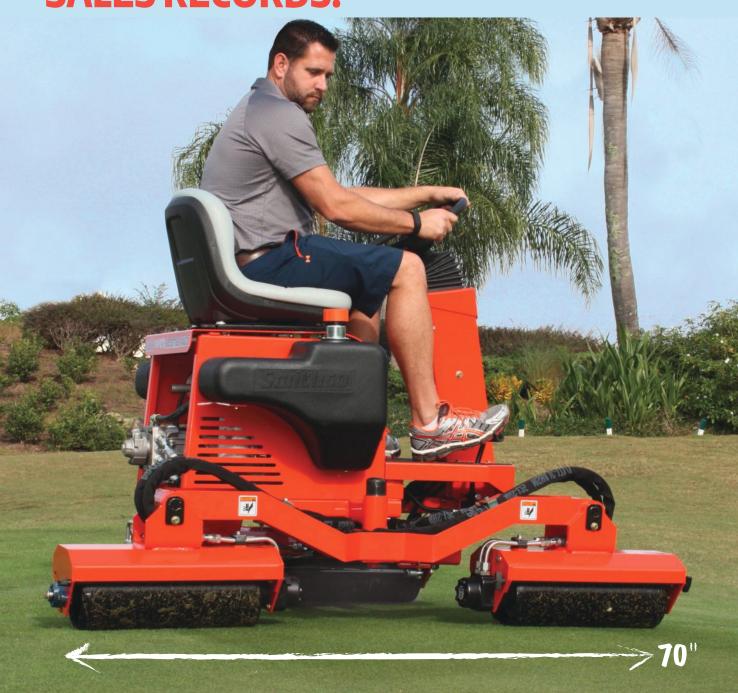


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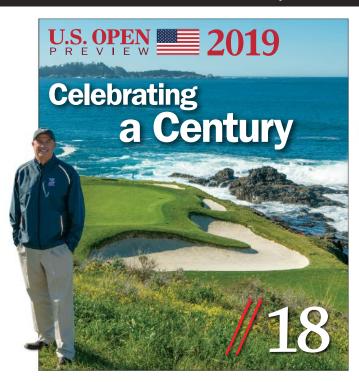
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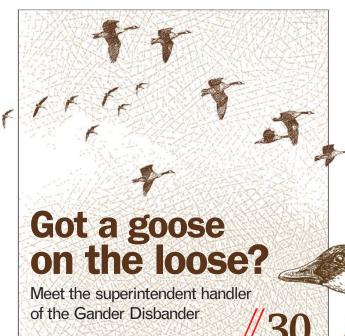
# **Golfdom**/05.19

VOL. 75 // NO. 5

SINCE 1927—The Resource for Superintendents // Golfdom.com







#### **COLUMNS**

- //6 **Keeping up with The Jones**—Seth Jones
  Tiger winning the Masters means Jones lost \$100,
  and that's fine by him
- // **12 Admiral's Cove**—Jared Nemitz

  Reinventing yourself year after year can keep you from boredom in the workplace
- // 15 The Walking Greenkeeper—Joe Gulotti Always remember who you're talking to and make sure you think before you speak it can make or break you
- // **39 The Turf Doc**—Karl Danneberger

  Spring means green grass, warmer temps and earthworm casts. Learn how to deal with this small annoyance.
- // 40 Clark Talks Turf—Clark Throssell
  A discussion about goosegrass with Matt Elmore, Ph.D., of
  Rutgers University



#### **SUPER SCIENCE**

- **// 35** Removing coarse topdressing sand from greens
- //36 Half-life is not the whole story

#### **DEPARTMENTS**

 $^{\prime}8$  Starter  $^{\prime\prime}10$  Golfdom Gallery

 $/\!/\,14$  The Golfdom Files

//42 The Shop

//44 The 19th Hole

e Snop // 44



#### The fungicide that holds strong for many moons.

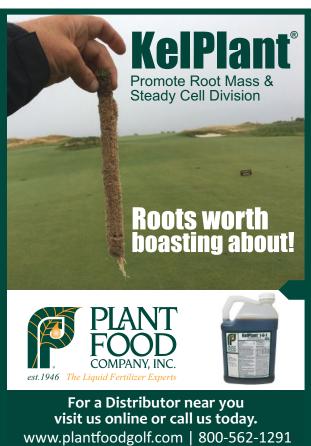
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GOLFDOM (ISSN 1526-4270) is published monthly by North Coast Media LLC, IMG Center, 1360 East 9th Street, 10th Floor, Cleveland, 0H 44114. Subscription rates: For US, Canada and Mexico, 1 year \$58.95 print and digital; two years \$88.95 print and digital. All other countries, 1 year print and digital \$10.99.52 years \$169.95. For air-expectation service, include an additional \$75 per order annually. Single copies (prepaid only) \$10 plus postage and handling. For current single copy or back issues, call 847-513-6030. Periodicals postage pald at Cleveland 0H 44101-9603 and additional mailing offices.

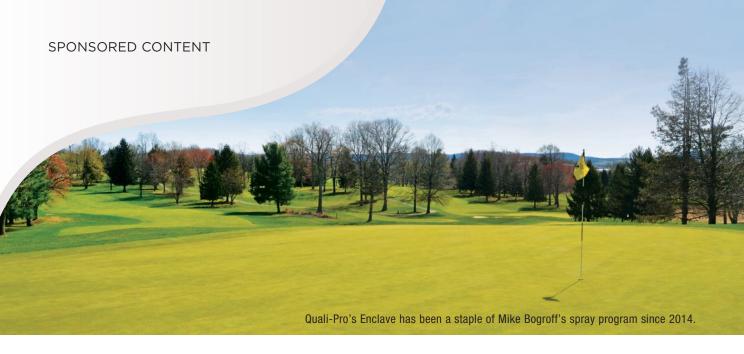
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# **CONSISTENT CONTROL**

# WHY ONE SUPERINTENDENT TURNS TO ENCLAVE TO ENSURE SNOW MOLD PROTECTION

By **KELLY LIMPERT** 

or many, spring is a time of
excitement — the trees start
blooming, flowers begin budding
and golfers are itching to get out
on the course. However, for superintendents in cold weather regions, it also
can be a source of anxiety.

Snow mold, a dreaded foe for any superintendent, can compromise turf and leave it vulnerable to other diseases.

Having started his career in the upper Midwest, Mike Bogroff, superintendent at the Pines Country Club in Morgantown, W.Va., has seen firsthand what snow mold can do to a golf course — and how long affected courses can take to recover.

"One of the unique things about snow mold is that you can get it whether you have snow or not," Bogroff says. "Even though the golf season is done, you still have to be very proactive in treating snow mold because if it catches you, it can be an issue that you deal with going into the next season."

Now starting his 14th season at the Pines — a private 18-hole club in the foothills of the Appalachian Mountains — Bogroff relies on



Mike Bogroff

Quali-Pro's Enclave to stay ahead of this resistant turf disease.

Bogroff started using Enclave in 2014, and since then it has been a staple in his

spray program for tees, greens and fairways.

"I come out in the spring with clean turf in all the areas I've treated," Bogroff says. "With its synergistic combination of active ingredients, I really feel that the turf comes out healthier and more lush."

For snow mold control, Bogroff will do a split application in the winter. The first will be while the plant is still actively growing, so that it can take up the systemic active ingredients. Then, two to three weeks later, before the plant goes into full dormancy, he'll go

out with the other half.

"The four active ingredients and the two different modes of action just made sense for my needs on the golf course and for my budget," explains Bogroff. "It saves time only having to mix a couple jugs at a time instead of four or five different products all at once to actually get what you're getting with just Enclave alone."

Enclave helps Bogroff uphold the high standards the Pines has become known for as home course of the West Virginia University men's golf team and former host of the LPGA Futures Tour.

"I know by using Enclave going into the spring," he says, "we're going to have the turf conditions and the quality that is expected by our members."





"The guy who can't putt in the backyard with his little boy is going to come back and defeat the big boys on the PGA Tour — the likes of Dustin Johnson, Rory McIlroy, Brooks Koepka?"

SETH JONES, Editor-in-Chief & Associate Publisher

# Mac the Knife strikes again

he saying goes, "A fool and his money are soon parted." And man, did Tiger Woods fool me!

For the past couple years, Golfdom Publisher Craig MacGregor and I have had a friendly back-and-forth, making small \$5 bets while we're traveling. We'll bet over such trivial things as the over/under on that evening's Monday Night Football game, or even if we'll be able to get a seat at the bar. For a long stretch, I was the winner of every bet.

Now I'm starting to think that 'Mac' was just working a long hustle because suddenly I find myself bleeding money to him. It started in December when I lost \$100 to him on a weight loss challenge (agonizingly, he beat me by less than one percentage point of weight), and now I owe him another Benjamin based on Tiger's recent win at Augusta.

I bet Mac that Tiger would

never win another major, back when it looked like Tiger's playing days might be over, based on health issues. I thought it was a surefire bet, my only concern being how long it would take to pay off based on Tiger dragging his broken body to the first tee of every major for the next 20 years. But I also told Mac that if I ever did lose that bet, I would pay it off with a smile ... because it meant Tiger won another major!

It's hard not to overdramatize the unlikelihood of Tiger's Masters win. At this year's Golf Writers Association of America annual dinner, Woods accepted the 2019 Ben Hogan award, given to a player who overcomes a serious injury to remain active in golf. Tiger gave a six-minute acceptance speech the day before the Masters began

and talked about how dire his physical health was before his final spinal fusion surgery.

"Golf was not in my near future or even the distant future," Woods said. "I knew I was going to be a part of the game again, but playing the game again? I couldn't even do that with my son Charlie. I couldn't putt in the backyard."

The guy who can't putt in the backyard with his little boy is going to come back and defeat the big boys on the PGA Tour — the likes of Dustin Johnson, Rory McIlroy, Brooks Koepka? It's just not going to happen, right? Until it did.

I remember talking to Jared Brewster, then the assistant superintendent at Bellerive CC in St. Louis, now the superintendent at Highland Springs CC in Springfield, Mo. I asked him who he wanted to see win the PGA Championship that was about to be played at his course. "(Tiger) needs another major," Brewster said to me. "He's the whole reason I do what I do; he's the player who got me into this great game."

There are many of us like Brewster, who got into golf because of Tiger or saw success in our careers partly because of Tiger. Seeing Woods' name back at the top of the leaderboard, and closing the deal, means so much to the game of golf and the people who work in the business. Tiger is simply good for the industry. Even last year, golf TV ratings jumped 30 percent in tournaments in which Tiger played, according to the National Golf Foundation's recently released 2019 Golf Industry Report.

The early Sunday start time hurt TV viewership for the final round of the Masters, but there was still a spike as Tiger neared the end of his round, according to **Golf.com**, making for the highest peak rating since 2013. Probably more telling, *Golf Digest* reported that video of Tiger's winning putt at the Masters has 7 million more views online than Patrick Reed's winning putt in 2018.

So congratulations to Tiger on his 15th major victory. Congratulations to Mac on winning another \$100 off me. And congratulations to golf — we've got Tiger back. **③** 

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6 // Golfdom May 2019 Golfdom.com

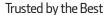




Quail Hollow knows tournament golf. The Charlotte, North Carolina course has hosted the PGA Tour's Wells Fargo Open since 2003. And the PGA Championship came to Quail in 2017. Superintendent Keith Wood and his crew have counted on John Deere for these high profile events. "I love the way that the John Deere mowers perform. I love the cutting units, especially the reel technology," says Keith. "When we use the A Model mowers, I'm even more impressed with

some of the adjustments that we can make, thanks to the Tech Control display."

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# NEWS, NOTES AND QUOTES



### **NICHOLS INDUCTED** INTO GEORGIA GOLF HOF

BY SARAH WEBB // Associate Editor

Only the fourth superintendent to hold the honor, Randy Nichols, CGCS, was recently inducted into the Georgia Golf Hall of Fame.

"The people that were already in the Hall of Fame really welcomed you. They made you feel really good," Nichols said. "I knew about half the people there; I worked with about 25 percent of them out of the 350-plus people there."

Nichols' foray into his half-centuryplus career began in 1967, when he served as the assistant superintendent (and then superintendent) at Memphis CC. He then became construction superintendent at both Brookfield CC and CC of Roswell — both in Roswell, Ga. — before settling into his position as director of golf course operations at Cherokee Town & CC in Atlanta from 1975 to 2001.

He served on the Georgia Golf Course

Superintendents Association's (GGCSA) board of directors from 1977 to 1986 and as the association's president from 1985 to 1986. Nichols also has held various titles within the Golf Course Superintendent's Association of America (GCSAA) from 1979 to the present, including serving as president from 1993 to 1994. He also served for the Georgia Turfgrass Association, the United States Golf Association, the Georgia Golf Hall of Fame and more.

"When I became president of the GCSAA, there were some turbulent times," Nichols said. "We did not have an executive director/CEO for about eight months. It was difficult times, but I got through it, and I think our association is much better off for some of the changes that we made," Nichols said, crediting the GCSAA's board of directors at the time for helping out with much of the work.

//ACQUIRING COURSES

#### **TROON ACQUIRES OB SPORTS**

Troon recently added to its portfolio with the acquisition of OB Sports Golf Management, a golf course management company with more than 70 golf courses and private clubs throughout the United States and internationally.

"We are delighted to have OB Sports Golf Management as part of Troon, continuing our growth and reach in the industry," said Dana Garmany, executive chairman of Troon. "With the addition of OB Sports (Golf Management), Troon now reaches or provides managed services to over 460 18-hole equivalents at 440-plus locations around the world."

**OB Sports Golf Management will** continue to operate under the OB Sports brand and have the same business relationship with existing clients. The corporate office in Scottsdale, Ariz., will continue to serve as OB Sports Golf Management's headquarters.

The acquisition follows Troon's acquisition of Boston-based RealFood Consulting in February and the July 2018 purchase of Cliff Drysdale Management.

#### //NORTHWEST TERRITORY

#### **AQUATROLS APPOINTS NEW** NORTHWEST **TERRITORY** MANAGER

Aquatrols, manufacturer of soil surfactants and related technologies, has appointed Jay Lewis as its newest U.S. territory manager. In his new role, Lewis will be responsible for overseeing the company's business in the Pacific



including western Canada and Hawaii. Lewis joins the Aquatrols team from **Textron Specialized** Vehicles, where he most recently was its channel

Northwest region,

development manager.

An Oregon native, Lewis has previously managed distribution in Jacobsen Golf's western region.

**8** // **Golfdom** May 2019

#### //CHARITABLE CAUSES, COURSES

### Arcis Golf rounds up for autism

Arcis Golf, the second-largest owner-operator of private, resort and daily-fee clubs in the U.S., recently launched a nationwide campaign called Arcis Round Up For Autism that expands its partnership with legendary golfer Ernie Els and the Els for Autism Foundation.

In conjunction with April's World Autism Month, the "Arcis Round Up For Autism" program at 60 Arcis Golf clubs around the country will encourage members, guests and patrons to "round up" to the nearest dollar on any purchases of merchandise, food and beverage or golf as a donation to the charity. Additional contributions will be accepted through September,

with clubs or individuals raising or donating \$15,000 or more invited to send a two-person team to play in the Els for Autism Golf Challenge Grand Finale event in mid-October.

"Our goal is to promote the tremendous work of the foundation, as well as raise funds for programs that create a better future for people with autism spectrum disorder, as one in every 59 children in the U.S. is affected by autism," said Blake Walker, founder and CEO of Dallas-based Arcis Golf.

Els added, "By rounding up and engaging golfers in this simplest of actions, we can generate funds to learn more about autism."



#### //CAPTION THIS!

### TIGER WASN'T THE ONLY MASTERS WINNER

The 2019 Masters has come and gone, but there were more winners than just Tiger Woods.

Patrick Reinhardt, superintendent at Georgia Southern University GC in Statesboro, Ga., and Eli Rahz, superintendent at Cypress Creek GC in Ruskin, Fla., will receive a Masters gift package for their captions to the above photo.

Golfdom's 2019 Masters coverage — sponsored by Syngenta — was also a big winner.

Across all social media platforms, Golfdom tallied over 200,000 impressions during Masters week.

The winners of our pick 'em competition who picked Tiger Woods and Dustin Johnson to finish first and second were David Clowers, Brian Legg, Justin VanLanduit and Chase Best. Shane Rice, Brent Parizek and Cam Gurtner won prizes for showing us how they were enjoying the Masters.

Check out pages 10-11 to see the faces we saw at the Masters. A special thanks to our friends at Syngenta (who remind everyone to #ConditionPerformRecover) for sponsoring our 2019 Masters coverage.

#### //FIRE IT UP

#### STAPLES GOLF DESIGN TO SPEARHEAD FIREROCK CC PROJECT

Andy Staples, owner and principal architect of Staples Golf Design, has been selected as the consulting course architect for FireRock CC in Fountain Hills, Ariz.

The 430-member club will close the golf course on May 13 to undergo the multimillion-dollar project, which is aimed at revitalizing the award-winning, 19-year-old Gary Panks-designed golf course.

"My plan is to bring out the best of the site by instilling a more strategic, natural style of bunkering, filled with drama for every level of player," Staples said. "We'll also look to the future by finding ways to make the club's operation much more sustainable."

Course enhancements will include:

- Bunkers will be renovated, and some will be eliminated or relocated;
- Fairways, rough and tee boxes will be regrassed using Celebration bermudagrass;
- Green surrounds and approaches will be refined to create more options for hole locations (without changing the contours of the greens); and
- All existing tee boxes will be rebuilt and additional tees will be added.

#### //INDUSTRY INSIGHTS

#### NGF RELEASES GOLF INDUSTRY REPORT

The National Golf Foundation's 2019 Golf Industry Report shows that golf's participation base remains stable, with about 24.2 million people playing golf on a course in 2018 - up from 23.8 million in 2017. Twenty-three million people hit golf balls at golfentertainment facilities (like Topgolf), indoor simulators and driving ranges. With 9.3 million people exclusively playing golf off-course, the game's overall participant pool went up 4 percent to 33.5 million. There were 434 million rounds played in 2018, a 4.8 percent year-over-year decline due in part to the third-wettest year on record dating back to 1895. The total U.S. golf course supply declined by 1.2 percent, with the opening of 12.5 new 18-hole equivalents and 198.5 course closures.



Mr. and Mrs. Greenkeeper Matthew Wharton, CGCS, MG, Carolina GC, Charlotte, N.C., and his wife, Darless, aka Mrs. Greenkeeper, near the big leaderboard at Augusta National Golf Club.

Amen Corner with RTJII (Left to right) Rich Sweeney, Plant Food Co.; Ricky Reeves, superintendent, Miami Beach GC; Robert Trent Jones II, ASGCA; and Nate Watkin, superintendent, Seagate CC, Delray Beach, Fla., on Amen Corner. RTJII was dropping stories — click over to Golfdom.com to check them out.

Breakfast of champions Egg salad sandwich ... it's what's for breakfast! Golfdom Managing Editor Clara Richter enjoys the aftermath of her first trip through the concessions stand at the Masters.

Beware of the FOG The second annual Friends of Golfdom (FOG) meetup at Augusta National was a hit! From left to right are 2015 GCSAA President John J. O'Keefe, CGCS, Preakness Hills CC, Wayne, N.J.; 2014 Herb Graffis Businessperson of the Year Jim Rattigan, Plant Food Co., Jupiter, Fla.; 2014 GCSAA President Keith Ihms, CGCS, Bella Vista (Ark.) Property Owners Association; Ryan Swilley, Gulf Stream (Fla.) GC; Ryan Franklin, St. Petersburg (Fla.) CC; Nate Watkin, The Seagate CC, Lake Worth, Fla.; Andrew Fike, Wycliffe G&CC, Wellington, Fla.; Steve Merkel, CGCS, Landscapes Golf Management, Lincoln, Neb.; Mark Semm, BASF; Rich Sweeney, CGCS, Plant Food Co., Swedesboro, N.J.; Greg Wyatt, retired, Eagle Bend GC, Lawrence, Kan.; and Casey Old, Kansas Golf Association, Lawrence, Kan.

Let's play two! (Left to right) It was fun relaxing off the course with the Chicago North Siders, including Greg Rounds, Sunset Ridge CC, Northfield, III; Jeff Frentz, CGCS, Lake Shore CC, Glencoe, III.; Connor Healy, Conway Farms GC, Lake Forest, III.; and Donald Cross, CGCS, Skokie CC, Glencoe, III.





Friends of the Chesapeake It's never a surprise to run into a group of superintendents at Augusta National's No. 12 concessions area! This year, we saw a group from the eastern shore of Maryland. From left to right: Eric Hindes, Bayside Resort GC, Selbyville, Del.; Joel McTavish, Rum Point Seaside Golf Links, Berlin, Md.; Chris Fronzeack, SiteOne; Tom Tipton, Prospect Bay CC, Queen Anne, Md.; Eric Snelsire, Bayer Environmental Science; Tom Akers, Links at LightHouse Sound, Bishopville, Md.; Joe Perry, CGCS, Eagle's Landing GC, Ocean City, Md.; and Derek Haley, Talbot CC, Easton, Md.

Man of many impressions Hey, it's the Tiger/Dustin Johnson/Sergio/lan Poulter impersonator! Casey Old, executive director, Kansas Golf Association (left) spotted Golf Channel/NBC Golf comedian Conor Moore (center) on No. 13 at Augusta National. Old, Moore and Wyatt seized the moment for a memorable photo. "Heeheeheeheeheehee!!!"

Their cups runneth over Garrett Luck, CGCS, Hidden Glen at Bentdale Farms, Cedarburg, Wis.; Michael Crowley, head pro, Morningstar Golfers Club, Waukesha, Wis.; and Steve Fischer, Club Car, show off their Masters cup collection. Looks like a good day! Well done, fellas.

Olympia Fields forever Andrew Sandner, design associate, Staples Golf (left), Golfdom EIC Seth Jones and Andy Staples, president, Staples Golf, take a break from walking the back nine at Augusta National for a quick photo. Staples Golf recently was named the architecture firm of Chicago's Olympia Fields CC — something worth celebrating for the old friends.

May 2019 Golfdom // **11** 

### **Admiral's Cove**

NOT JUST ON MILESTONE BIRTHDAYS



"Becoming too comfortable or bored in your job can lead to unhappiness, change of career or even job loss if you're not careful."

JARED NEMITZ, superintendent, The Peninsula Club, Cornelius, N.C.

## Think reinvention every year

hey say that every now and then, you need to reinvent yourself. If you Google "reinvent yourself," you come up with more than 18 million results. People often reevaluate themselves after job losses, career changes or at milestone birthdays. Why not every year?

A year ago, I felt something new to me: boredom. I really didn't understand the feeling at the time, but it came after a busy four years of master planning, renovations and projects at the club. My team and I made many changes and improvements to the golf course. It was highly gratifying; however, after completion, it was business as usual. I'm a fast-paced individual, so this slowdown hit me hard.

Many superintendents go through that same process at various career stages. In any profession, people fall into ruts where they think they are doing the same thing over and over, and they wake up needing a new challenge. Becoming too comfortable or bored in your job can lead to unhappiness, change of

career or even job loss if you're not careful.

I looked at job boards for other career opportunities, thinking that was the juice that would get my blood going again. I realized that while a job change could be satisfying, revitalizing my operation and empowering the people around me could do the same thing. The goal each year should be to improve your team, operation, course conditions and yourself.

Successful individuals learn to reinvent themselves and improve all the time, not just at birthday milestones. This is not only good for your mental health and job satisfaction, but it also will keep your staff energized and fulfilled and continually will demonstrate your value to

your superiors. When your superiors and members stop believing that you can consistently bring value to the business, they will seek out someone who can.

One way to push yourself to the next level is by making time to self-evaluate and analyze your practices and operation. Gauge your personal strengths and weaknesses each year. Really think about where growth can occur. Evaluate the entire operation from top to bottom.

Get feedback from your team members on how you can improve as a leader and how they think the operation can get better. When you ask, they will tell you. Looking at what you do from someone else's viewpoint can be eyeopening. It's also highly

empowering to your team when they believe they are part of the solution.

Another strategy is to read leadership books. Ultrasuccessful people read a lot of books. Warren Buffett has said that he reads more than 500 pages a day and believes that knowledge compounds. People think leadership is a natural trait. It is not. Good leaders work at it and get better.

Change can be hard but rewarding. Don't forget to make work fun again, not just a J-O-B. "Do what you love and you'll never work another day again." It's the truth. This job can get the best of you if you aren't having fun. There are times to be serious and get the job done, but there are also times where levity should win the day.

Lastly, set achievable goals and execute them. As you set new expectations and reinvent yourself, you'll find new energy in and around you. People will respond and you will feel better for it.

I am full of newfound optimism and hope for the 2019 golf season. I haven't looked forward to a new season of golf since my first year as a golf course superintendent. It is truly special when you wake up to go to work, and instead of feeling like you are in a rut, you feel as though you are part of something special. If you feel that way, I bet your team will too.

Jared Nemitz is superintendent at The Peninsula Club, Cornelius, N.C. He can be reached at jared.nemitz@ thepeninsulaclub.com or followed at @jarednemitz.



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# The Golfdom (F) (F) (S)

FROM THE ARCHIVE

In the May 1936 issue of *Golfdom* — which, like the May 2019 issue, featured Pebble Beach on the cover — *Golfdom* founder Herb Graffis wrote a letter to his dear old friend — or perhaps it's more accurate to say "frenemy" — Beef McLip, expounding upon the benefits of free golf lessons for youngsters. Graffis, in his signature irreverent style, outlines why Beef is wrong to say that free golf instruction is a bad idea. As a rebuttal, Graffis gives several reasons why free lessons could attract more young people to the game of golf and would do nothing whatsoever to detract from it. Graffis' words are perhaps just as poignant today, as the industry tries to draw more newcomers to the sport. To read the full article, visit **golfdom.com/exclusive**.

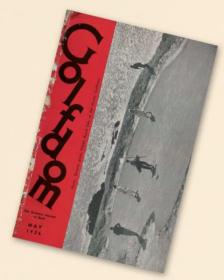
## **Dear Beef:**

As I told you after you had registered your polite and open-minded squawk, I send you my idea of the box score on this free golf lesson idea. One great thing about you, Beef, is that you come right out with your dissenting opinions even if you have to go to the trouble of writing them. I am strong for you on that count. The mugs who pout and do their bellyaching in dark corners I'll have to turn over to the attention of *Golfdom*'s Who Gives A Damn Dept., and this department can get around to them after caring for a lot of other prior matters within its jurisdiction.

But there probably are other reasonably smart guys like you who are wondering just how far this free golf instruction business should go, and that's why I'm answering you publicly, omitting a few of the words we might use in our private correspondence.

#### It insures for the future

In the first place, Beef, you fathead, free golf instruction for kids at golf clubs is easily the smartest, most foresighted thing pros have done to assure continuance of golf on a big and growing basis.



Before the Depression, golf could depend on its caddies for recruits. With a kid making a few bucks a day lugging clubs, and usually more of a demand than supply of caddies, youngsters were being paid for being exposed to the game. In 1929, there were about 90,000,000 rounds of golf played. In 1934, this figure fell to around 50,000,000, and with reduced caddie fees per round. In the meanwhile, older fellows who didn't care about playing golf but who were somewhat concerned with having grub in their bellies, began to take over a lot of the caddying work. Therefore, the re-

cruiting strength of the caddie angle was reduced more than 50 percent in value.

I used to think that it might be a serious mistake to give free kid class lessons at the well-to-do clubs, but I've changed my mind on that. I meet a lot of nice people (as much as that may amaze you, Beef, old dear), and I'll bet that I've heard in the last six months 50 rather wealthy men of fine families lament that their boys haven't shown much golf interest. The older men know how much golf might mean to their boys as the kids grow older. That has made me think that if the competitive and educational interest of group lessons extended clear through to the top clubs, it would be a smart move for the pro who wants to keep his job and make a good piece of dough when he gets old. And I tell you Beef, golf, like any other pro sports business, is a hell of a game to get old in, unless a fellow has looked ahead.

#### Free lessons beget paid ones

Your other yowl was that free lessons might reduce the paid lesson business. I have talked this over with many, many pros - old and young - during the course of our ballyhoo of free lessons as a profitable idea for pros, and these fellows have told me that if free class lessons destroy the market for individual paid lessons, then there is something wrong with the way the pro is going after and teaching his individual lessons. The free group-lesson business in pro spare time has been directly responsible for developing hundreds of thousands of dollars' worth of individual lessons that never would have been bought were it not for the incentive acquired in the group lesson. Better remember, Beef, that most of that lesson time is time when otherwise you wouldn't be making a nickel. @

Golfdom.com

#### The

## Walking Greenkeeper / VINNIES AND PAULIES WELCOME



"I called the owner to let him know my boss wanted to check out his operation, and to put it mildly, he wasn't thrilled."

JOE GULOTTI, superintendent, Newark (Del.) CC

## It's in the details

y last name is Gulotti with a hard G. It's an Italian name, but I also have a mix of French,
Czechoslovakian and mostly Irish blood. The only truly Italian thing about me is my last name.

I haven't experienced much bigotry because my name ends with a vowel, but in the late 1950s, Italians were refused admittance to our area's elite golf clubs. So, they decided to start their own club where Vinnies and Paulies would be accepted.

I became superintendent of this club in June 2011. I'd like to think my last name had nothing to do with this, but it probably did. Even though the club was still considered Italian, it had become a diverse hangout for the blue-collar set, where plumbers, carpenters and teamsters hit the links.

Unknown to me, in 1995 the club sold 13 acres of the property to the neighboring shopping mall. The mall purchased a corner of the course, hoping to expand someday. That someday came in early

spring 2012.

The club president explained the deal to me, then said we needed to come up with alternative course routing. An architect came actually, a good friend of mine — and his rerouting idea was creative. The problem was money. These old Italians didn't want to come off the loot, so they decided this project would be accomplished in-house.

As you can guess, I thought this was a bad idea. One of the board members was an architect. Not a golf course architect, or even a landscape architect, but a building architect. I guess in his mind, this qualified him to redesign the golf course. His first couple of sketches were terrible. I think he colored the drawings with crayons, and his design broke numerous cardinal sins of

golf course architecture.

To save the club from architectural disaster, I brainstormed ideas for a better solution. I really struggled at first, but muses eventually touched my soul, and an alternative plan to the Crayola kid's wackness coalesced.

Fortunately, the board agreed that my rerouting scheme was spot on. It consisted of building four new tees and one green. Construction would begin in early fall of 2012, and I was genuinely stoked to be billed as an actual golf course architect. It did wonders for my ego.

I planned to use quality materials, and USGA-spec sand for the green was a priority. But it's hard to tell an old Italian board member who owns a sand pit that his product isn't speccing up. He was adamant we use his

sand (to save money), and as hard I tried to convince him otherwise, we ended up using his sand.

Despite the old Italian's nonspec sand, I did have a say in the organic component. I tried to mimic the soil conditions of our other greens, which were constructed in the native soil push-up style. Consultants were on-site, and we decided on a particular company to deliver the organic material.

It was all set until our Italian board member wanted to see the operation of the organic matter company. I called the owner to let him know my boss wanted to check out his operation, and to put it mildly, he wasn't thrilled.

He used some pretty unflattering terms to describe my old Italian friend, basically saying that it would be a cold day in hell before he allowed some (insert derogatory Italian adjective here) to see his operation.

I was flabbergasted, but not for reasons you might expect. Being 25 percent Italian, I wasn't put off by his bigotry. His intolerance wasn't surprising, but this guy, who we were ready to do business with, did not remember that my last name is Gulotti (with a hard G).

Needless to say, we didn't use this company. It's in the details, son, and this guy totally blew it.  $\Theta$ 

Joe Gulotti (hardg43@gmail.com) is the superintendent at Newark (Del.) CC. To read his blog, visit thewalkinggreenkeeper.com.

# Corteva Agriscience gets to the heart of the matter

Bringing together three businesses into one, Corteva promises to enrich the lives of its customers | **By Leon Gordon** 

oming next month is the official launch of a new name in the game of turf care: Corteva Agriscience, bringing together DuPont Crop Protection, DuPont Pioneer and Dow AgroSciences.

And just what exactly is in the name of Corteva (pronounced kohr-'teh-vah)? According to Karan Bansal, T&O category lead for the new company, the name comes

from the words "cor," meaning "heart" in Latin, and "teva," meaning "nature" in Hebrew

"That name was the winner because at the end of the day, it explains what we are trying to do as an organization," Bansal says. "It's about the 'heart of nature.' We care about the soil; we care about the land."

With an expansive pipeline of products already available and new technologies only months away, the entire team at Corteva Agriscience, Agriculture Division of DowDuPont is eagerly anticipating the future of the newly monikered company, Bansal says.

KARAN BANSAL

"It's super exciting going from Dow AgroSciences, where we were very strong in crop protection, to becoming

Corteva, where we have a balanced portfolio," Bansal says.
"This is the world's leading pure-play agricultural company
— I consider myself lucky to be a part of it."

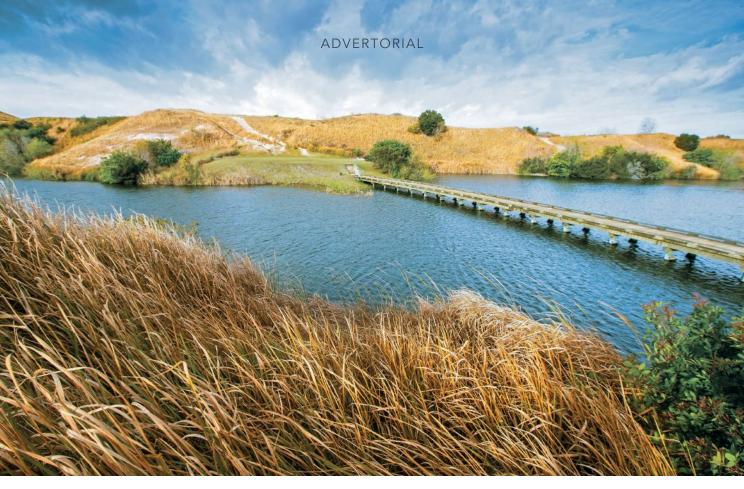
#### A BIG WIN FOR SUPERINTENDENTS

Justin Stewart, Corteva's eastern sales leader, T&O business, is similarly thrilled with the new company, saying it allows him and his team to "bring the rich heritage of all three companies to the table and enrich the lives of these consumers for generations to come." As a former superintendent himself, Stewart wants to help turf managers be more efficient in their jobs and in their lives.

"I know what it's like. I've worked the hours. Quite frankly, working for a smaller course, at times I was making a buck an hour — superintendents know what I mean," Stewart says. "There was no shortage of working on the course, of checking in on things. Anything I can do, anything my team can do, anything Corteva can do to make that job easier, to get better control and consistency and save superintendents time and effort, is a big win."

Stewart, who has a master's in plant pathology from Purdue University, worked as a superintendent in Indiana early in his career. He recalls relying on Dimension specialty





herbicide for preemergent crabgrass control in those days, and he still cherishes the product today.

Forgive the pun, but Stewart says Corteva is more multidimensional now than its predecessors were when he was a superintendent.

"Not only do we have our core portfolio, but we also

are waiting on EPA registration on two

game-changing products: GameOn and Relzar specialty herbicides. And we now have a product for native areas, NativeKlean herbicide," Stewart says. "These products will bring key benefits to our customers — weed control, no temperature restrictions and turf safety —

JUSTIN STEWART key benefits that our market hasn't seen yet. It's exciting not just for 2019 going into 2020, but also for the next five years. Nothing is off the table."

#### THE PERFECT TIMING

Corteva Agriscience formally launches on June 1. To celebrate this launch, Corteva has partnered with *Golfdom* in sponsoring the magazine's coverage of the 2019 U.S. Open at Pebble Beach Golf Links from June 10-16. Visit **Golfdom.com** and follow along on Twitter (@Golfdom)

and on Facebook for complete coverage of Pebble Beach's maintenance efforts, as well as for opportunities to win U.S. Open gear.

As that June 1 date quickly approaches, Bansal says his team gets more and more excited to celebrate the formal launch. The golf market is robust, Bansal says, and the timing couldn't be better.

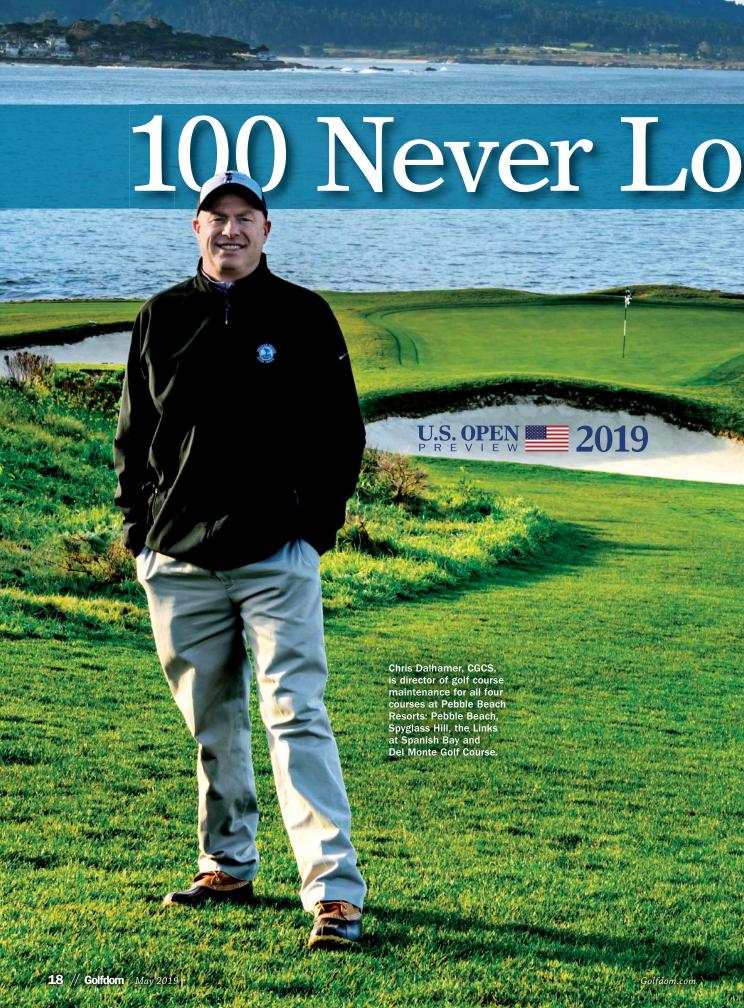
"For the golf course superintendent, what it means is Corteva is here to bring them innovative solutions to make their lives easier," Bansal says. "That's our objective. In the environment that we're in, with the current labor conditions and regulatory restrictions, we want to make safer chemistries for our superintendent customers. One thing that stands out to me in conversations with our customers, especially at our field days — they say, 'Wow, (Corteva) is bringing out products that no one else has.' To see that excitement makes us excited."

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# oked So Good

Six events in 11 months? It's still a dream come true for the tightknit crew at Pebble Beach Golf Links

BY SETH JONES

It's been nine years since Pebble Beach Golf Links hosted the U.S. Open, but somehow it doesn't seem so long ago. Time flies in Pebble Beach, Calif., something to which longtime assistant superintendent Jack Holt can attest.

"It's been 38 years I've worked here, going on 39," Holt says. "And I couldn't tell you how that happened — it goes by so quickly. It's unbelievable. This will be my fifth U.S. Open."

Rick Pieper will celebrate his 39th year working for Pebble Beach Resorts this month. He started out as a "cart man" at Spyglass Hill before making the switch to the maintenance team when he learned he could go from \$4 an hour to \$6 an hour. After a few years on the crew, he fell in love with the gardener at Spyglass Hill, but she told him she wouldn't date a coworker (or a married man), so Pieper asked the superin-

tendent if he could get a transfer.

He got the transfer. Within two weeks, he was divorced, working at Pebble Beach and had a new girlfriend.

"It was at the beginning of getting ready for the '92 U.S. Open ... but I also worked the '82 U.S. Open," Pieper recalls. "We came over from Spyglass to help them out, because back then, the (U.S.) Open had the crew and maybe about four other extra guys. There were only about 15, 16 guys that would go out and get the course ready for the '82 U.S. Open!"

Continued on page 20

Continued from page 19

It will be a crew of 140 maintaining the course the week of the 2019 U.S. Open — 40 members of the Pebble Beach crew plus 100 volunteers. Quite an upgrade from what Pieper remembers in 1982. But some things never change — he's still working U.S. Opens at one of the finest golf courses in the world, and yes, he's still married to that gardener.

"The opportunity to take care of

a historic property and to have great

ownership that puts the resources into

#### Shine on, you crazy diamond

The 2019 U.S. Open begins June 13 and is the ultimate way for the course to celebrate its 100th anniversary. This will be the sixth U.S. Open played at Pebble Beach, with previous U.S. Opens at the course including the 1972, 1982, 1992, 2000 and 2010 tournaments. The Open will return again in 2027, and the Women's U.S. Open will be played there in 2023.

It's all par for the course for the diamond of American golf that is Pebble Beach. Chris Dalhamer, CGCS, is director of golf course maintenance for all four courses at Pebble Beach Resorts. Pebble Beach, Spyglass Hill, the Links at Spanish Bay and Del Monte Golf Course all fall under his jurisdiction.

Dalhamer says that although it sometimes can be a challenge for him and his staff, it never gets old caring for a "national treasure."

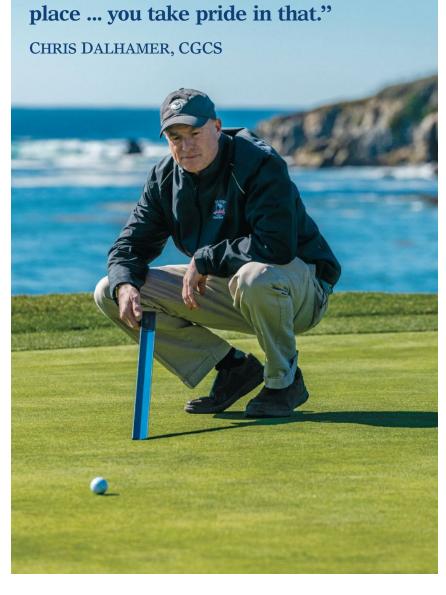
"The opportunity to take care of a historic property and to have great ownership that puts the resources into the place ... you take pride in that," Dalhamer says. "You take pride in a national treasure, making sure you're shining it. The day you don't, you have to move on. We look at it as an honor. The footprint of this property is very special."

Dalhamer started working at Pebble Beach as an intern in 1993. A native of the area, he fell in love with golf maintenance as a high school kid working on the crew at Poppy Hills Golf Course in Pebble Beach. He graduated from Chico State University, Chico, Calif., with a degree in business and a minor in plant science. He participated in the Northern California Golf Association's internship program, which got him the internship at Pebble Beach. He was 18 months into the internship when the superintendent at the time, Mark Michaud, promoted him to assistant superintendent, a job he held for five years.

Dalhamer left to take the superintendent position at Carmel Valley Ranch Golf Club in Carmel Valley, Calif. When Troon Golf took over management of Carmel Valley, Dalhamer was promoted to one of Troon's senior agronomist for the West Coast. A year later, Spyglass Hill, a course he's always loved, called. Three years into his tenure as superintendent at Spyglass, the position at Pebble Beach opened up, and Dalhamer has never looked back.

And, how could he? With so many events on the books, there's no time to look back.

Continued on page 22





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



Dalhamer takes a hands-on approach when it comes to keeping the course in pristine condition.

Continued from page 20

"From August of 2018, we're going to have two USGA events all the way to June of 2019," Dalhamer says. "And then two PGA (Tour) events plus another tournament ... we're always in tournament mode. That's a solid 10 months of tournament-mode building, breaking down, getting prepped."

Assistant Superintendent Bubba Wright, who is in charge of



**Bubba Wright** 

managing the crew, calls it a "great opportunity," and says the tightness of the crew makes it all work.

"It's been a huge year for us. You look back to the U.S. Amateur (August of last year), (then) the week after that we had the Concours d'Elegance, then a month later the (PURE Insurance Championship impacting) First Tee, then the TaylorMade

(Pebble Beach Invitational), then the AT&T (Pro-Am)," Wright says. "We've had a special nine months."

#### Welcome to the machine

Thankfully, Pebble Beach has the tools — and the talent — to handle such a workload.

"We've got a great staff, and Chris has been a great mentor," Wright says. "It's a fast-paced environment, but the guys here are a huge part of what keeps me going every day. These guys are essentially like family."

Charlie Almony comes from a superintendent family, with his grandfather, father and uncle all superintendents. He started at



Pebble Beach in 2008, taking a step back from his previous job to work at the famed course. He's now moved up to crew leader, and

says Dalhamer is the best superintendent he has ever worked for (sorry, dad, grandpa and uncle).

"(Dalhamer) is out on the course with us, super hands on. We work side-by-side every morning when we're on the course watering," Almony says. "He cares about the crew, cares about the people, and it shows in the workplace ... I want to stay at Pebble Beach for the rest of my life. I love this place."



Charlie Almony

Jon Rybicki has been the mechanic at Pebble Beach Golf Links  ${\it Continued\ on\ page\ 24}$ 



"Roller, mower and irrigation technologies — those are the top three things making our lives better," Dalhamer says.

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 $Continued\ from\ page\ 23$ 

for the last five years. He has experience both as a mechanic and as an assistant superintendent, but what was new to him was the fury with which the Pebble Beach crew attacks a task.

"It's just a different culture; it's a machine," Rybicki says. "When we go out to do something, we put all our effort into it and get it done quick, and a lot of golf courses aren't like that — you take your time. That's the biggest difference between a normal crew and this crew."

Pebble Beach operates Jacobsen's Eclipse II walking greensmowers, Jacobsen 550 fairway mowers and Jacobsen AR5 rotary mowers. The course installed a new Rain Bird IC irrigation system after the 2010 U.S. Open. "The ability to manage irrigation with iPads and phones is incredible," Dalhamer says. "We have single-head control. Water here on the peninsula, and really all of California, is a big resource, so to manage it to the degree that we're managing it with soil sensors and (to be) able to alter it at a whim is huge."

While the course will play akin to the 2010 U.S. Open, one change will be the gained knowledge the course staff brings to the tournament since 2010, especially on the *Poa annua* greens. The United States Golf Association partnered with Pebble

Beach to study the use of wetting agents on the course, hoping to have the greens slick yet attractive in June.

"We've worked in conjunction with the USGA. They funded trials on our greens to see how we can get them as dry and as firm as possible but consistently rolling and not aesthetically displeasing," Dalhamer says. "I'm not going to say it's going to be perfectly green, but it's going to be dried down to a level that is tournament championship conditions, and not displeasing to the eye."

The U.S. Open. The PGA Tour. The Champions Tour. Celebrity golfers. Golfers enjoying a once-in-a-lifetime golf experience. Heck, a famous car show.

It's nothing new to Dalhamer and his crew, but the course remains special every day.

"We want to exceed expectations each and every day," Dalhamer says. "We tell that to our crew all the time — the people playing out here are having a once-in-alifetime experience. That's our Pebble Beach motto. The day you forget that is the day you start losing ground." •

See more on page 26

"We've worked in conjunction with the USGA. They funded trials on our greens to see how we can get them as dry and as firm as possible ..."

CHRIS DALHAMER, CGCS



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## Pebble personalities

The people who make Pebble Beach Golf Links shine are as interesting as the course itself

#### **Steven Spatafore**

ASSISTANT-IN-TRAINING

It's fair to say the 2008 AT&T Pebble Beach Pro-Am changed the life of then-12-year-old Steven Spatafore.

Not because he had a chance encounter



Steven Spatafore

years before Spatafore was born.

ner, Ray Romano or Kevin James. Huey Lewis could have walked right by him and Spatafore wouldn't have recognized him — Sports came out in 1983, 13

with Kevin Cost-

To Spatafore, the celebrities at Pebble Beach were the men and women on the grounds crew. More than getting any autograph, he just really, really wanted to put the pin in the cup.

Spatafore's father, Pete, brought his young golf-nut son to the AT&T Pro-Am as a reward for his good grades in school. They arrived plenty early at the course, in time to see the crew changing cups. Young Steven asked then Pebble Beach Assistant Superintendent Billy Hausch if he could put the pin in the cup. Hausch obliged.

On the next hole, Hausch spotted Spatafore and waved him down. This time, he gave him a lesson on how to cut and

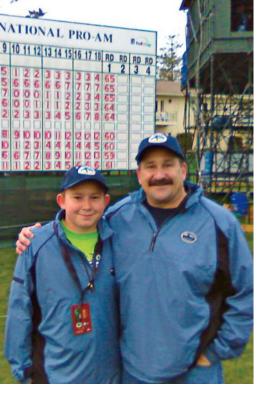


change a cup. Spatafore asked Hausch, "You get paid to do this?" to which Hausch replied, "Absolutely."

After pleasantries were exchanged and Hausch explained a little more about











From L to R: Steven Spatafore with dad Pete Spatafore in 2010, with PGA Tour rules official Jon Brendle in 2014, with dad in 2016.

the work that goes into maintaining a golf course, Pete Spatafore and Hausch exchanged contact information. Hausch

mentioned offhand that the two should come play the course sometime as his guest. "Dad gave me the classic, 'Oh, he was just being polite," Spatafore recalls. "But that summer, he called my dad and said, Continued on page 28



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### U.S. OPEN 2019

Continued from page 27

'No, I really mean it, your son seems really interested in golf maintenance."

The rest, as they say, is history. The next summer, 13-year-old Steven Spatafore found himself on the AT&T Pro-Am volunteer crew, raking bunkers. Year after year he'd return, each year the job getting better, from filling divots to mowing greens, then data collection. Spatafore went to college at Cal-Poly San Luis Obispo, graduating with a B.S. in agricultural and environmental plant science with a concentration in turfgrass and sports fields.

Spatafore had three internships — Valhalla GC in Louisville, Ky., Pasatiempo in Santa Cruz, Calif., and Cypress Point. Now he's 23, engaged to his college sweetheart and "blessed" to be working at a job he loves. Once a competitive golfer, he realizes there was no looking back from that moment he placed the pin a decade ago at Pebble.



"At Valhalla, I was working 90 hours a week in 100-degree weather growing bent-grass," Spatafore says. "And I left there still loving this career. My takeaway was, if I can do that and still love it, then yes ... I found the right career."

Spatafore and Hausch still stay in regular contact. Pete Spatafore is proud of the career his son has found, but a little upset the two haven't played Pebble Beach together since Steven got his job there. (That's OK, the two played Cypress Point together, a day Steven Spatafore describes as one of the best days of his life.)

"I've been very blessed in the things people have done for me to get to where I am — from the golf courses I've worked at, to a fiancée who supports my dream unconditionally," Spatafore says. "I have a love of Pebble Beach deep in my heart. There's just something about the atmosphere — it just never loses its shine. There are some tough days of hard work ... but you can't ever have too bad of a day at Pebble Beach."

### Jack Holt ASSISTANT SUPERINTENDENT

For nearly the last four decades, Jack Holt has rolled out of bed, laced up the work boots and reported to Pebble Beach Golf Links for work. Somehow, he says, it's become a 38-year career, going on 39. Softspoken, Holt knows this will be his last U.S. Open working at Pebble Beach. He's ready to see some new scenery. The sunrises at Pebble Beach are incomparable, but the sunsets of a retirement well deserved are even prettier.

Holt and his wife bought a retirement home in northern California, five acres, with a trout stream. He doesn't know if the dogs will miss chasing the geese, but at least they have the land to kick around. And he knows this gem of a golf property will be in good hands.

"(The younger generation) is as excited, or more excited, than any of us older guys," Holt says. "It's not the same every time for us, but to them, it's the unknown. It's fun to watch them, to see that enthusiasm. It's



Assistant Superintendent Jack Holt will soon retire after nearly four decades of service at Pebble Beach.

a great opportunity for them, too."

Holt has seen the course change for the better over the last four decades. He's also seen the surrounding community change ... perhaps for the worse.

"The Peninsula is not the place it was ... I've lived here my whole life," Holt says. "It was a sleepy fishing village when I was young. Now there's a lot of traffic, a lot of tourists. It's not the same place."

Holt is mostly ready to get back to those sleepy days. He's ready to say goodbye to the traffic, for sure. But like most people as retirement stares them down, he's wondering if he'll get bored with it.

"As you get closer to the reality of it, you do start to wonder. How much can I fish, you know? But I think I'll make the adjustment," he says. "It's getting up in the morning every morning. Instead of bouncing out of bed, if it's a little cold, I'm more likely to roll over closer to the wife to stay warm. I still enjoy coming to work early every morning. I don't know ... I guess as you get older, you get to a point where you say, 'I'm ready to do something different."

#### Rick Pieper

GREENKEEPER

It was the 50-percent pay increase that got Rick Pieper into the maintenance game. And it was love that got him to Pebble Beach (see main feature.)

Forty-one years ago, Pieper was a "cart man" at Spyglass Hill when a friend on the grounds crew told him he needed to switch jobs if he wanted to make the big bucks. "At the time, I was making four bucks an hour, and he said, 'We make \$6 an hour out here as greenskeepers," Pieper recalls. "I wanted me some of that."

Pieper has now been at Pebble Beach for more than 30 years and has seen some amazing golf along the way. His perspective on the evolution of championship golf is unique — his memories of the 1982 U.S. Open at Pebble Beach still are vivid.

"We came over from Spyglass to help out (the Pebble Beach crew). Back then, they had the crew and about four other guys," Pieper says. "There were only about 15, 16 guys that would go out and get the course ready for the '82 U.S. Open! In '92, I bet we didn't have 30 people working on the crew. It just wasn't that big. The 2000

U.S. Open was when he had 40 people working. Then in 2010, we had 100 volunteers! That was quite a change."

Pieper marvels at the advancements the industry has



Rick Pieper

made over the last 40 years.

"We didn't have the technology to get the course in such great shape that we do now, with the fertilization programs and the technology," Pieper says. "The equipment has changed so much — we can split hairs now with mowers, and we have a mechanic that takes care of the equipment every day. Back then, we didn't even have a full-time mechanic at the shop! Now, if you have a problem, the mechanic comes to you."

For Pieper, the work has been good for one primary reason: the view and the happiness it brings everyone.

"I'm always around people who are really happy to be here. Not very often are our customers grumpy. That's really cool because a lot of people have jobs where they deal with unhappy people," Pieper says. "I had a guy come up to me a year or so ago. I shut down my mower on No. 17 to let him hit ... he comes up to me and he says, 'You do know, don't you?' I said, 'Know what?' He goes, 'You have the greatest job in the world.' I said, 'Oh yes, I do know that.' He said, 'You get it.' Every day, I look around first thing in the morning when it's a clear morning like we had today, and it's just gorgeous. Even the rainy, windy days are pretty cool." **G** 



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# Got a goose on the lose?

Meet the superintendent handler of the Gander Disbander

BY ED HISCOCK

lmost 10 years ago, local engineer Rick Johnson asked Dan Marco, CGCS at Ruth Lake Country Club in the western Chicago suburb of Hinsdale, Ill., if he could use the property as a testing site for solar-powered laser units to deter geese.

At first, Marco thought it was another "hocus-pocus-type device" that would never work. "I said, 'Rick, I've seen every goose device in the world, and none have worked, but if you want to come out here and try it out, I'm all for it.' I thought it would never work, but I had a huge geese problem."

As the tests went on, however, Marco started to see fewer geese on the course. Of greater interest to him, though, were the significantly fewer goose *droppings* where the units were placed.

"He came out and started putting these

different devices on the course (including floating in ponds)," Marco says. "He'd go out in a boat — they were red lasers at the time — and I'd walk the course and I'd say, 'Where are all the geese? This is actually working."

Throughout the years of testing, Marco developed a relationship with Johnson, who owned a local Jacobsen distributorship. Eventually, Johnson started talking

about retirement.

"Rick has it out there for five years," Marco remembers. "He basically was a one-man show, and he was getting up there in years and going to retire. But I



Dan Marco

said, 'I hate to see this technology go away, could I maybe buy the patent off you?'"

And that's exactly what the longtime

superintendent did, along with partner Dave Anderson.

Anderson, a consultant who had focused mainly on the TDR soil-moisture device for Spectrum Technologies, had recently retired and was looking for a new project. Further developing a solar-powered, laser-driven goose deterrent fit the bill. The new company took the name Verde Technical Solutions.

"I got really lucky," Marco says. Anderson lived behind the 12th tee at Ruth Lake CC, "and he had more of the technical end of it, and we changed (Johnson's) device around — we put a green laser in instead of red. It's been well documented that geese hate green laser light. A lot of superintendents have these green pens that they use to lase the geese during the day."

The partners dubbed the device the Gander Disbander. "We've had them out in

Continued on page 32

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 20" head will come with one of 3 handle sizes: 54" Aluminum, 60" Green Gator Grip, or 72" Green Gator Grip

# BECONE A BUNKER RAKE BUFF



#### // WILD GOOSE CHASE

Continued from page 30

the field for two years," Marco says, noting that it's been a word-of-mouth product up to now. "And we've had some really good feedback. We just took on some distribution (Pompano Beach, Fla.-based Precision USA), so we're excited about it." Precision USA highlighted the product at its booth at the recent Golf Industry Show in San Diego.

"We have about 60 courses around the country," Marco notes. "We sold in Arizona; we sold our first international unit — maybe — to Canada. There's a lot of interest in Carolina, of course, and

In many cases, land-based flashers

that surround ponds.

can be placed on top of hazard stakes



around Chicago where I'm from, which I guess is low-hanging fruit. I have a lot of connections and a lot of friends. They've tried it and liked it. We're also in Arkansas, so we're spreading our wings a little bit."

#### Strobing over your pond

Asked how to describe his product, Marco says it's pretty straightforward.

"It's a strobing green laser that shoots across your pond," he says. "There's a floating buoy that sits in the middle of your pond (anchored to the lake bottom by a cable — the anchor and cable cost less than \$20), and this green laser shoots across 200 yards in every direction.

"What superintendents have liked about it is that when they leave for the day — because this comes on at dusk — the

The green laser in the land-based and floating devices spooks geese, causing them to roost elsewhere.

geese fly in to roost overnight, this kicks on every seven minutes for seven minutes, flashes throughout the night and spooks them off the golf course. The droppings go way down, and that's the biggest thing. We also have a version where you can put it on land. Let's say you have a driving range that's flat where geese congregate - it works there, too."

And not wanting to come off as discriminating against man's best friend, Marco adds, "I love the dog services and the dogs, and I don't want to take away from that — and superintendents probably will always have them — but when you have to have an outside firm come in and you're spending a lot of money, this is a way more economical solution."

Continued on page 34

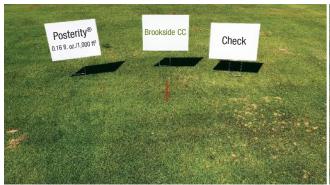




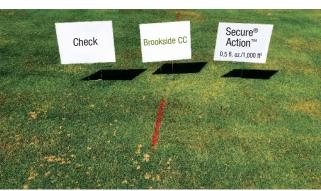
**32** // **Golfdom** *May* 2019 Golfdom.com

#### CONDITION. PERFORM. RECOVER.

# How timing equals savings for Brookside Golf and Country Club







Secure Action test plot. Visit GreenCastOnline.com/SecureAction for additional data and rates

arl Wittenauer, CGCS at Brookside Golf & Country Club in Columbus, Ohio, knows that timing is everything. Take his role as superintendent, for example — three months after accepting the assistant superintendent job at the course, the superintendent

position opened up, presenting him with a perfect opportunity to take the reins.

Armed with 30-plus years of knowledge of Brookside, Wittenauer knows all too well that timing is also key when it comes to controlling the No. 1 issue he faces on fairways: dollar spot.

"We're constantly fighting dollar spot, and if you're not on a two-week program, it can be hard to control," he says.

Last year, he was presented with an option to change that way of thinking. Syngenta Technical Manager Mike Agnew, Ph.D., and Territory Manager Gregg Schaner approached Wittenauer about hosting a trial of Posterity and Secure Action fungicides.

The first application took place in early June — the heart of dollar spot season, according to Wittenauer — with

Posterity being applied at a rate of 0.16 fl. oz./1,000 ft<sup>2</sup> on one 10,000 ft<sup>2</sup> plot, Secure Action applied at 0.5 fl. oz./1,000 ft<sup>2</sup> in another and a small strip with no treatment as the control.

The team let the trial go for five weeks, and at the end, as no surprise to the Brookside crew, the control plot

was covered in dollar spot. However, the plot treated with Secure Action had minimal breakthrough of dollar spot, and the one with Posterity had even less. Wittenauer recalled.

After the five-week mark, the crew applied the second application, discovering how

both products worked on a curative basis as well. After cleaning up the area, the areas were protected for another four to five weeks.

**Carl Wittenauer** 

The extended protection equals big savings for Wittenauer and his course.

"If you do two applications of Posterity, you could possibly eliminate one whole spray somewhere, maybe even two, resulting in significant savings for someone on a tight budget," he says.

He has two applications of Posterity scheduled for his 2019 program. "I feel

confident recommending Posterity to other superintendents," Wittenauer says.

Staying informed about the latest developments in dollar spot management is also key, which is why Syngenta created its Dollar Spot Solutions site at GreenCastOnline.com/DollarSpot. This website features dollar spot alerts based on the Smith-Kerns dollar spot model. Superintendents can sign up to receive texts or emails that will notify them five days before a course is predicted to reach a 20 percent risk of developing dollar spot, allowing them to plan their sprays accordingly.

"If you let it get in front of you, it will be a challenge for the rest of the season," Wittenauer warns. Wittenauer recently signed up for the tool and completed his first Posterity application for the season. "If you can have an indicator that it's time or getting close, that is a great tool."

For additional trial data and to sign up

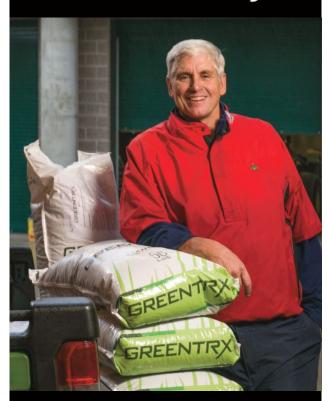


for dollar spot alerts based on the Smith-Kerns model, visit **GreenCastOnline. com/DollarSpot** or scan the QR code.

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#### // WILD GOOSE CHASE

Continued from page 32

The number of the land-based "flashers" and in-pond "floaters" a superintendent needs is based on the course's terrain, Marco says. "It depends on how big your lake is. If the lake or pond is more winding, you might have to have a few because it's just going to shoot straight. If you have an open lake, it shoots far, but it's still safe for animal and human viewing. For the land-based product, if you have hazard stakes around your pond, you can plop it on top of the hazard stakes."

The company has a number of testimonials from superintendents and some product love from USGA's *Course Care* publication, which noted that the product "improves upon handheld versions by mounting the laser on a floating doughnut placed in the middle of a lake ... The technology requires minimal power and no moving parts. The green laser beams are only observable during the early morning, late evening and nighttime."

So, what's it like being a full-time superintendent while trying to get a new business off the ground?

"It's a lot of work at home at night after dinner," Marco says.
"My wife's watching something on Netflix, and I'm on the computer typing and doing emails. It's just learning how to manage my time where I'm not affecting my job at all."

Marco says the company is working on other devices that are technology driven but simple to use. He hopes to have them ready next summer and production ready next fall.

By which, Marco presumably means devices that will help him, among other superintendents, like the Gander Disbander helped him solve his own goose problem at Ruth Lake CC.

"It's a question of trying to build things that will help me where I'm at," he notes. "And if it helps me, maybe it'll help someone else."  $\bullet$ 

A gander-free — and droppings-free — No. 10 at Ruth Lake CC.



TOHS HIGH / JOHNSON THE ME HOW SHEET OF OTOTAL

34 // Golfdom May 2019 Golfdom.com



# Super Science

// NO MORE COARSE ON THE COURSE (GREENS)

### REMOVING COARSE TOPDRESSING SAND FROM GREENS

By Hui Chen and James Murphy, Ph.D.

uperintendents use topdressing to manage thatch accumulation and maintain smooth putting green surfaces. However, they often avoid topdressing during the growing season because residual coarse sand may interfere with play and dull mower blades.

A field study was initiated in May 2016 on 20-month-old Shark creeping bentgrass (Agrostis stolonifera) turf to determine the effects of 0.5-mm sand topdressing (lacking coarse and very coarse sand) and core cultivation on the surface physical properties of putting green turf. Evaluated factors were sand size (medium-coarse, medium-fine or fine-medium) and rate (50 or 100 lbs./1,000 sq. ft./2 weeks) of topdressing and cultivation (noncored or cored plus backfill of coring holes with medium-coarse sand twice per year).



Application of sand topdressing treatments.

We measured volumetric water content (VWC) of plots at the 0- to 1.5-inch depth zone on 70 dates from May to October 2018. The effect of sand topdressing size on VWC depended on whether plots were core cultivated. Without core cultivation, the VWC of plots topdressed with fine-medium sand was 3.5 percent to 8.4 percent greater than plots topdressed with medium-coarse or medium-fine sand. Core cultivation greatly diminished this difference among sand sizes; VWC

among sand sizes was statistically similar on 40 out of 70 measurement dates.

When we observed differences among plots topdressed with fine-medium versus medium-coarse and medium-fine sand, VWC was different by only 1.1 percent to 3.2 percent. Thus, core cultivation and backfilling of holes with medium-coarse sand was effective at producing a drier surface.

Topdressing with medium-fine sand resulted in a similar surface wetness as topdressing with medium-coarse sand and greatly reduced the amount of sand removed with mowing. Topdressing with the fine-medium sand also reduced interference with mowing but produced a much wetter surface because of the substantial increase in fine and very fine particles in the mat layer. @

Hui Chen and James Murphy, Ph.D. are at Rutgers University. You may contact Hui Chen at hc508@rutgers.edu for more information.

#### **NEWS UPDATES**

#### ADVANCED TURF SOLUTIONS PARTNERS WITH PREMIER SAND **MANUFACTURER**

Advanced Turf Solutions is now an exclusive partner of The Hayden Group, an Arkansasbased company that manufactures Premier golf course sand. Customers of Advanced Turf located in Missouri, Illinois, Kentucky, Tennessee, Indiana and eastern Kansas will now be able to purchase Premier White and Premier Play bunker sand.

The Hayden Group's bunker sands meet the highest level of industry standards. The sands address common issues faced by golf course superintendents such as drainage problems, playability and ease of maintenance, according to the company.

Premier White is a bright white golf course sand consisting of manufactured, crush quartz. This Tour play-preferred variety has a clean and consistent finish, a great infiltration rate and a high penetrometer rating. Premier Play is a cutting-edge hybrid blend of manufactured material with natural grain. This variety is ideal for remodeling a golf course and has a good infiltration rate plus a good penetrometer rating.

"We are excited to partner with Advanced Turf Solutions to provide their customers with our standard of high-quality sand and excellent service," said Chief Growth Officer Michael Collins.

HALF-LIFE IS THE TIME REQUIRED FOR A SUBSTANCE TO BE BROKEN DOWN INTO HALF THE ORIGINAL AMOUNT. IT IS A MEASURE OF ITS PERSISTENCE ..."

Rick Latin. Ph.D. (see story on page 36) //NOT THE END-ALL OF FUNGICIDE RESISTANCE RISK?

# Half-life is not the whole story

By Rick Latin, Ph.D.

here's been a fair amount of chatter lately about fungicide half-life and what it means for disease control and fungicide resistance risk. Half-life is the time required for a substance to be broken down into half the original amount. It is a measure of its persistence in the environment.

Table 1 includes published half-life estimates for selected fungicides in aerobic soil and water. Half-life in soil and water are not related, and they impact different segments of a product's journey from the package to the turf surface.

Half-life in water is relevant to fungicide stability in the spray tank and may be influenced by water quality. Breakdown in the spray tank often is associated with high pH (alkaline hydrolysis). The bottom line is that alkaline hydrolysis is not an issue with most modern fungicides (they are listed as "stable" in Table 1). For those few fungicides where it may be a concern, the hydrolysis acts on only the small soluble fraction of fungicide.

Half-life in aerobic soil is pertinent to fungicide behavior within the turf profile. Here is where mistaken assumptions may lead to unreasonable expectations regarding fungicide performance. If a fungicide has a long half-life, should superintendents expect extended periods of disease control? Does a greater soil half-life value mean that pathogen populations will be exposed to the active ingredient for a longer period of time, and therefore, is there increased selection pressure for fungicide-resistant strains? Explanations to these questions are based on how half-life is defined and the very nature of the degradation process.

#### TABLE 1

#### Fungicides and half-life values in aerobic soil and water

Fungicide	Basic manufacturer product name	Aerobic soil half-life (days) <sup>1</sup>	Aqueous half-life (days)¹
azoxystrobin	Heritage	84	Stable
boscalid	Emerald	246	Stable
carbendazim	*	34	350
chloroneb	Teremec	130	Stable
chlorothalonil	Daconil	3.5	29.5
cyazofamid	Segway	10	25
difenoconazole	**	130	Stable
fluazinam	Secure	72	3.6
fludioxonil	Medallion	239	Stable
fluopicolide	**	271	Stable
fluopyram	**	309	Stable
fluoxastrobin	Fame	59	Stable
flutolanil	ProStar	400	Stable
fluxapyroxad	Xzemplar	183	Stable
fosetyl Al	Signature	1	Stable
iprodione	26GT	26	4.5
isofetamid	Kabuto	37	Stable
mancozeb	Fore	1	1.3
mandestrobin	Pinpoint	140	Stable
mefenoxam	Subdue Maxx	36	Stable
metconazole	Tourney	142	Stable
myclobutanil	Eagle	365	Stable
PCNB	Turfcide	210	Stable
penthiopyrad	Velista	121	Stable
propamocarb	Banol	40	Stable
propiconazole	Banner Maxx	72	54
pydiflumetofen	Posterity	2,416	Stable
pyraclostrobin	Insignia	62	Stable
tebuconazole	Torque	365	Stable
thiophanate methyl	3336	1	47
thiram	Spotrete	5	3.5
triadimefon	Bayleton	26	Stable
triadimenol	*	137	Stable
trifloxystrobin	Compass	1	40
triticonazole	Trinity	237	Stable

<sup>&</sup>lt;sup>1</sup> AERU. 2018. PPDB: Pesticide Properties DataBase. Agriculture & Environment Research Unit (AERU) at the University of Hertfordshire. http://sitem.herts.ac.uk/aeru/ppdb/en/index.htm

36 // Golfdom May 2019 Golfdom.com

<sup>\*</sup> Carbendazim is a fungitoxic metabolite in the breakdown of thiophanate-methyl. Triadimenol is a fungitoxic metabolite in the breakdown of triadimefon.

<sup>\*\*</sup> Some fungicides are included as components in combination products.

#### WHAT A LAB SAYS

Half-life is determined in the laboratory by adding fungicide to soil then sampling repeatedly over time. The labs use concentrated solvents to pry every last bit of fungicide from each sample. When 50 percent of the original concentration remains, the lab records half-life. The procedure is relevant to this discussion because not all fungicide detected by laboratory extraction and analysis is accessible in nature by plants and microbes. Once a fungicide finds its way into the soil, some of it remains soluble in the soil water, and some of it binds to organic matter attached to soil particles (Figure 1). The fraction that binds is rendered inactive; it will not affect pathogen growth and will have little or no disease-control capability. The extent of binding is influenced by fungicide attributes and soil properties (more binding occurs where organic matter is high) and tends to strengthen over time. Recorded half-life values like those in Table 1 account for total fungicide, both soluble and bound fractions.

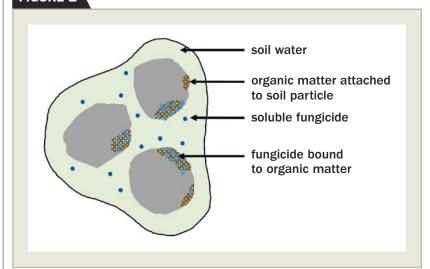
For purposes of disease control, only the amount of fungicide in the soluble fraction is important. The soluble fraction is available to plants and soil microbes, including fungal pathogens. Fungicide in both fractions is subject to breakdown by a combination of physical, chemical and biological forces. Microbial transformation — the breakdown of organic molecules into components utilized for microbial growth — is required for complete degradation of a fungicide into its basic elements.

#### **POSSIBLE OVERESTIMATION**

When interpreted from the perspectives of fungicide efficacy and disease control, published half-life values tend to overestimate the duration of the fungicide's useful presence in the turf profile.

Consider tebuconazole, a popular

#### FIGURE 1



In aerobic soil, some fungicide binds to organic matter associated with soil particles, and some becomes soluble in soil water. The binding inactivates fungicides. Published half-life measurements account for both fractions, but only fungicide in the soluble fraction can affect pathogen growth and result in disease control.

modern DMI fungicide with activity against a broad spectrum of turf pathogens. The estimated half-life of tebuconazole in aerobic soil is 365 days (Table 1). Yet, as effective as it is, superintendents would not expect disease control for a full year, even if they doubled the tebuconazole application rate. That's because its recorded half-life value represents total fungicide, both soluble and bound fractions. Therefore,

it will vary with the fungicide application rate and other factors. However, based on observations of residual disease control with tebuconazole and most other fungicides, efficacy half-life is much closer to a week than a year. Also, since bound fungicide fractions have no inhibitory effect on pathogen growth, the long half-life for tebuconazole (and similar fungicides) does not increase fungicide resistance risk.

"When interpreted from the perspectives of fungicide efficacy and disease control, published half-life values tend to overestimate the duration of the fungicide's useful presence in the turf profile."

despite the fact that its published half-life is 365 days, tebuconazole's "efficacy" half-life is so much shorter.

Efficacy half-life is the time required for efficacy of a given fungicide to be degraded to half that of the original treatment. There are no published standards for efficacy half-life, and

#### WHAT ELSE TO WATCH

Other issues complicate the discussion. Fungicide breakdown is a process involving a sequence of steps starting with the active ingredient molecule, then passing through a series of (mostly nonfungitoxic) metabolites before

Continued on page 38

#### Continued from page 37

complete degradation to CO<sub>2</sub>, H<sub>2</sub>O and inorganic constituents (chlorine, sulfur, nitrogen, etc.).

A few fungicides have breakdown metabolites that are fungitoxic. In the world of turf fungicides, carbendazim and triadimenol are fungitoxic metabolites in the degradation of thiophanate-methyl and triadimefon, respectively. So, while the original active ingredients may not be detected in a sample, metabolites will continue to inhibit fungal growth. Research suggests that such metabolites are short-lived and do not contribute much to overall treatment efficacy.

Also, published half-life estimates differ depending on testing methodology. Because of refinements in procedures and instrumentation, values published in 2000 can differ substantially from values determined 15 years later. Half-life values sometimes are expressed as a range to reflect environmental variables that influence persistence over time. Finally, a small portion of fungicide bound in the turf profile may become unbound (desorbed) over time as microbes digest organic matter. Researchers have completed little desorption research with fungicides, but results of studies in bioremediation of other pesticide pollutants suggest that it has negligible practical value.

#### LOOKING MORE CLOSELY

It's a good thing superintendents and other turf professionals are discussing fungicides more deeply than merely what and when to spray. Understanding how and why fungicides work is essential to making decisions from an informed perspective.

However, there usually are no simple explanations for fungicide behavior in the turf profile. Interpretations of fungicide half-life based on partial understanding rarely tell the whole story. The take-home message distills down to two points: Long half-life

values do not translate to extended periods of disease control, and they do not suggest increased risk for the development of fungicide-resistant pathogen populations. **©** 

Rick Latin, Ph.D., is a professor emeritus of Plant Pathology at Purdue University, where he conducted extensive research on all aspects of turfgrass disease management and control. You may reach Rick at rick@rlturf.com for more information.

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#### Ad Index

#### Companies featured in this issue

ADVERTISER	PAGE
1st Products	26
Anuvia Plant Nutrients	34
Aquatrols	41
Buffalo Turbine	4
Corteva Agriscience	16-17
Frost Inc.	26
John Deere	7
Kafka Granite	CV3
Mi-T-MCorp.	29
PBI/Gordon Corp.	22, 23
Pike Creek Turf, Inc.	28
Plant Food Company, Inc.	4
Progressive Turf Equipment Inc.	27
Quali-Pro	5
Smithco	CV2-p1
Standard Golf Company	31
Syngenta	3, 33
The Andersons	25
Target Specialty Products	CV4
Toro	21
Trigon Turf Sciences	13

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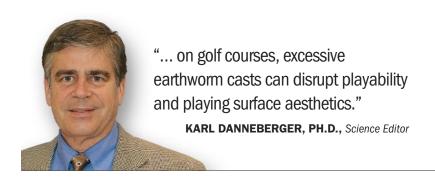
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## As the worm turns

alking across my lawn in May, I feel bumpiness under my feet. Although not visually apparent, I know bumpy turf is a sign of earthworm casts. Helping verify my diagnosis are mole tunnels throughout my lawn from the moles hunting for earthworms as food. Moles crave earthworms so much that they eat the equivalent of their body weight of earthworms in a day.

Earthworms are beneficial to turfgrass systems, producing tunnels through the soil that help reduce soil compaction and let air and water move in and through the soil. Feeding on grass clippings and thatch, earthworms are important in the initial steps of microbial breakdown of plant litter. Dan Potter, Ph.D., at the University of Kentucky, has reported that an acre of turf can support more than a million earthworms that consume more than 4 tons of plant debris.

Earthworms affect turfgrass soil fertility and land worldwide. Commenting on the global adaptation of earthworms, Charles Darwin — in one of his last — papers speculated that almost all the fertile soil in the world passed through the gut of an earthworm. Earthworm activity is desirable and a sign of a healthy soil.

The downside to some, but not all, earthworm feeding is the deposition of their fecal material in small mounds, called casts, on the turf or soil surface. Casts are most evident during cool, wet weather, primarily in fall, but also at

other times of the year.

I'll live with the bumpiness in my lawn caused by the casts through the "shock absorbers" of my forearms on the lawn mower. But on golf courses, excessive earthworm casts can disrupt playability and playing surface aesthetics. Castings cause disruption to ball roll, and traffic can result in a muddy smear over the turf. In some cases that I observed in Europe, golf courses close temporarily because of the excessive mudding and smearing of earthworm casts.

Cultural practices to reduce earthworm casts include using soil-acidifying fertilizers, rolling, topdressing with angular sands or aggregates and removing clippings. Earthworm populations, at least of the casting type, decline with a drop in soil pH. At a pH below 5.0, earthworm populations are low. The use of acidifying fertilizers lowers the pH at the soil surface, reducing earthworm populations.

Rolling on courses to flatten castings was the most popular practice in the late 1800s and early 1900s. Disad-

vantages to rolling, depending on the type of roller, were the potential for soil compaction and the fact that the casts often smeared across the turf, making for a muddy surface.

Heavy topdressing with angular sands or aggregates is believed to agitate earthworms and discourage them from coming to the surface and creating casts. In the early 1900s, greens sometimes were constructed with a cinder layer in the subsurface to discourage earthworms from migrating upward in the green mix.

Recent research studies at the University of Arkansas and other places have looked at light sand topdressing for earthworm-cast suppression. Although preliminary results show variability, it will be interesting to see how these studies pan out.

The results from lowering pH, rolling, topdressing and removing clippings have been inconsistent at best in reducing earthworm casts.

There has been considerable attention paid recently to a naturally occurring plant compound known as saporins for controlling earthworms. Saporins are found in hundreds of plants. However, tea seed meal, a byproduct of tea oil production, is especially high in saporins. Field and laboratory studies have confirmed that saporins from tea seed meal are effective in controlling earthworms. Tea seed meal works as an expellant that causes the earthworms to come to the surface and die.

Earthworms present a dichotomy for golf course superintendents. On one hand, they provide many agronomic benefits to the turf. At the same time, they can cause significant disruption to the playing surface. Balancing earthworm activity on golf courses has been — and will continue to be — an ongoing challenge.

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

# Goosegrass emerging in the mid-Atlantic

Matt Elmore, Ph.D., is a turfgrass weed scientist at Rutgers University. Matt and his team have an extensive weed science research program, and they place an emphasis on understanding goosegrass and its control. You may reach Matt at matthew. elmore@rutgers.edu for more information.

# Explain a little about the life cycle of goosegrass.

In central New Jersey, goose-grass germinates in early May, which is two to four weeks after crabgrass germinates. Our monitoring has shown that goosegrass seed will first germinate when the soil temperature at a 2-inch depth reaches a daily maximum of 75 degrees F. A big flush of goosegrass germination occurs when the soil temperature at a 2-inch depth reaches a daily maximum of 85 degrees F.

We have observed large flushes of goosegrass seed germination in mid-to-late August if the turf thins out. It takes about two months of good growing weather for goosegrass to produce seed, and it's a prolific seed producer.

Goosegrass emergence patterns differ from golf course to golf course. We believe there are a number of goosegrass biotypes that lead to variability in emergence and other characteristics.

Why is goosegrass becoming more of a problem in your area? I'm not really sure, but sev-

eral factors may play a role in goosegrass becoming more of a problem. The duration and intensity of high temperatures in summer have increased, which causes more stress on the coolseason turf and provides good growing conditions for warm-season weeds like goosegrass. Herbicide use patterns have changed. For instance, MSMA is no longer used as a postemergence control for goosegrass, and perhaps more goosegrass now survives to produce seed. And it's possible that goosegrass has developed resistance to commonly used preemergence herbicides that are primarily applied for crabgrass control, such as dithiopyr, pendimethalin and prodiamine.

# How widespread is herbicide-resistant goosegrass, and how does it develop?

In our area, we are uncertain of the extent of herbicideresistant goosegrass and are working to identify and document cases of it. Herbicide-resistant goosegrass develops from long-term repeated use of herbicides with the same mode of ac-

tion. Dithiopyr, pendimethalin and prodiamine all have the same mode of action.

Long-term continuous use of any one herbicide or some rotation of all three can lead to the development of herbicide-resistant goosegrass.

Oxadiazon (Ronstar) has a different mode of action than dithiopyr, pendimethalin and prodiamine and can be used for preemergence control of goosegrass.

Rely on cultural practices to produce a healthy, dense stand of turf and don't be afraid to aerate highly trafficked areas, even if you have applied a preemergence herbicide. This is the best goosegrass control strategy.

# Describe a preemergence herbicide strategy for controlling both crabgrass and goosegrass.

On many golf courses in our area, it's common to find both crabgrass and goosegrass. Keep in mind that dithiopyr, pendimethalin and prodiamine are more effective on crabgrass than goosegrass, and oxadiazon is more effective on goosegrass than crabgrass.

To target crabgrass, apply dithiopyr, pendimethalin or prodiamine prior to crabgrass seed germination. Dithiopyr applications also offer early postemergence

crabgrass control. To target goosegrass, apply oxadiazon three to four weeks after crabgrass seed germinates.

If a superintendent is using oxadiazon for the first time, start in year one by applying it to the most problematic areas to get comfortable with the herbicide. Be sure to use the granular formulation on cool-season grasses and apply it to dry turf.

# Qls there anything else you would like to add?

Focus on improving turfgrass density. If you plan to use a postemergence herbicide to control emerged goosegrass, be sure to treat the goosegrass prior to tillering. Large, tillered goosegrass is difficult to control, especially in creeping bentgrass where herbicide use rates are limited. After using a postemergence herbicide to control goosegrass in midsummer, consider applying a product that contains oxadiazon to prevent additional goosegrass seed from germinating, unless you plan to seed in the fall. @



Clark Throssell, Ph.D., loves to talk turf. Contact him at clarkthrossell@bresnan.net.

**40** // **Golfdom** May 2019

# Starter.





## Unlock Your Turf's True Potential with Zipline Powered by AquaVita Technology

The foundation of any conservation program begins with making the most of what is already available. Zipline powered by AquaVita Technology contains a proprietary technology that unlocks existing bound nutritional elements in the soil, making them more available to the plant. A Zipline program promotes consistent playing through balanced hydration and soil resource enhancement.

To learn more about Zipline powered by AquaVita Technology visit: **Aquatrols.com/Zipline** 



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# The Shop // MUST-HAVE NEW PRODUCTS







3

#### 1 Toro Outcross 9060

The Outcross 9060 by **TORO** is a turf-friendly machine that delivers the benefits of both a tractor and a superduty utility vehicle, the company says. The vehicle includes a weight-balanced chassis and four-wheel steering, coupled with full-time four-wheel drive. All four wheels turn individually at a rate determined by the machine's ground speed and turning angle, minimizing the possibility of turf damage and allowing the machine to traverse various types of terrain with ease, according to the company.

Toro.com/golf

#### **2** Zipline

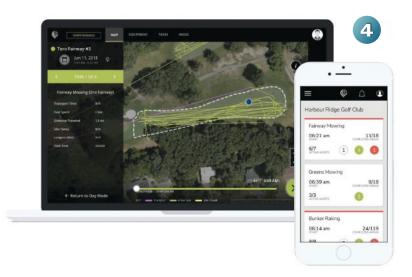
AQUATROLS' Zipline is a formulation engineered to improve water infiltration and deliver balanced hydration. Zipline's AquaVita technology gives turf an added boost by enhancing mineralization and promoting a variety of additional plant health benefits. Its dual-action surfactant blend provides consistent moisture management and localized dry spot prevention and improves turf stress tolerance and turf quality, Aquatrols says. Its low spray volume makes it an ideal solution for broad-acre applications, according to the company. Aquatrols.com

#### 3 GreenTRX

GreenTRX by **ANUVIA PLANT NUTRIENTS** is a high-efficiency
multinutrient slow-release fertilizer. Its
homogeneous granules sustainably
deliver the nutrients turf needs while
enriching the soil for healthier turf
and great playability, according to the
company. GreenTRX is both immediately
and slowly available to plants.

AnuviaPlantNutrients.com

**42** // **Golfdom** May 2019







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To stay up to date on all the latest products and services, visit **golfdom.com/category/products** 

#### 4 Fairwayi0

FAIRWAYIQ'S technology allows superintendents to better manage labor and equipment, the company says. It eliminates guessing where employees are on a property and allows superintendents to see the differences between working time and travel/idle time. FairwayiQ creates real-time, automated information collection, which provides insight to outlier working scenarios and reports on total hours worked — not just estimates.

FairwayiQ.com

#### **5** Kelpene GPX

Suitable for turf, **PERFORMANCE NUTRITION'S** Kelpene products are blends of sea kelp extracts and plant extracts, primarily terpenes, derived via a proprietary extraction process. According to the company, benefits of Kelpene products include environmental adaptability, improved stress management, increased resilience, enhanced tissue responsiveness, elevated nutrient use efficiency, increased root mass and root tips, improved nutrient uptake and better allocation of plant energy.

PNFertilizers.com

#### **6** Cool Terra Organic

5

cool Planet's Cool Terra is a durable, porous, organic material designed and engineered using a proprietary biocarbon technology to improve soil quality. Cool Terra can increase water and nutrient retention, add structure to the soil and provide an environment for microbial growth. It's been shown to improve plant establishment through quicker germination and increased root development, and it benefits the environment by integrating fixed carbon back into the soil, according to the company.

CoolPlanet.com

Golfdom.com May 2019 Golfdom // 43

# 19<sup>th</sup>Hole

# John Thompson

**SUPERINTENDENT** // Sycamore Hills GC, Fort Wayne, Ind.

John, what can I get you? A cold beer, an IPA ... do they have Lagunitas?



**Tell me about your family.** I married my high school sweetheart, Melissa. We've been married for 24 years, and we wanted kids right away. Emma is 22, Charlie is 20, Jack is 18, Betsy is 14 and Henry is 12.

Five kids! How do you have your job and at the same time have five kids? I give all the credit to my wife. She calls herself the "controller of chaos." She's a registered nurse, but she quit working and raised our family. And actually, all my kids help out on the golf course. They all have worked tournaments with me ... my boys can do anything I can do on the golf course.

#### What does the family do for fun? We

cook as a family. Cooking is my hobby. We hardly ever go out to eat. Instead, we get into debates over who makes the best risotto. For the NCAA tournament, we fill out brackets, and whoever wins, I cook the dinner of their choice. This year, Betsy won, and she wanted steak risotto and stuffed artichokes.





**Tell me about Sycamore Hills.** It's a fantastic Jack Nicklaus Signature design, built in 1987-1988. It sits on 240 acres; 180 acres are irrigated, and there are no native areas — everything is maintained. Only two holes don't have water; there's a river, plus ponds or creeks on every other hole.

#### How did you get into the business? I

started working on a golf course at age 16, then all through high school. My freshman year of college, I had the come-to-Jesus talk with Dad. I was a political science major, and he asked me, "Do you really see yourself in a suit and tie?" I said no, and he told me to go get my degree in turf. My dad is an avid golfer. He's pretty proud of me.

## Fill in the blank: I tell young people that \_\_\_\_\_ is the key to success.

Listening. Kids need to put their phones

down and listen, and they need to ask questions. A kid is nodding his head at you, (and) it turns out he's paying more attention to who is texting him. You tell him to go out to No. 7, then you see him on No. 17.

What is an underrated benefit to having your job? I'd say seeing the wildlife. We're in the middle of a neighborhood, and we've got five foxes living under our maintenance shed. I saw a bald eagle the other day. You can't explain that to members. I put that in our newsletter, and someone said, "I haven't seen the bald eagle yet!" Well, it's not like you can summon it, "C'mere eagle!" You have to be here. The other day, one of those foxes looked right at me — it was just me and him, right in the middle of a fairway.

As interviewed by Seth Jones, April 18, 2019.

**44** // **Golfdom** May 2019



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Cleanse application breaking apart hydrophobic organic coatings versus the competition.



TSP GOLFDOM AD R2\_04-19-1











