can bring the engine speed down to 2300 RPMs, significantly reducing engine noise while also increasing fuel economy.



The TechControl display is unparalleled in its ability to give timely feedback to the operator and service technician. A message appears in the display screen alerting the operator and the status screens help the technician quickly and accurately diagnose the issue.



The LoadMatch™ screen lets you manage the conditions in which you are mowing, as well as the terrain. Thanks to Load Match, if the reels come under heavy load while mowing, the machine's traction speed will slow allowing reels to turn and maintain cut quality.



# The new A Models. More control. Better results.

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7200A

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“Even though golf is a livelihood to us, at the end of the day we’re working to provide a recreational activity/sport at a beautiful place that’s fun and at which people are willing to pay money to enjoy.”

**MARK WOODWARD**, *Contributing Editor*

## It could be worse

Considering the stresses and economic problems we all face, it’s sometimes easy to forget how cool it is to be in the golf business. We have a tendency to get caught up in the negative aspects of what we do and what happens to us because of the pressure we feel to raise the bar in terms of course conditioning and overall golf facility management.

And at times Mother Nature doesn’t help us, and indeed wreaks havoc on our golf course. This is beyond our control. But it’s frustrating, because day in and day out we take pride in being in control of the cultural practices we implement, and we implement these practices with precision and consistency to produce the best possible product our individual budgets will allow. Then out of nowhere, and sometimes for what appears to be no reason, Mother Nature throws something at us that wipes out all our hard work.

And it always seems to happen at the most inopportune time, like right before the club championship.

Other times, it’s an unreasonable member who seems impossible to please no matter how hard we try. So it’s easy to get in a rut and dwell on

the tough times and negative aspects of the industry.

I understand that we all have times when we think the world is against us, and no matter what we do it seems like someone is complaining.

But if you think about it — and we’ve all seen this — there is example after example that superintendents have the education, experience and abilities to recover from almost anything that is thrown at us. Even the announcers for televised golf are amazed at how fast we can get a golf course in playable condition after a major storm or natural disaster.

This is what makes our jobs so interesting to those around us. When a neighbor, an acquaintance at a party or even a total stranger that I strike up a conversation with asks me what I do for a living,

the details of my job often dominate the direction of the conversation.

You know what I’m talking about. People are instantly intrigued and somewhat envious of what we get to do in our daily work lives. Not just about how we do what we do (and how they can accomplish it on their lawns) but also on the outside benefits of our jobs. They want to know if I’ve met a well-known golfer or a celebrity. They always ask if I play golf every day and inquire about my favorite golf course.

Generally the conversation stays focused on what I do. Try as I may to shift the emphasis of the conversation to their jobs, it always seems to get back to the golf industry and what I do. It’s actually quite gratifying to know that our jobs are so interesting to others, but sometimes it’s em-

barrassing because their jobs are so boring. Accountants and information technology specialists just don’t seem to have that many stories to tell. If that accountant or IT specialist happens to be an avid golfer, you might find yourself the one doing most of the talking for a while.

And when you think about it, we do get to hang out at some pretty cool places (golf courses), meet some incredible people, enjoy the outdoors and do things of which others only dream. Even though golf is a livelihood to us, at the end of the day we’re working to provide a recreational activity/sport at a beautiful place that’s fun and at which people are willing to pay money to enjoy. Not too many other professions can make that statement.

There’s no doubt that our industry faces some challenges. And I’m sure all of us have worked a few too many hours in a work week. And I bet we’ve all been frustrated with Mother Nature, the general golfing public and even our own crew.

But if we continue to do our part as individuals to grow the game, make the industry stronger, be good environmental stewards and keep the golf industry sustainable, we can continue to have some of the coolest jobs in the world.

**Mark Woodward** is a senior vice president for OB Sports, principal of Casa Verde Golf, president of Mark Woodward and Associates and a contributing editor for *Golfdom*. He can be reached at [mwoodward@obsports.com](mailto:mwoodward@obsports.com).



“After you spent big bucks to rebuild greens to USGA specifications and have used proper materials and construction mandates, why would you... risk pest and pathogen contamination?”

**JOEL JACKSON**, *Senior Contributing Editor*

# Punching holes in cultural practices

**W**elcome to the wonderful world of golf course cultural practices. I recently attended a regional educational day hosted by the West Coast, Suncoast and Ridge chapters of the Florida GCSA presented by Bryan Unruh, Ph.D., from the University of Florida. I wanted to talk to a few superintendents about their aerification programs to address the cultural practices theme of this issue.

It's been my observation in recent years that the number of frequent solid- or “pencil-” tine aerification programs has increased. Using solid tines is a way to aerate putting surfaces with minimal disturbance. I recently talked to two superintendents who haven't used hollow tines on greens since 2003 and 2008, respectively, after the greens were built to USGA specifications. A third super has backed off and does only one core aerification in the spring. He has done it this way since his greens were rebuilt 12 years ago.

While the reasoning behind pulling cores is to remove excessive organic material and thatch to help smooth the putting surface, I understand that pulling cores

removes perhaps 5 percent to 9 percent of the organic layer. Meanwhile, one of the primary justifications for not removing cores is to avoid contaminating the putting surface and root zone by moving nematodes and pathogens around the green.

Another key argument goes: After you have spent big bucks to rebuild greens to USGA specifications and have used proper materials and construction mandates, why would you pull cores that only affect such a small amount of the profile and risk pest and pathogen contamination? The issue of member dissatisfaction with playing conditions is a real issue that has to be addressed at many clubs as well.

Having opened a political can of worms, remember that

the world of golf course maintenance is variable depending on your location, operational and financial resources, soil conditions, golf season, etc. Successful superintendents learn to adapt practices to continual changes.

One superintendent told me the practice of pulling cores originated as a means to improve water percolation and drainage of the old native-soil “push-up” greens. Greens profile specifications certainly have changed, but exact adherence to specs often was at the mercy of the construction contractor. My best fossil shark's tooth collection came from the gravel layer used in the subsurface drains when the “USGA spec” greens were being constructed on Disney's Osprey

Ridge course back in 1991.

Innovations in turf breeding brings new denser, faster-growing cool- and warm-season grasses to the marketplace, which require changing the old methods. Equipment and chemical technology innovations also change the ways we mow, cultivate and treat turfgrass. Recent bio-based products have had a big impact on enhancing the beneficial microbe populations in the soil profile. There is so much to consider, and we know that change can be difficult.

Each of the superintendents I talked to had a regular turf consultant and/or used annual USGA Green Section visits to help monitor and evaluate turf conditions and the programs.

Two of the “experts” totally supported and recommended the use of solid tines as the sole aerification method. The third, even while consistently rating the turf and playing conditions as excellent, keeps recommending pulling cores.

Yet it seems to me tradition is on the side of pulling cores — that “solid-tine only” is a ticking time bomb that will lead to catastrophe.

But if you have sand-based or USGA spec greens and had no adverse readings on regular soil, tissue and moisture testing and, as a bonus you could reduce the seasonal disruption to putting surfaces by aggressive core-pulling and still have happy golfers, would you consider giving it a try?

**Joel Jackson, CGCS-Ret.**, is senior contributing editor for *Golfdom*. Email him at [flrjn@aol.com](mailto:flrjn@aol.com).



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## Cameron Watt

### ASSISTANT SUPERINTENDENT

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*If you ever find yourself in Vancouver, take the 30-minute drive to Langley, British Columbia, Canada. Nestled near the Coastal Mountains is The Redwoods Golf Course. Views of the mountains are abundant on the 18-hole course, and watch out for the remains of a car covered in foliage sitting on the right of the No. 2 green.*

*These are just a few of the views that assistant superintendent Cameron Watt sees daily. The 15-year golf turfcare industry veteran has worked at numerous courses. Watt hopes to take the next step in his career soon, but also hopes to stay in the area — after all, his wife followed his career, now it's time for him to return the favor.*

#### WHERE DID YOU STUDY TURFGRASS SCIENCE?

I went to school at Kwantlen University College, located in Langley, so it's pretty close to where I work.

#### WHAT DO YOU LIKE ABOUT WORKING AS AN ASSISTANT SUPERINTENDENT?

Each golf course has unique characteristics and challenges. This course that I'm at now, it's my fifth golf course. Every course that I've been at, in terms of the people I've met, the microclimates that I manage and the different areas that I manage, everything is different. I guess I like the variety.

#### WHO IS YOUR MENTOR?

I've had a lot of mentors in my career. I would attribute my biggest growing role to the first superintendent I worked under (TJ McNamara, Predator Ridge

Golf Resort.) He encouraged me to go to school and that's when I made the decision to go to post-secondary education for turf.

#### WHAT IS THE GREATEST ASSET YOU BRING TO A COURSE?

It's attention to detail. I've always been very particular to make sure everything looks perfect. I'm very organized and particular on how things look. I always want that perfect product for guests.

#### DID ANYTHING SURPRISE YOU ABOUT THE INDUSTRY?

What surprised me the most was the amount of people management. When you get into the management role as an assistant, I think that your focus is not on the grass as much. You're dealing with different personalities, making sure you're motivating staff and trying to get everybody

to work together to one common goal. I think growing grass is almost the easy part. You know your site, you know what kind of conditions you are going to get, it's just dealing with the different personalities that you're going to be working with (that) is the biggest surprise and challenge.

#### ANYWHERE IN PARTICULAR YOU WOULD LIKE TO BE A SUPERINTENDENT?

I've moved around a lot; I don't like moving around. My wife has found a pretty solid job that she likes (here) and for the last 10 years she's followed me around for my career, so I think I need to return the favor and support her and her career.

#### WHERE DO YOU SEE YOURSELF IN 10 YEARS?

Still employed. You want a better answer? In 10 years I want to be a superintendent.

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# The Golfdom



FROM THE ARCHIVE

In the January *Golfdom*, our resident assistant superintendent columnist Matt Neff wrote an impressive history on the various titles of superintendents. This was such a great topic that we had our crack team of historians (AKA associate editor Grant B. Gannon) delve into the archive to see if it had been brought up before. ¶ Turns out Bill Smart, then superintendent of Powelton CC in Newburgh, N.Y., and at the time president of the Hudson Valley GCSA, addressed the name in the April 1969 *Golfdom*. ¶ We couldn't reprint the article in its entirety here, but the full version is available at [golfdom.com/category/online-exclusive](http://golfdom.com/category/online-exclusive).

## Superintendent or greenkeeper — which?

*Although golf course superintendent is officially the title, the term greenkeeper still persists...*

BY BILL SMART

A few years before World War II, the National Association of Greenkeepers changed its name to the Golf Course Superintendents Association of America, thus changing the title of everyone in the trade from greenkeeper to golf course superintendent. In spite of the passage of over 20 years, the old title still persists, to the delight of a few and the dismay of many.

Why has greenkeeper persisted instead of fading into the past along with the village blacksmith and the automobile crank? First and foremost, it continues because it is in both the written and the spoken language of the country. Any writer will admit that greenkeeper taps out on the keys more easily and naturally than golf course superintendent — especially when it's coupled with an association's name such as Golf Course Superintendents Association of America or even my affiliate, the Hudson Valley Golf Course Superintendents Association. By the same token, say the

word greenkeeper in place of golf course superintendent and notice how lightly it trips off the tongue. Its use, therefore, is encouraged in everyday conversation because it's just easier to say.

I have no doubt that if a nationwide poll of superintendents were taken today, 90 percent would be in favor of

the title golf course superintendent, but for the wrong reason. As one widely-read golf writer put it, "Greenkeeper, they feel, connotes a rumpled little man in baggy overalls who darts about the fairways getting dirt under his fingernails."

This description in fact did fit many of the pre World War II turfmen and even some of today's. Perhaps in that 90 percent are those who feel that a more imposing title would un-rumple the man (past and present) from the baggy overalls to a gray flannel suit and manicured nails. Then there are those who have struggled and sweated through two to four years of turf school, most getting rumpled, baggy and dirty on seasonal course jobs and who will settle for nothing less than golf course superintendent as their title. One super I know discards, unopened, any mail addressed to him as greenkeeper.

The remaining 10 percent who like the old term have a broader view: Fundamentally the job has remained unchanged. The job functions are the same and have not disappeared as has the auto crank, or changed as the smithy was forced to do.

Greenkeeper is still a specific term for one trade (or profession if you wish) with no other value or use as a spoken word. The term superintendent, however, has been widely adopted in other fields, that today there are literally thousands of superintendents of one kind or another: building superintendents, school superintendents, park superintendents, construction superintendents and on and on.

The one factor that has changed the image of the superintendent, if not the title, has been the end product, the golf courses. Thanks to the golf boom, the golf course is the focal point of interest and admiration for millions of people. The course is where the supers' collective recognition begins and ends.



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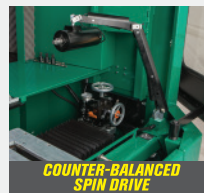
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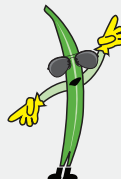
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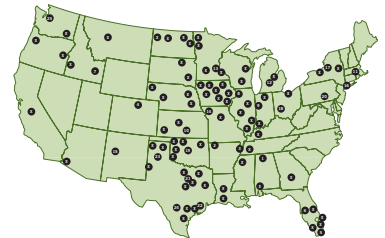
**TO CORE OR  
NOT TO CORE?**



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**BY STACIE ZINN ROBERTS**

**T**he sewer ditch was 5 feet deep, 30 feet wide and a mile long. It cut a path of destruction — a big, gaping hole — right through the heart of 120-year-old Tacoma Country & Golf Club in Lakewood, Wash.

It was the spring of 2010. Superintendent Joel Kachmarek looked at the long list of projects necessary to repair the damage the city caused when it dug the sewer trench on the property. He decided core aerification would have to wait — he just didn't have the manpower.

He decided to topdress, solid-tine aerify and hold off on core aerification until later.

That September the club faced a serious rain event that would have turned any pulled cores into a muddy mess. Instead, Kachmarek topdressed and solid-tine aerified again.

The following spring, clean-up from an ice storm made core aerifying impossible, so the crew topdressed and solid-tine aerified the fairways and greens once more.

It's been five years now, and Kachmarek

is yet to pull a core on his golf course.

"As we did three applications of solid tining on the fairways and were not seeing a negative from that, we just kept it going," Kachmarek says, "and we're still waiting



**Joel Kachmarek**

to see if there's a time when we think they're not draining well, or they're soft and we should core. But we haven't had that feeling yet. Actually, it's quite the opposite. We have felt that the fairways have been firmer than ever and draining just fine."

He says the greens and fairways have been topdressed for so many years that "they're straight sand, 8-inches deep." Rather than pulling cores, he aerifies using solid tines twice a year in the growing season, combining that with heavy topdressing. He also bought a VertiDrain deep-tine aerator that he uses twice a year to further

*Continued on page 28*



**Chris Hoff**  
Minnesota

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Continued from page 27  
improve drainage on the property.

### 30 years, no cores

It might seem that Kachmarek is bucking conventional wisdom by not pulling cores. But research shows that he may be onto something. And he's not alone.

Back in 1978, shortly after Kurth Thuemmel, CGCS, became superintendent at Walnut Hills CC in East Lansing, Mich., he read about research by William B. Davis conducted at the University of California, Davis, titled "Pros & Cons of Frequent Sand Top Dressing." That research affected how Thuemmel managed the sandy loam greens at Walnut Hills for the next 35 years.

For the first two years, Thuemmel instituted a program of heavy topdressing, complemented by core aerification. At the end of those two years he believed he had built up a sufficient profile of sand

## CAN YOU CUT OUT THE CORE?

Here's a quick checklist to see if your course is a candidate for switching to solid-tine aerification.

- **Turf type.** Do you grow a cool-season grass? Warm-season grasses probably won't thrive without some amount of core removal.
- **Greens Construction.** What type of greens do you have? If you've got USGA, Hurdzan or California greens, you may be

good to go. Push-up greens may require that you build up a layer of sand before switching to solid-tine exclusively.

- **Frequent topdressing.** Can you dedicate the budget and manpower necessary to topdress at least 20 cubic feet of sand per 1,000 square feet per year?
- **Nerves of steel.** Are you willing to buck conventional wisdom?

on his greens. He stopped pulling cores completely.

For two decades, he topdressed every three weeks. In the last 15 years of his tenure at Walnut Hills, he topdressed every two weeks at a lower rate because by that time mowing technology had improved, allowing mowing heights to come down. Cutting the grass shorter meant the bed-knives were lower, too. Switching to every

two weeks at a lighter rate kept the mowers from getting bogged down and dulled by the sand.

From time to time, he'd solid-tine aerate, "if a localized problem" arose. Thuemmel now jokes that his colleagues called him the "crazy old guy at Walnut Hills" for not core aerifying. However, "I really didn't go out on a limb," he says, "because I followed the guidelines that those research-

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Since Joel Kachmarek, superintendent at Tacoma C&GC, quit pulling cores five years ago, he says his fairways are firmer than ever and draining fine. He solid-tine aerifies twice a season in the growing season and combines that with a heavy topdressing.

ers in California had put out.”

Thuemmel retired in early 2014. The new superintendent at Walnut Hills, Kurt Grost, CGCS, had been Thuemmel’s assistant superintendent for 16 years. He’s kept Thuemmel’s philosophy going.

“We have no standard aerification schedule on the greens,” Grost says. “As needed, greens are solid tined, star tined in season for venting purposes, no more than one time per green during the growing season. I am considering one deep-tine aerification next year with solid tines for increased rooting, venting to get a little deeper in the profile than our standard 3- or 4-inch.”

After 35 years of consistent topdressing, the greens at Walnut Hills are transformed. Want evidence? Cut a cup on those greens and look at the profile.

“We’ve got sand built up — over what was originally push-up greens — in many places up to a foot deep,” Grost says.

### What the research says

Roch Gaussoin, Ph.D., extension turfgrass specialist at the University of Nebraska-Lincoln, published research on the bene-

fits of topdressing and solid-tine aerification versus core aerification. His premise began with a historical perspective.

“When we were building greens out of locally available materials and didn’t have aeration,” he says, “we would have compaction. Then we started pulling cores and putting sand topdress on greens.”

Although times and technology changed, core aerification didn’t go away. Gaussoin wondered why that was, when newer construction methods and designs (such as USGA, Hurdzan and California-style greens) were developed that incorporate sand into the soil profile.

“Sands don’t compact readily. Is there still a reason to pull the core? It’s labor intensive and disturbs members. I decided to venture out,” Gaussoin says.

In his research, Gaussoin discovered that the “golf courses that were topdressing a minimum of 20 cubic feet per 1,000 square feet per year had the best quality greens and were doing less aggressive aerification than coring.”

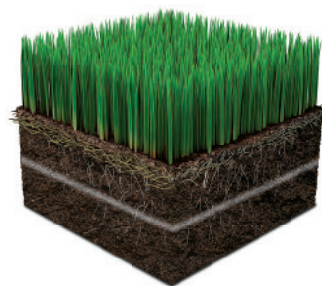
The caveat to this was that Gaussoin’s research was limited to courses grassed

*Continued on page 31*

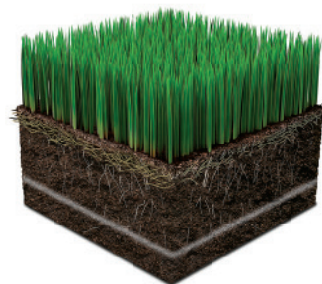
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A Dryject is used at Magna GC in Aurora, Ontario, Canada. "We still pull a core a little bit, but dilution is the primary foundation of what we do," says Wayne Rath, CGCS. "We bought into the concept that sand is our friend."

Continued from page 29

with cool-season turf on their greens.

"(In) my conversations with colleagues in the South and Southwest, where they have bermudagrass or pasplum, they said they wouldn't try it," he notes. "Warm-season varieties are aggressive grasses with a longer growing season. This is only for cool-season grasses — bentgrass or *Poa*/bent combinations. That's where it's been tested. Especially ultradwarf bermudagrasses that have a heavy root production, they may require physical removal," Gaussoin says.

Wayne Rath, CGCS, is the superintendent and property manager at Magna GC in Aurora, Ontario, Canada. He first met Gaussoin in 2000 when Seed Research of Oregon named Magna's greens the best 18 greens in North America. He thought of Gaussoin again three years ago when he needed a bit of guidance.


"Three years ago was the summer from hell. We ran into some trouble. We had a little too much fertility on the greens, a little too much organic matter. We were living the fat life a little too long on greens," Rath says.

He did some Internet research, and what kept coming up was Gaussoin's PowerPoint presentation, "Dilution is the Solution," a program that touts heavy topdressing and solid-tine aerification to dilute with sand the organic matter in the greens profile. He asked Gaussoin to visit his course.

"As soon as he left, we did a full half-inch tine with heavy sand," Rath says. "We bought into his program, modified it a little bit, but keep in mind the foundation with sand and solid-tine aerification. What Roch brought to our operation was not to be afraid to solid tine. We still will pull a core a little bit, but dilution is the primary foundation of what we do. We bought into the concept that sand is our friend."

Both Rath and Kachmarek agree that the key to the sand application is to topdress first, then punch solid tine, and drag in any remaining sand.

Could core aerification become a thing of the past on courses with bentgrass or *Poa* greens? Grost says he's a believer.

"It's not a perfect system and it's not for everybody, and it's actually quite contrary to what 99 percent of the people in the business would tell you," Grost says. "But it works." 

### FOR MORE INFORMATION

To read the research ("Pros & Cons of Frequent Sand Top Dressing," by William B. Davis) that convinced Kurth Thuemmel, CGCS, to abandon core aerification 30-plus years ago, visit: <http://archive.lib.msu.edu/tic/mitgc/article/197830.pdf>

To view the PowerPoint presentation by Roch Gaussoin ("Dilution is the solution!") that caused Wayne Rath, CGCS, to ask Gaussoin to visit his course, visit: <http://www.gcsaa.org/uploadedfiles/Education/Conference-Sessions/2014/Dilution-is-the-Solution.pdf>

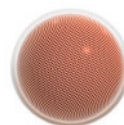
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# Show them how mulch you care

BY HANNAH SCHRUM

It's that time of year again — if not already, then soon — when landscape beds on and around the golf course beg for a fresh coat of mulch.

Though bulk mulch applications commandeer a significant chunk of material and labor budgets, the benefits are well understood: moisture management, weed suppression (though it's not the silver bullet we wish it were) and aesthetic value.

Mulching is an important landscape management tool, and as with any tool, utilizing it masterfully results in maximized benefits. Choosing the right mulch has as much to do with its intended purpose as cost alone. Selecting the optimal type of mulch or mulch alternative saves time and maintenance thereafter. Here's a quick guide to understanding the different types of mulch (including viable alternatives) and their appropriate applications.

## Types of mulch

Just like different types of turf, all mulches are not created equal, nor is there a one-size-fits-all for every landscape solution. The two most common natural mulches are derived from hardwood or pine products. Alternative mulches and groundcovers are also notable resources.

**Hardwood mulch** Hardwood mulches are versatile and available in a variety of natural or dyed colors and textures. These mulches are denser than their pine counterparts, which allows them to retain moisture and smother weed seeds more effectively. Its denser nature also makes hardwood mulch heavier and more cumbersome to spread com-



pared to pine mulches. Texture (single, double or triple ground) is a significant element and is reflected in the cost. The more refined (and more expensive) products form an effective barrier to weeds and are more likely to stay in place on sloped beds (reducing time spent on cleanup after heavy rains) than those especially prone to messy runoff. However, their increased fineness means that they are less durable and need refreshing more often than coarser products.

**Pine mulch** The distinct look and smell makes pine mulch a favorite of many club members. It's a much lighter product compared to hardwoods, making application faster and easier. But the lower density makes pine a culprit for floating and washouts after heavy rains. Like hardwood mulch, pine products also are available in a variety of textures. The coarsest of

*Continued on page 34*

A renewed application of the right type of mulch can produce benefits both visually and financially appealing to a course.



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## // MULCH MAINTENANCE

*Continued from page 32*

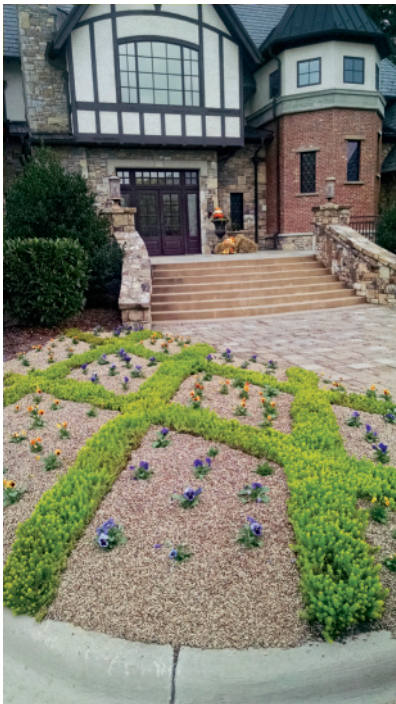
these (nuggets) exhibit considerable longevity compared to pine needles, which need complete annual or even semi-annual replenishment.

### **Alternative or premium mulches**

These include cocoa hulls, buckwheat hulls, cottonseed hulls, screened com-



Avoid creating a “mulch volcano,” which smothers tree roots.



Premium cottonseed hull mulch combined with sedum groundcover accentuates annual plantings at the clubhouse entrance.

post and gravel.

These are premium products used in relatively small but highly visible beds. The cost is high but the visual appeal is extremely striking. With the exception of gravel, these products break down fairly quickly and thereby can serve double duty as soil amendments. On the other hand, gravel maintains its appearance for years and needs only to be touched up and maintained after the initial costs of application. One drawback is that gravel does little to suppress weeds or retain moisture.

**Groundcover** Tough, no-fuss plants that grow quickly are sometimes a more sensible alternative to mulch in the long run. Though the initial installment requires greater attention than an application of mulch, the benefits are seen quickly in subsequent years when mulch is no longer needed to cover the same area. Hardy, fast-growing groundcovers include liriope, sedum, creeping jenny and native grasses.

### **Mulch application**

Use hardwood mulches where deciduous ornamentals are dominant, and introduce pine mulch products beneath conifer/evergreen plants. Using a combination of different mulches in juxtaposition can be useful in creating soft footpaths between holes. The size, slope and focal value of the bed should dictate the texture of the product you choose. Finer textures tend to stay in place better and have higher visual appeal.

**Tree rings** The mulched ring, 2 inches to 3 inches deep, should be flat (not mounded), around the base of the tree. Avoid creating mulch volcanos, which smother tree roots and invite insect infestations beneath the bark, all to the ultimate decline of the tree. Never allow mulch to be in contact with the trunk.

**Flower (annual) beds** Use the finest textured mulch available, as coarser products detract from the available nitrogen needed by the annuals. Premium mulches such as cottonseed hulls or screened compost have a striking effect and quickly elevate the visual display of annuals. ©

Hannah Schrum is the senior horticulturist at The Cliffs at Walnut Cove in Arden, N.C.



Use different colored mulches to create a striking visual display on a footpath between holes.

PHOTOS BY: HANNAH SCHRUM



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# Super Science

## // A GENTLE BREEZE, PLEASE

### IMPACT OF TURF FANS ON CREEPING BENTGRASS GREENS

By David McCall

**T**he physiology of creeping bentgrass [*Agrostis stolonifera* L. var *palustris* (Huds.)] is negatively impacted during periods of stress, decreasing the efficiency of many vital functions. Optimal creeping bentgrass growth occurs between 50 and 64 degrees. Root development slows as the soil temperature rises above 80, with a loss of functionality at soil temperatures above 86.



Field data collection of reflectance and environmental parameters on in-play greens to quantify the impact of turf fans on putting greens.

To mitigate environmental stresses to creeping bentgrass, turf fans are used on many golf courses to improve airflow and increase transpiration. The objectives of this research were to 1) spatially quantify benefits of turf fans on the overall health of creeping bentgrass putting greens and 2) determine optimal activation timing to maximize creeping bentgrass performance during summer stress.

Each main plot consisted of an entire green with a unique fan application (no fan, activate fan at 70 degrees

soil temperature, and activate fan at 80 degrees soil temperature). Six in-play creeping bentgrass (Penn A1/A4) greens were equipped with permanent 5 horsepower oscillating turf fans (TurfBreeze TB-50 Premium, 45,000 CFM) and compared against three comparable greens without fans.

The study was repeated once, with data collection in 2013 and 2014. Fans were activated when daily soil temperature at 1.5 inches averaged 70 degrees and 80 degrees. Once activated, each fan ran continuously throughout all data collections.

Root depth, root zone temperature and canopy temperatures were positively impacted by fans, regardless of activation date, and were strongly correlated to surface wind speed. Surface wind speeds of 9 mph can reduce soil temperatures by 4 degrees. Impact was most apparent for the first 40 feet from the fans. Surface airflow ranged from 12 mph (20 feet) to 3.6 mph (70 feet), compared to 2 mph on greens with no fans.

Root zone temperature was negatively correlated with two vegetation indices (NDVI and RVI), which are used as objective measurements of reflectance to quantify turf health. Using this correlation, reflectance maps were generated to predict root zone temperatures across entire greens. Duration between fan activation dates was 18 days in 2013 and 36 days in 2014. Late-season rooting depth were slightly longer when fans

## NEWS UPDATES

### CISAR RETIRES FROM FLORIDA

John Cisar, Ph.D., retired from the University of Florida recently after 28 years. He received a B.A. (Honors) in Botany from Rutgers University, an M.S. in Floriculture and Ornamental Horticulture from Cornell University, and earned his Ph.D. in Biological Sciences at the University of Rhode Island.

Cisar began his academic career at the University of Florida – Ft. Lauderdale



Research and Education Center in 1986 as an Assistant Professor of Environmental Horticulture. He assembled an impressive record of research and outreach

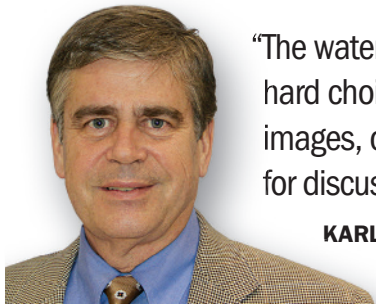
in water quality, effluent irrigation on nutrient leaching, nitrogen and pesticide fate, turfgrass nutrition, irrigation efficiency, soil water repellency, soil amendments, evaluation of wetting agents, evaluation of plant health products, turfgrass physiology, bermudagrass and St. Augustinegrass evaluation and management, and much more. His work has been supported by the USGA, the GCSAA and the Florida Turfgrass Association, among many other segments of the green industry.

Cisar has been a frequent lecturer at the GCSAA's Golf Industry Show, delivering seminars and workshops on warm-season turfgrass management, irrigation efficiency, and soil and water quality.

"His approachable persona and gregarious charisma infected all around him," Dr. Ed Nangle, Chicago District Golf Association, says. "He will leave a huge void, not just in South Florida, but all around the world in the turfgrass industry." Although retired from Florida, Cisar remains active in the green industry as a consultant, lecturer, researcher and advisor and can be reached at [cisarturfdoc@gmail.com](mailto:cisarturfdoc@gmail.com).

were activated early, suggesting creeping bentgrass may benefit from extra air movement prior to peak summer stress.

David McCall and Erik Ervin, Ph.D. are at Virginia Tech University and Dana Sullivan is at TurfScout, LLC., Greensboro, N.C. David McCall can be reached at [dsmccall@vt.edu](mailto:dsmccall@vt.edu) for more information.



“The water issue facing California is forcing hard choices, and one of the most polarizing images, or more likely, the lightning rod for discussion, is golf courses.”

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

## Gimme some water

**A**s Eddie Money once sang, “Gimme some water.” Water is the world’s most precious resource. I hear that statement or versions of it made all the time, and I believe it.

When you live east of the Mississippi River surrounded by the Great Lakes and rivers like the Ohio, it is hard to fully appreciate what it means to deal with a lack of water, or water that is costly and of poor quality. Unfortunately, this is a daily occurrence in the western United States, especially in a state like California.

In the past year the national news was continually running stories on the severity of the California drought. In December, heavy rains and mudslides in California washed the drought off the front pages. However, a recent visit to northern California revealed that the drought is far from over.

With no rain in January, and with a below-normal snowpack, the coming year is shaping up to be a tough one for most of the state. The water issue facing California is forcing hard choices, and one of the most polarizing images, or more likely, the lightning rod for discussion, is golf courses.

I attended and spoke at a Northern California GCSA seminar, where I learned firsthand the water issues facing northern California superintendents. The first thing I learned was water is a complex issue and no single

solution fits all. For example, given the hundreds of water districts, geological variations and water sources, the availability or allotment of water can vary in extremes from enough water to none.

Some of the thoughts that I took away from the meeting are:

### **EFFLUENT WATER**

Over the years, California golf courses have moved to effluent as a water source. Effluent implies too much undesirable water, but in some situations, the quality of effluent was better than the potable water source (stream, river, etc.) for irrigation. Some courses would like to rely on effluent even more. Interestingly, in some situations water conservation with effluent is not necessary desirable. The need to use the effluent water before it’s deposited in the ocean can result in water districts encouraging golf courses to use as much as possible.

### **COST OF WATER**

Golf courses that were provided water cheaply by a city or district in years past are now raising rates significantly, resulting in golf clubs rapidly trying to

find alternative water sources. In addition, a few California water districts have implemented turf rebates, which consist of paying homeowners and businesses like golf courses to remove turf areas and establish them to native or desert. In some instances, the cost of maintaining these areas will eventually be more than the rebate money received. But many golf courses believe it is the right thing to do.

### **TECHNICALLY MANAGED WATER**

That’s what I call water judiciously managed by superintendents, which means continual measuring and monitoring for the purpose of applying irrigation as efficiently as possible. As the drought continues, turf areas that are watered shrink from tees, greens and landing areas in fairways, to no irrigation of fairways, to the point where the water just runs out. Unfortunately, golfers don’t always understand why they are playing on less than ideal conditions.

### **COMMUNICATION**

Communication is a critical aspect in water management, not only with golfers but also with water district boards. One of the comments that stuck with me was a panelist who basically said these board members want to get re-elected, so they want to work with people or at least get as much input as they can. Superintendents and/or clubs need to be involved with the local water district, making it clear how the golf course uses water, and also getting involved in determining allotments.

Upon returning to cold and wet Ohio, I have a much deeper appreciation of the superintendents who deal with water issues, even if it is not covered in my local paper.

Karl Danneberger, Ph.D., *Golfdom’s* science editor and a professor at The Ohio State University, can be reached at [danneberger.1@osu.edu](mailto:danneberger.1@osu.edu).



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# Suppressing annual bluegrass seedheads

Bruce Branham, Ph.D., is a turfgrass scientist at the University of Illinois. He has conducted research on annual bluegrass management and control for more than 30 years. Bruce can be reached at [bbranham@illinois.edu](mailto:bbranham@illinois.edu) for more information.

## Q What is a reasonable expectation of annual bluegrass seedhead suppression on a putting green using a plant growth regulator?

First, keep in mind that the intensity of annual bluegrass (*Poa annua*) seedhead production varies greatly from one year to next. In some years seedhead production is modest and in other years there is a bumper crop of seedheads. This means that if a plant growth regulator (PGR) provides 80 percent control, in a year of modest seedhead production there will be only a few seedheads present. That same 80 percent control during a year with a bumper crop of seedheads means there will be a noticeable amount of seedheads present. Leave an untreated area 5 feet by 5 feet in an out-of-the-way

**IT IS EASIER TO CONTROL ANNUAL BLUEGRASS WHEN THERE IS ONLY 5 PERCENT VERSUS 25 PERCENT OR 50 PERCENT.**

part of several greens so you can judge the effectiveness of the PGR application.

A Primo (trinexapac-ethyl) + Proxy (ethephon) application will generally provide 70 percent to 80 percent seedhead suppression, with a variation of suppression from year-to-year of 50 percent to 90 percent suppression.

A low rate weekly application of Embark (mefluidide) can provide close to 100 percent seedhead suppression.

## Q What products are available to suppress annual bluegrass seedheads?

Primo + Proxy is widely used because it has a good safety margin to the desired turf and will generally provide 70 percent to 80 percent seedhead suppression. Primo + Proxy is a good combination because each product has strengths the other does not have.

Embark is gaining in popularity for seedhead suppression because it provides nearly 100 percent suppression when applied weekly at a low rate. Applying Embark weekly at a low rate minimizes the risk of discoloring

the turf while still suppressing seedheads. Superintendents have been persistent in figuring out how to use Embark to suppress seedheads while keeping turf damage potential low. Additional research on the use of Embark on greens would be a help to the industry.

Do not tank mix a product that contains non-chelated iron with Embark. Non-chelated iron antagonizes Embark and will reduce the effectiveness of an Embark application.

Trimmit (paclobutrazol) and Cutless (flurprimidol) can be applied to greens to reduce the population of annual bluegrass but they do not provide seedhead suppression. Trimmit will reduce the height of the seedheads, making them more difficult to see, and will reduce some of the bumpiness they cause, but will not suppress the number of seedheads present.

## Q What is the recommended timing of PGR applications to suppress annual bluegrass seedheads?

For both Primo + Proxy and Embark, the turf should be completely green, the putting green should have been mowed once or twice, and no annual bluegrass seedheads

should be present.

There is a good model that Ron Calhoun, Ph.D., and others developed that can be found at [gddtracker.net](http://gddtracker.net) to help time applications of Primo + Proxy, Embark and other pesticides.

## Q If seedheads are present in the latter part of spring, what can be done?

Once seedhead production starts, it is difficult to make a difference at that point.

## Q Anything else you would like to add?

Make a concerted year-round effort to reduce annual bluegrass populations so a superintendent will not have to worry as much about seedhead suppression. In situations where the green is dominated by annual bluegrass, consider regrassing with a new cultivar of creeping bentgrass. The new cultivars of creeping bentgrass are much more competitive with annual bluegrass than the older cultivars, reducing the invasiveness of annual bluegrass. It is easier to control annual bluegrass when there is only 5 percent versus 25 percent or 50 percent.



Clark Throssell, Ph.D., loves to talk turf. Contact him at [clarkthrossell@bresnan.net](mailto:clarkthrossell@bresnan.net).

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BY **GRANT B. GANNON** // Associate Editor

### 1. Aercore 800

The smallest of **JOHN DEERE'S** Aercore line of aerators, the Aercore 800 is also the only walk-behind in the series. The depth gauge lets the user select the depth they would like to reach, with settings up to 3.5 inches. It is 84 inches from the handlebar to the rear of the coring head, and aerates a width of 31.5 inches. These features allow for increased maneuverability as well as consistent hole depth on undulating greens. The Aercore 800 is a turf friendly design, from adjustable turf guard pressure to the hydraulic-free mechanical transmission. [johndeere.com/golf](http://johndeere.com/golf)

### 2. Multiliner 1.2m

The British company **SISIS** brings its Multiliner 1.2m from across the pond and is designed for several types of aeration. It is a tractor mounted drum-type aerator with quick release cover and tines that do not require tools to replace. Sisis offers multiple tines to attach including pencil, solid, chisel and a range of hollow. The

weight frame promotes tine penetration and two trailing spring release pressure rollers ensure a clean surface finish.

[sisis.com](http://sisis.com)

### 3. Carrier

The **REDEXIM** Carrier is a multi-function power tool that is designed to carry a variety of hard working implements such as a deep tine aerator, over-seeders, a verti-cutter, sod cutter and more. The Carrier's Vanguard 31 hp engine and three-wheeled hydrostatic drive train make it a powerful, but highly maneuverable machine. With the Redexim Verti-Drain 1513 implement attached to the Carrier's three-point lift, it is capable of aerating to a depth of 6 inches, with either coring or solid tines, and provides the same patented forced heave of all Verti-Drain machines. [redexim.com](http://redexim.com)

### 4. ProCore 1298

In the tractor mounted coring aerator category is the ProCore 1298. **TORO** lists the product as a fairway aerator but it shares its cor-

**LOOK! RELEVANT MATERIAL!** We just told you about aeration in not one but *two* parts of the magazine (if you skipped ahead to the Professional Grade pages and have no clue what we are talking about, we appreciate your enthusiasm for this section but please refer to pages 20 and 26 for more aerator fun.) In the 1994 summer blockbuster, "Forrest Gump," Bubba told us that shrimp is the fruit of the sea. We think aerators are the fruit of golf maintenance equipment.

ing head technology with the greens and tee aerator, the ProCore 648. Superintendents can glide across their course, aerating a width of 98 inches with each pass and reaching a depth of 5 inches. If that is a little too deep for your taste, it also features a depth control mechanism to adjust the depth all 12 tine heads touch.

[toro.com](http://toro.com)

### 5. Terra Spike XF

**WIEDENMANN'S** Terra Spike XF deep aerifier is unique in that it can aerify at a depth of 8.5 inches at the speed of a shallow aerifier. The exclusive twin drive transmission can produce square-hole spacing of 2.5 inches and 5 inches, with a forward travel speed of 1.2 and 2.4 mph, respectively. The quickset feature of the central depth adjustment and the central angle adjustment allows depth and angle adjustments to be performed on the fly, thus obtaining optimal aerification results. The unique shock absorbing systems, VibraStop and PowerPack,

remove any vibrations resulting from the high aerification speed.

[wiedenmannusa.com](http://wiedenmannusa.com)

### 6. Lawnaire V with EST

This walk-behind core aerator is the fifth installment of **RYAN'S** Lawnaire product line. What sets it apart from its predecessors is the Easy Steer Technology (EST). This feature allows the user to steer the unit left and right while the tines are still in the ground. The EST achieves this through its outer tines, which rotate faster while maintaining deep core penetration during turns. The Lawnaire V will punch 9 holes per sq. feet, at up to 2.75-inches deep and aerates a width of 26.5 inches. [ryanturf.com](http://ryanturf.com)

#### CONTINUED ONLINE

For more listings of top aerators, go to [golfdom.com/category/products](http://golfdom.com/category/products)







1



2



3



4



5



6

# The 19<sup>th</sup> Hole with...



## Sean Sullivan

**CGCS** // The Briarwood CC, Billings, Mont.

**Sean, what can I get you?**  
I'll have a Diet Coke.

**So you drove from Billings to San Antonio for the GIS this year?** I've only flown once in the last 14 years (to the GIS), that was to Anaheim. Generally I'll drive, no matter what the distance. It gives me time to think about problems on the course, without all the distractions of the course problems... if that makes any sense.

**I think it does! What's been your longest GIS road trip?** I did a 6,700 mile one, from Billings to GIS in San Diego, then to Atlanta to pick up a car



and some mowers, then back to Billings. It was 17 states and two weeks, including the show.

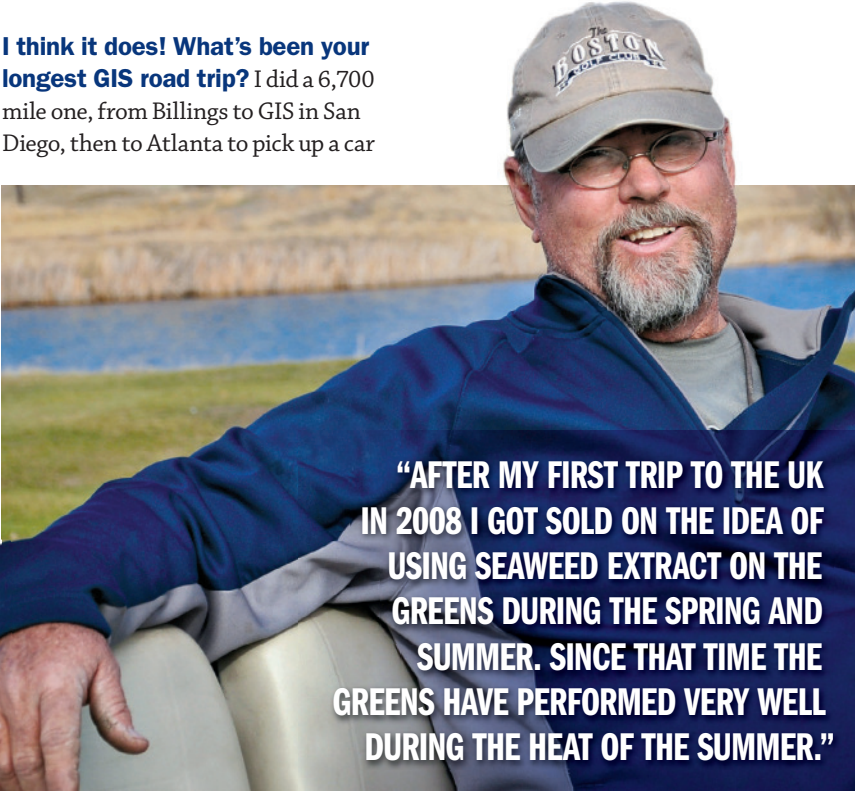
**What are you most excited about for this summer?** I've been selected to work on the Open Support Team at St. Andrews this year. I go for a couple extra days to visit courses. I like to see how other people problem-solve.

**Any maintenance practices you guys do that are unique?** I don't have traditional white or river sand for

my bunkers. I have jet-black coal slag. It's a by-product of burning lignite coal in a special burner for power in North Dakota. The by-product is inert, very hard, a durable gloss-black particle. You can get it screened to the size of fairway fertilizer or greens-grade fertilizer. It never loses its black color and it drains very well. Because of the heat it generates in the summer it doesn't generate weed problems like your traditional bunker material.

**What do golfers think about it?** I have had it in place since 2007. The mid-to high-handicappers love it because it's easier to get out and the particle is so dense, you never get a fried egg lie. But the low handicappers that actually practice bunker shots, they struggle, because they're using the wrong bounce off their clubs.

**You make customized ball washers... how did you get into that hobby?** I've owned a powder-coating gun for 20 years now. It's a cheap, \$100 hobby gun. I used to do cups and stuff. I got tired of doing the plain green ball washers every other year. And it's an alternative to using aerosols. All you need is the initial investment of \$100 for the gun, and an ordinary kitchen oven... (For) golf courses that can't afford new stuff, they can do it themselves for next to nothing. Even the most elaborate patterns I can do for between \$12 and \$18, a lot cheaper than sending them out. As interviewed by Seth Jones, March 2nd, 2015.



**"AFTER MY FIRST TRIP TO THE UK IN 2008 I GOT SOLD ON THE IDEA OF USING SEAWEED EXTRACT ON THE GREENS DURING THE SPRING AND SUMMER. SINCE THAT TIME THE GREENS HAVE PERFORMED VERY WELL DURING THE HEAT OF THE SUMMER."**

# GO GREEN.

[...on your tee boxes]

[...on your greens]

[...on your high traffic areas]

[...on your fairways]



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Damaged turf on your #7 tee? Weak areas on your #2 and #12 greens? Want to improve the overall stand of grass on your high traffic areas on #6 and #10? Greening up your course has never been easier or quicker with the TriWave 40. Just hook up to your turf vehicle and **seed them all in one trip.**

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