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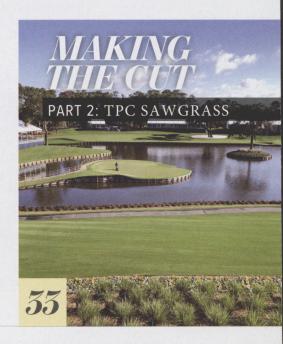
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STUPID BEATS NONE

did something stupid at the Golf Industry Show.

No, I didn't miss a meeting or deadline. I bypassed eating overstuffed burritos. I didn't visit the Gaslamp Quarter after dark. If you're looking for drinking stories and pictures, you're in the wrong place. We're here to educate and inspire.

That doesn't mean we totally avoid bad decisions. A group of us active GIS attendees gather annually for a 6 a.m. Wednesday group run. We have strutted along San Antonio's River Walk, skirted traffic on Orlando's International Drive and scanned the beauty of San Diego Harbor. In two years, we'll sightsee along the Las Vegas Strip.

The runs allow us to establish and strengthen relationships. We start as a group before forming packs based on desired

pace. This year, I made the stupid mistake of trying to keep up with Shinnecock Hills GC superintendent Jon Jennings and Weston Golf & CC senior assistant Matthew Legg. They were running around a 7-minute mile pace; I'm comfortable on longer runners at slightly above an 8-minute mile pace. I faded in the third mile like Phil Mickelson in the final round of a U.S. Open. After finishing the 6 ½-mile run, I trudged back to our Little Italy hotel, vowing to stay in the moderate-paced pack next year. Knowing your limits minimizes the possibility of doing something stupid.

There's no limit to the size of our running group. I know when I walk from the hotel to the convention center on that same morning each year, I'm likely to see my former Penn State Golf Courses boss Rick Padgett, TPC Deere Run's Alex Stuedemann, golf course architect Jim Nagle, Cohasset GC's Glen Misiaszek and Jennings. They are successful people who make time for fitness despite life and work demands. I can speak for our happy little group when I say I hope you join us next year in Orlando. You won't be disappointed by the networking or how you feel the rest of the day.

A day after our informal run, is the Health in Action 5K, a wonderful event supporting the Environmental Institute for Golf sponsored Syngenta. The number of participants swelled to 180 in San Diego, the highest in the race's three-year history. But the number also raises concerns. The GCSAA reported a GIS attendance of around 11,900, meaning only 1.5 percent of show attendees bothered running or walking with their peers in a beautiful setting. From what I hear, numerous GIS-related parties attracted a far greater share of attendees than the 5K.

We all have different agendas and schedules when attending industry events. None of us have two bodies. For an industry that invests billions of hours and dollars into creating healthy playing surfaces, we can all do a better job of promoting personal health, especially after a year like 2018. Brutal growing conditions not only battered turf, they battered bodies and minds. Finding 30 minutes for fitness a few days a week doesn't suddenly make a tough job easy. But it does help a body and mind withstand the repeatable rigors of precarious work stretches.

Maybe morning runs aren't your answer to feeling better. Maybe that evening function really does hold career value. We all must determine Best Management Practices for our own bodies.

I like to complete workouts before the day slips away. Even a stupidly swift workout beats missing one.

About that ...

I'm not ignoring the fact my role here is changing (page 50). We'll examine what makes Golf Course Industry special next month. GCI



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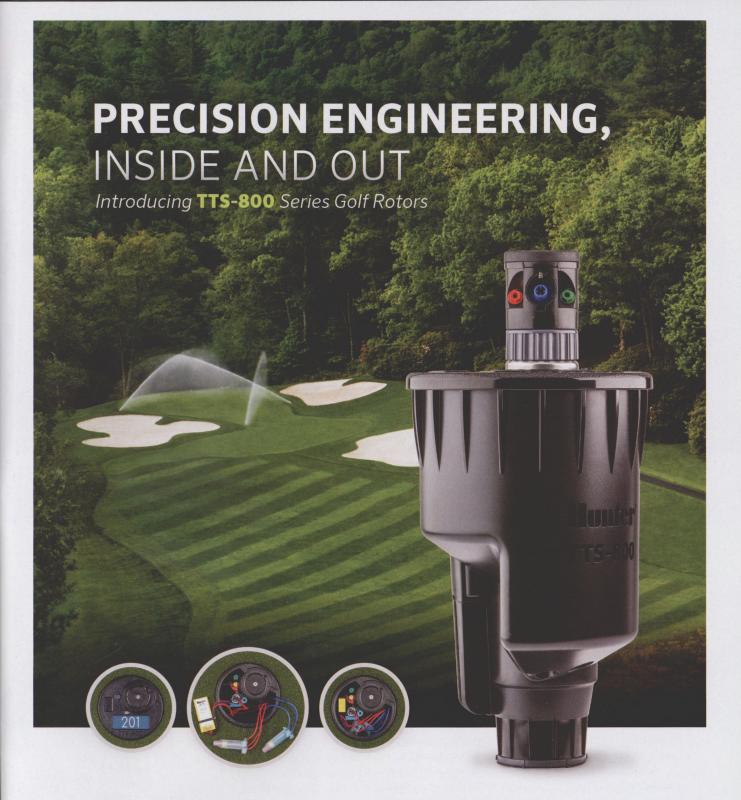
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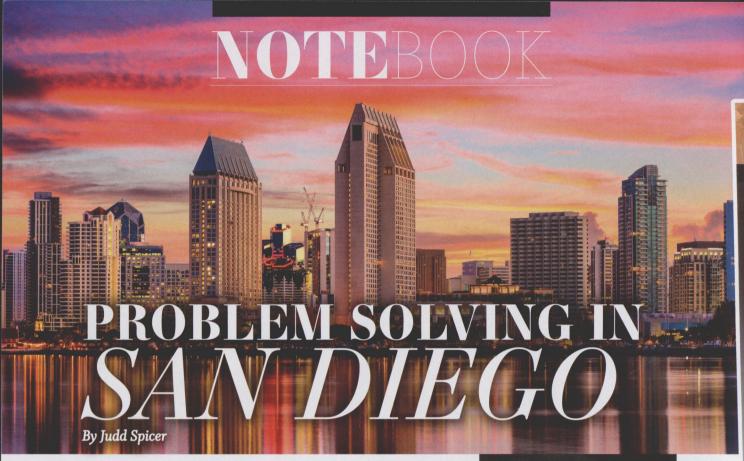




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magine a golf therapy session ... in a room filled with hundreds of your colleagues.

The "Solutions Center" educational seminar at the 2019 Golf Industry Show played like an open-aired empathy assembly to a standing-room crowd.

"I think it hit on many of the big topics in the industry right now," says panelist Chris Tritabaugh, superintendent at Hazeltine National Golf Club. "Things like taking care of yourself, creating culture and getting people to work well together are all big things right now."

As attendees sent in problems/question via text message to facilitator Carol D. Rau, PHR, Career Advantages (Lawrence, Kan.), the seminar's six-person panel took on a diverse range of subjects matters ranging from labor and work/life balance, to Twitter and turf tips.

"My hope, when I do a seminar, is that there are maybe one or two things that somebody will walk away with," Tritabaugh says. "Whether it's something I said, or something one of the other panelists said that can help somebody."

The topic of golf's labor issues and engaging a younger generation of staffers proved paramount during the two-hour discussion.

Advising a need for patience with millennials, Carlos Arraya, CGCS, Bellerive (Mo.) Country Club, suggested to the room a strategy to heed labeling, and to give younger workers the time and opportunity to develop.

"I think the subject of millennials is talked about a lot right now," Tritabaugh says. "You have to do it differently. If a person is going to manage in a way that they did, say, 10, 15 or 20 years ago – you're not going to have success in leading a high-performance team. Leading this younger generation is about creating a culture of enjoyment."

Per complementing one's work force with the senior set, Tritabaugh adds

1. John and Jodie Cunningham; 2. Terry Buchen; 3. Forrest Richardson, Pedro Guereca Gurrola and Lester George; 4. Anthony Williams and his son, Anthony; 5. Chuck Totten and Rodney Sparks.









that "free coffee and a free newspaper" had done wonders to bring in divotfilling volunteers.

Managing personal wellness was almost foremost among the discussion.

"When you leave work, leave work. When go home, go home," emphasizes panelist Troy Flanagan, director of golf maintenance at the Olympic Club. "Yeah, this is our livelihood, but we need to remember that it's just grass."

Panelist Dr. Doug Soldat, professor of soil sciences at the University of Wisconsin-Madison, earned a collective headnod from the room when noting that part of his own balance may be achieved by simply turning off e-mail notifications when away from the workplace.

The topic of social media also earned ample play among panelists, with most confirming that use of respective mediums can be a great tool - so long as characters of caution are part of one's

Multiple panelists warned to avoid "shaming" guests or members for poor course maintenance when Tweeting, and also suggested to ensure club policies

before sending out opinions or images.

"It's too bad that social media has trended toward a negative tone in general," Tritabaugh says. "The ability to use it for information or conversing with colleagues, like a lot of people in this industry do, is pretty awesome. And it's amazing to me how different this event is now compared to when I first started coming - and that's because of the advent of social media. You'd come here and know a few people, and now it seems like everybody kind of has a general idea of who everybody else is.

TORO, TURFCO CELEBRATING MILESTONES

pair of Minnesota-based companies are celebrating longevity in the golf industry this year.

Toro has reached 100 years in the market, while Turfco is using 2019 to honor the Kinkead family's century in business.

In 1919, Toro developed the industry's first motorized fairway mower, the Toro Standard Golf Machine, for The Minikahda Club.



in Minneapolis. The company's first president and co-founder John Samuel Clapper, agronomic pioneer Dr. James "Doc Watson" and irrigation visionary John Singleton are among the innovators responsible for helping Toro establish longevity in the industry.

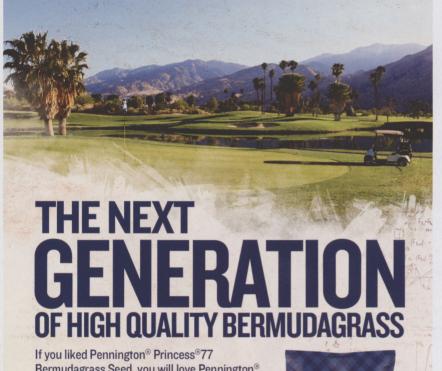
"Without a doubt, we owe much of our success to the Toro employees who have helped shape the golf industry with countless innovations," says Rick Rodier, vice president and general manager of Toro's Commercial Business. "But we wouldn't be here today without the Toro customers across the globe who put their faith and trust in our products every day."

Toro was founded on July 10, 1914, and for the first five years focused primarily on providing engines for the Bull Tractor Company and other tractor and truck companies. The company developed the first Toro-designed piece of farm equipment – the power cultivator - before shifting focus to mowing products.

People are also at the forefront of Turfco's longevity in the industry.

The Kinkead family's presence in the turf industry extends to Robert Stanard Kinkead, a World War I veteran who founded the St. Paul-based National Mower Company. Robert entered the business by making reel-type, sickle bar and pull-behind lawn mowers that could be hitched to horses or tractors.

Working closely with local superintendents, Turfco created the



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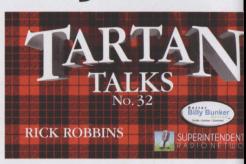
first mechanized topdresser in 1961. John Kinkead Sr., while still working at National Mower, led the introduction of many other turf innovations. Turfco is now owned and operated by John's sons, George and Scott Kinkead.

"It's been an honor and a privilege to be part of an industry where everyone loves what they do, and we look forward to working together with our customers in the next century," Scott says.

Tartan Talks No. 32

Even after 45 years in the business and successfully completing projects in a dozen countries, Rick Robbins hasn't strayed far from his North Carolina roots.

Robbins, who spent his childhood around World Golf Hall of Famer Peggy Kirk Bell and her husband Warren "Bullet" Bell at Donald Ross-designed Pine Needles Country Club, discussed his past, how an architect views the Rules of Golf and design ideas on a



Tartan Talks podcast. "The journey has been interesting to say the least," Robbins says. "Growing up in the mountains of North Carolina, I never thought I'd see the see places that I've seen."

Robbins describes himself as "semi-retired," although he remains busy renovating practice facilities for clubs. One of his recent projects, Compass Point Golf Club, an 18-hole course opened in 2016, is where Robbins now lives. With guidance from Robbins, the Leland, N.C., course has used its par-3 19th hole, 9-hole putting course and chipping and sand-play greens, to create revenuegenerating events. "If I can find a way to make it fun, golfers will want to spend more time practicing their short games," Robbins says.

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Determining success

What does success look like?

I've traveled both sides of the Atlantic in the past two months, speaking to peers, assistants, deputies and other industry professionals about this very question. At first glance, you may have thought my pal, Lee Strutt, course manager at Royal Automobile Club, and I planned to stand before you at industry conferences and talk about ourselves. You would be wrong. The best feedback we received from our presentation was hearing folks say, "that wasn't what I was expecting."

Nearly a year-and-a-half ago, I reached out to Lee because I was feeling a bit overwhelmed. I was putting too much pressure on myself after working so hard to achieve a personal goal. The conversation continued and eventually blossomed into the presentation we delivered this year at both BTME and GIS. If just one person benefits from our talk, Lee and I deem it a success.

So, what does success look like? And is it linked to happiness? This is a question we raised with attendees and surprisingly, many people who considered themselves successful didn't necessarily consider themselves happy. Why is that? Because the road to success is not simply a climb up the career ladder. No, it is filled with twists, turns, switchbacks, potholes and other obstacles all with a price. Only you can determine if the price of success is worth

Let me explain. For starters, we talked about different ways success could be measured, whether it's mowing your first laser, producing the perfect sward, getting your first promotion, obtaining a position at a high-end facility, or hosting a major championship or even the Ryder Cup.

Other ways success could be measured include being the highest paid, having the largest maintenance facility, obtaining professional certifications or achieving other forms of higher education (more superintendents are pursuing business degrees and I know a few who have their MBAs). Mentoring is another way to measure succes; having a positive impact on someone else's life and career path is an overwhelmingly positive thing.

We also discussed success outside of turfgrass management, which could include owning your home. Maybe you obtain wealth and worldly possessions, such as that flatscreen TV you've been eyeing, or perhaps you just wish to travel and see other parts of the world. If you've been able to accomplish any of these things since beginning your career as a professional turfgrass manager, you're a success.

Then we discussed the types of things within our realm that limit or hinder our ability to succeed. Rising player expectations continue to stress and strain our operations. We face budget limitations yet are asked to produce more with less. And don't get me started on the current labor situation: We are all struggling to find quality help on both sides of the globe, and it isn't going to get any easier. Automation is fast approaching (you can argue it's already here). It appears to be a solution to the labor shortage, but at the same time, do you really believe managing robots is going to be easier than managing personnel?

Lee said it best when he said our profession should come with its own health warning. So, what can we do and what are some strategies for success? First and foremost, family comes first. Too many of us work so hard to obtain the dream position and then we dive in head first to make an impact. Before we know it, we've ignored those closest to us. Your family is forever, and it was heartbreaking to hear my pal stand before his peers and tell everyone his relationship with his two daughters is fractured because they believe he put his career aspirations ahead of them. I confessed that I've always told my wife she is the most important thing in my life, but my actions didn't always match those words. I would ignore her calls when I was busy and call her back when I had a free moment. I didn't realize the impact that action had on her psyche until she confided in me. Now I take the call no matter what I'm doing, and if it isn't an emergency, I call her back, but at least she knows where she truly stands.

Take time for yourself along the way. Do at least one thing every day to make yourself happy. I like to call it a guilty pleasure. It can be anything, like talking with a friend or loved one, reading your favorite book, listening to your favorite podcast, playing golf or just simply watching TV in front of the wood stove with a tray on your lap and your best pal at your side. GCI



MATTHEW WHARTON, CGCS, MG, is the superintendent at Carolina Golf Club in Charlotte, N.C., and President of the Carolinas GCSA. Follow him on Twitter @CGCGreenkeeper.



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DRILER

A SUPERINTENDENT, GENERAL MANAGER, TERRIFIC GOLFER AND CHAMPION CURLER. MEET SILVER BAY GOLF COURSE'S NORMA O'LEARY. By Judd Spicer

Photos By **Derek Montgomery**





If you go when the snowflakes storm When the rivers freeze and the summer ends Please see if she's wearing a coat so warm To keep her from the howlin' winds

- Bob Dylan, "Girl From the North Country"

uddled on the shores of Lake Superior off U.S. Highway 61 in Northern Minnesota, the city of Silver Bay (pop. 1,769) sits closer to the Canadian Border (96 miles) than it does the state's capital city of Saint Paul (204 miles).

Reference to "ranges" across the provincial surrounds are more apt to be of the "iron" than "driving" variety, as the region has long been one of the nation's largest producers of iron ore.

Prone to harsh winds along Minnesota's North Shore and known for winter temps which regularly dip well into the negatives, Silver Bay ei-

ther stands near the beginning or the end of the line of the historic highway, depending on one's purview.

Between the coarse wintertime conditions, short summers and blue-collar ethic, the region isn't a place for the timid, the weak, the apathetic. It's a place for the strong, the driven, the hearty.

It's a place for a woman. It's a place for Norma O'Leary.

> The general manager and superintendent at 9-hole Silver Bay Golf Course, O'Leary's grounds, like the curator herself, are smaller in scope but mighty in

stature.

FARM GIRL

Born in Chaska, Minn., a half-hour drive southwest of the Twin Cities, O'Leary is a self-proclaimed "farm girl."

By age 13, she started working at Dahlgreen Golf Course, located five miles west of Hazeltine National, where she'd tee-it-up readily in her high school years. Prior to playing the famed Ryder Cup and major championship venue, O'Leary's golf beginnings were far more humble.

"One day when I was walking home from work at the course, I found the head of a 5 iron in a ditch," she says. "My dad welded it to a solid steel rod, and then attached a rubber hose from the milker that we used for cows, and that was the grip. That was my first golf club, and I have no idea how I could hit it, but I could hit it."

While not averse to the tenets of hard work, O'Leary found greater reward in tending to cups before cream.

"I loved every time I got called to work because it got me out of milking cows," O'Leary says. "They'd have me changing cups, raking bunkers and basic things. Changing cups was a challenge for me because I had to stand with both feet on top of the shell of the cup-cutter, and twist my whole body. But I managed."

O'Leary has always managed.

Listed (generously) at 5-foot-2, she'd go on to play college golf at the University of Minnesota, where she'd initially study accounting before graduating with a self-created major in business & horticulture.

"Halfway through college, I just knew there was no way I could sit in a building doing accounting all day long," O'Leary says. "I don't know how I got through college; when the sun came out, I had such a hard time sitting through class."

As her college years neared an end, O'Leary took notice of being in a gender minority.

"I loved working on the golf courses, but there were no women in the field," she says, "so I didn't think the opportunity was going to be there for me."

O'Leary made her own opportu-

In the late 1980s, she took a job maintaining a course in Grand Marias,



Minn. (40 miles from Canada), where she led the transformation of par-31, 9-hole course into a par-36 play. "Just clearing the woods and lengthening some holes," she humbly recalls.

Married in 1988, her husband's job as a Minnesota State Trooper would find the couple transferred "south" to Silver Bay, where opportunity called for O'Leary as well. "That work in Grand Marais went well enough, I guess, that I got a phone call offering me the superintendent's job at Silver Bay Golf Course," she says.

Taking charge of the 9-hole course as both general manager and superintendent, O'Leary instantly applied her farm girl work ethic across the grounds' 3,200 playable yards.

"All I had for irrigation, there was an old galvanized pipe that ran up each fairway to each green with old quick couplers; one by each green," O'Leary recalls of her Silver Bay beginnings. "There were portable sprinklers to water every tee and green."

Over the course of the next three years, working with 13 volunteer members, she'd bring the irrigation to par.

"All the electric heads and wiring for fairways the first year, then did the heads and wiring for greens and tees the next year," O'Leary says. "The third year, did the pump station and tied-in all the irrigation controllers."

Typically-armed with a paid, seasonal skeleton staff of one fulltime employee and one part-timer, O'Leary has been lauded for her communal approach to running the course, a philosophy which has found Silver Bay thrive with volunteer man and woman power.

Her embrace of community, coupled with a proactive approach to maintenance, impressed Silver Bay-native Mark Michalski, himself a seasonal course staffer. Now the head superintendent at the TPC Twin Cities, Michalski is preparing to unveil a revamped golf course for the debut of the PGA Tour's 3M Open in July.



Across it's A, B and C membership classifications, the Golf Course Superintendents Association of America reported 11,701 members as of late January 2019.

Of that tally, 110 are female members. The mark accounts for less than 1 percent of GCSAA's membership.

Among the association's top-25 most tenured female members, Norma O'Leary doesn't mind being different.

She may even relish it.

"There are generally no other women when I go to regional meetings and stuff like that, but I've just thought it's maybe because I'm different, that's all," says O'Leary, a certified GCSAA member since 1991. "I guess I've always thought of myself that way; that maybe I wanted to prove to people that I could work just as hard, if not harder, than a man. Or, say if there's a situation when I'm working with a guy and there are two boxes that need to be carried - I grab the heavy one."

While Suzy Whaley's elevation to President of the PGA of America in 2018 no doubt proves a sign of progress for professional women in golf, further numbers, by-and-large, continue to provide a statistical disparity between genders.

According to data provided by Henry DeLozier, principal of globally-renowned golf consulting firm Global Golf Advisors, the PGA of America reports just 7 percent of women accounting for either head golf professional or director of golf roles. DeLozier further provides that, for 2018, the Club Managers Association of America reported that while better than a quarter of assistant general manager and clubhouse manager jobs are held by women, a mere 8.8 percent of CEOs and general managers are

While fast to acknowledge the gender discrepancies in golf's working world, O'Leary adds that very rare is the occasion where she's sensed any intentional obstruction toward women. Though she'll grant two long-ago instances in which she did experience gender discrimination, O'Leary doesn't see or sense any true gender bias in golf.

"In my experience, I don't feel I've encountered as many barriers as you might think," she says. "But, personally, I'm not bothered. I definitely notice at, say, a conference setting, that I'm alone in that regard, but it doesn't bother me. And on the occasion where I see another women in that kind of setting, the conversation doesn't generally lead to that (gender discussion). Honestly, I don't ever remember having a conversation with another female in the association (GCSAA) where we've talked about where we are as women."

A working minority in The Gentleman's Game, Norma O'Leary is all for seeing more female superintendents across the nation's courses.

"Absolutely," she concludes. "Because I know how rewarding the work is."

Michalski has known O'Leary most of his life, first playing cityowned Silver Bay as a kid before working full-time summers for her from the time he could drive through his sophomore year of college.

"I can remember the first time mowing greens, I scalped pretty far out into the approach and I thought I'd be in serious trouble with her, but she just told me, 'Hey, it happens. Just don't do it again," Michalski recalls with a chuckle. "I learned so much from her, and a lot of what I do now as a superintendent came from her. She doesn't have a very large budget up there, but she produces pretty phenomenal conditions every year; and a lot of that is because how faithful she is to the cultural practices."

Referencing the ingenuity O'Leary brings to her work, Michalski harkens back to a memory of half the Silver Bay course losing irrigation after spring flooding partially knocked out a maintenance bridge.

"I was watering greens with a sprayer; just running water out of a tank," remembers Michalski. "Norma found the main line to the city and we ran a piece of pipe, spanned it underneath another bridge, and then tied it into a piece of irrigation on the golf course."

Despite working today on a far bigger stage and prepping to host the world's best players, lessons learned from O'Leary continue to shape Michalski.

"She's not afraid to try new things," Michalski says, "and that's something she always told my younger brother and I. Every day we'd go to work for her, she'd have our list of things to do, and she'd always say, 'This is how I think you should do it, but if you guys come up with a better way, as long as you run it past me, then let's do it your way."

From budget management to turf care, the TPC Twin Cities superintendent credits O'Leary for instilling in him a set of fundamentals which he uses daily.

"Now, at a facility hosting a PGA Tour event, I'm doing

the same things she does at a 9-hole golf course in Northern Minnesota," Michalski says. "It doesn't matter where you work. The right way to take care of the grass is the right way to take care of the grass."

ALL IN A WINTER'S DAY

Well-reputed as a fine competitive player across the Northern Minnesota golf scene, O'Leary has seen her sporting spirit find further purchase in another setting: curling.

Introduced to the sport by her husband, Mike O'Leary (who earned a bronze at the world championships in 1966), Norma has filled her mantle with off-course achievements.





A five-time competitor at the U.S. National Championships, she's twice appeared at the U.S. Olympic Team Trails (finishing sixth in both 2005 and 2009). At the U.S. Senior National Championships, she and her team boated four consecutive titles (2013-16), and the World Senior Championships saw her take home bronze medals in both 2014 and 2015.

> From turf to rink. O'Leary finds the games akin.

> > "There are a tremendous amount of curlers who are also

golfers," she says. "In golf, you always leave that shot or two on the course which makes you want to come back and do it again - curling does that exact same thing."

O'Leary's manicuring nature has also her seen he spend a few seasons as one-time ice maker at the Two Harbors Curling

"It can be the same feeling," she says of maintaining golf grounds and curling rinks. "On the golf course, you're trying to get the greens to roll faster for some players and then they become too fast for other golfers. Curling is the same: the ice is too fast, too slow, it curls too much or not enough."

Perfect ice on the rink: Crucial. Ice on her golf course ... not so much.

"Snow mold really isn't my greatest challenge. Really, it's the ice, and that's been the case over the past decade," O'Leary says of the winter months. "Rain in December and January now has kind of become the norm. I've tried all sorts of different things, and my colleagues are on the fence on how to best handle this."

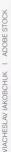
Continually combating the rain has helped O'Leary get off the fence.

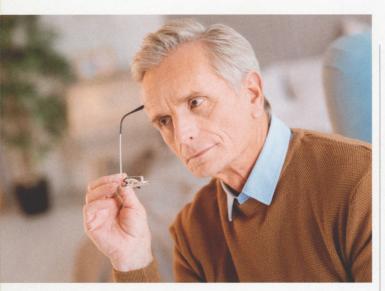
"One year, I put down my snow mold protection and then got 4 inches of rain a few days later, which I wasn't comfortable with," she continues. "I had just enough product left to spray three stripes up the center of each green.

Making the most of the tools at her disposal, the girl from the north country sees course care, much like golf itself, as a results-based game. Come spring, it was night and day where I was able to get that second application down; the edges that didn't get the second application were, like, 90 percent snow mold damage and where I went up the center was clean as a whistle." GCI

Judd Spicer is a Palm Desert, Calif.-based writer and frequent GCI contributor.







Respect your elders

After attending my 33rd consecutive Golf Industry Show, it occurred to me that I am now, officially, one of the "old guys." My hair is greyer and there is less of it. I have a brand-new knee. And I opt to wear soft shoes instead of sleek loafers. Trust me, however, Sans-a-belts are not in my future!

So why, after all these years, do I still attend? More than anything else, it's to meet new – and see old –friends. And to learn. One thing I learned again this year is that while turf maintenance may be a young person's occupation, we veterans of the game still have game.

I made it a point to participate in educational seminars, walk the show floor and attend the occasional evening networking function. I even conducted a day-long, for-credit seminar on tournament preparation for superintendents. When it was over, I was tired, but even more excited and enthusiastic.

The newest and greatest advances are cool, but I didn't get too wrapped up in technology and all the new innovations because none of those things have all the answers. The answers, I learned once again this year, are with people. That's where you'll find knowledge, expertise, and, perhaps most importantly, life experience.

Some of the younger superintendents out there may think the older guys are tired, impractical and out of touch. Trust me, we're not. We veterans of the trenches are more than capable of telling you what you need to know. No matter what the situation, we've been there and done that.

Take the seminars and check out the equipment, but don't neglect the best resource this industry has to offer: Those of us who have already been through "the wars."

There are many reasons to reach out to your elders. Not just about agronomics, but lessons on every aspect of what we do including life lessons we've likely learned the hard way: Everything from dealing with labor issues and climate change to handling members, staff and even family.

It's Networking 101, but I don't see enough of it happening. Our industry has dozens and dozens of experts who are more than willing to help by sharing their knowledge and experience. Pick their brains, talk to them.

Here are a few off-course topics perfect for getting some outside consultation or direction:

- Negotiations on and off the golf course
- Contracts, making sure you have all the bases covered
- Relocation (moving what to know and what to ask)
- Finances, both personal and private
- · Insurance
- New lease agreements for equipment
- Human resources issues, particularly since labor is the No. 1 issue facing our industry
- Budgets: How to cut 15 percent from your budget while still providing a solid product?
- Employment contracts. As a big-time attorney said to me, "they're only as good as the paper they're printed on!"
- Staying healthy (skin cancer, stress, survival of the fittest outdoors)
- · Family situations

Financial planning
 As I mentioned above, I
learned a lot of this the hard
way. If I had it to do all over
again, I definitely would have
become more engaged with
those who came before me, approaching people I admired and

asking for their help and advice.

For this year, it was people like Jon Jennings (2018 U.S. Open at Shinnecock Hills), Dr. Kimberly Erusha (USGA Green Section), Matt Shaffer and Mark Kuhns (former golf course superintendents at Merion Golf Club and Baltusrol Golf Club, respectively), Desert Mountain's Shawn Emerson, Tommy Witt (past president of the GCSAA), and Bob Farren (Pinehurst Resort) who are happy to connect. The list goes on and on. Ask how they handled a situation, what they've done wrong, where they go for answers.

There's no reason to be intimidated or nervous. We all want to help.

Seek out the really smart people, the researchers who specialize in diseases, insects, weeds. Among my "team" are Dr. Pat Vittum (entomologist), Dr. Fred Yelverton (weed scientist) and Dr. Bruce Clarke (pathology), all leading experts and good people. Go hear them speak then introduce yourself, give them your card, and follow up with email. They are all willing to share their expertise

Not only are we there to help, we seasoned veterans want to help. I gain great personal satisfaction talking to the new, young blood in the business. And I learn a lot, too. GCI



TIM MORAGHAN, principal, ASPIRE Golf (tmoraghan@aspire-golf.com). Follow Tim's blog, Golf Course Confidential at www.aspire-golf.com/buzz.html or on Twitter @TimMoraghan

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A late-arriving spring ruined agronomic plans for superintendents in multiple regions last year. Experts offer lessons from the miserable season.

By John Torsiello

t the risk of making Midwest, Mid-Atlantic and Northeast superintendents cringe in fear, we will recall the chaos caused by the late-arriving spring last year with the aim of helping to prevent the chaos if it happens in 2019.

"One of the biggest issues we saw was uneven growth of the turf caused by the cold weather late into spring and the delayed warm-up," USGA Green Section director of education Adam Moeller says. "This uneven growth on greens resulted in bumpy conditions in many cases." Complicating matters, Moeller adds, was a wet summer followed the cold spring, affecting turf on courses that didn't aerate in the spring.

"The cold spring led some superintendents to not aerate as usual or go to a smaller tine size so that the turf wouldn't take as long to recover," Moeller says. "As the year turned out, it would have been better if folks that didn't aerate had pulled the trigger to some degree in the spring, at least with smaller tines. Without aeration, rooting was shallow and superintendents missed an opportunity to improve the soil oxygen diffusion rates within the upper rootzone profile. This ultimately left putting green turf roots more vulnerable to the stress from the persistently wet and hot conditions later in summer. But supers had decisions to make and they could not have known what the summer would bring."

Ah, if we only had a crystal ball.

Dr. Cale Bigelow of Purdue University reports the Lower Midwest had one of the coldest Aprils and warmest Mays on record, which led to slow grass green-up and a "disadvantaged" cool-season turf compared to those "pesky warm-season summer annuals." This produced much more pressure from all summer annuals.

"As far as insects, we had lots of activity, but 'normal' damage, likely due to the abundant moisture," Bigelow says. "Disease in mid-tolate summer, particularly dollar spot was very problematic for many, as were other diseases associated with very wet soil conditions." Probably the most concerning issue from 2018, he adds, was widespread damage associated with what one of his mentors, Dr. Peter Dernoeden,

referred to as "Hot-Wet-Stinky Soils." Says Bigelow, "Scald and wet-wilt, were very big issues, especially where soil drainage was lacking and/ or a heavy thatch/organic layer was present."

A late warm-up can negatively affect both cool- and warm-season turfgrasses, says John Daniels, a USGA Green Section Central Region agronomist. A late warm-up will delay recovery from winter injury and is particularly a cause for concern for cool-season turf in the event it is followed by rapid increase in temperature.

MANAGING TURF AND PERSONAL STRESS

The University of Tennessee's Dr. Brandon Horvath offers multiple steps to avoiding the difficulties of 2018.

"Having a stress management plan can go a long way, meaning that one should seriously think about how we water; usually too much," he says. Using a moisture meter, he adds, can help superintendents maintain moisture in greens at an optimum amount about halfway between wilt point and field capacity. "Doing this will help reduce the need to constantly hand water, and improve conditions daily, while reducing stress from overwatering," he says.

Anther key part of stress management should be a mowing height and rolling plan that uses the current conditions to alter how turf is managed to reduce stress. Horvath somewhat jokingly adds, "Remember the

▼ A cold start to the spring of 2018 caused severe problems to roots in multiple agronomic regions.





line from the movie 'Spy Game,' where Robert Redford says, 'When did Noah build the Ark, Gladys? BEFORE the flood.' Having a plan in place before the stress hits will help you when it does hit."

"Fungicides don't solve all the problems," Horvath adds. "Remember the cultural practices from my first tip will help you manage stresses better than what is in a jug. Fungicides should only be used when indicated by the presence of disease, and/or weather conditions that will result in disease (thus, a preventative approach)."

Horvath also advises superintendents to invest in weather management technology. "It isn't enough to know what is happening in your zip code. Most of the weather offerings from the various websites and companies out there offer zip code-based weather info. You need location-based data to really be confident in your observation of weather. Seek recommendations from your local National Weather Service meteorologists, or check out some upstart companies, like Mesur.io. Monitoring the weather at your location is critical to managing stressful environments."

Furthermore, Horvath emphasizes the importance of drainage, adding "anywhere that doesn't drain like it should just means that area will be a stress spot later."

Traffic management represents another way to avoid turfgrass stress and damage resulting from less than favorable spring conditions. "Think about the entry and exit points

on each hole and green complex, then plan how you're going to move players around and spread out the traffic to help reduce the impact of stress by foot traffic," Horvath says.

Hole location management is also a consideration. "Many courses allow the set-up person to place

THINK ABOUT THE ENTRY AND **EXIT POINTS ON** EACH HOLE AND GREEN COMPLEX. THEN PLAN HOW YOU'RE GOING TO **MOVE PLAYERS** AROUND AND SPREAD OUT THE TRAFFIC TO HELP REDUCE THE IMPACT OF STRESS BY FOOT

> - Dr. Brandon Horvath, University of Tennessee

TRAFFIC."

holes wherever or use a 3 to 9 zone management style. There are many technologies out there to manage hole locations and move holes around to spread foot traffic out. Check out StrackaLine or EZ Locator. Both of these companies will help you manage hole locations."

Finally, properly manage and monitor your team when weather turns

tricky. "Take care of yourself and your crew," Horvath says. "This year has been a breakout year of removing the stigma of taking care of oneself in a stressful industry. I'd echo those comments by saying when stressful conditions hit, it is tremendously important to

> make sure you plan time for both you and your crew to de-stress and have fun even in the heat of the battle. It is easy to suggest that this is time wasted, but I would argue that under very stressful conditions, this small amount of time away helps to freshen your perspective and improve your well-being."

◆ Shade from trees can severely hinder turfgrass recovery and is especially troublesome when mild temperatures persist late into the spring.





▲ Using synthentic mats is a way to protect vulnerable turf during tough spring growing conditions.

NOT BUSINESS AS NORMAL

The University of Missouri's Dr. Lee Miller reports Pythium root rot as the No. 1 biotic disease diagnosed on greens in his region. What to do if this occurs? "Watered in preventative fungicide applications are the obvious, but limiting soil moisture to what the plant is using is another key aspect of management. Stagnant, unused water in the soil column is a precursor for many problems. The use of TDR technology has made the art of dancing the line between too much water and not enough a bit more of a science for many superintendents, but it is only one tool in the bag."

Miller recommends sampling soil often with the "trusty" 1/2-inch soil corer to determine where water goes on a green, and, "every once in a while," lean on it to view the whole column down to the pea gravel layer. "Take a hard look at greens drainage on historically poor performing greens very early in the spring," Miller says. "Run water, or go out during a downpour, and make sure water is exiting out of the soil column correctly through

the pipes."

The best way to remove water out of the soil column is "through the plant," he adds. Consider fan use a bit earlier than just when temperatures soar, but also when high humidity keeps water on the surface. A drier, cooler canopy will result in open stomates that move water, and an overall healthier plant system from leaf to root tip. "Last but not least, regular venting throughout the season will help dry out some of the profile, and facilitate air exchange for root growth," Miller says.

Don't be rigid with the fertilization schedule. Instead, fertilize as dictated by temperature. The temptation is to "juice" bentgrass putting greens a little in a late warm-up, but heavy nitrogen applications may turn into a stressor for compromised roots that can't sustain higher foliar growth. "Slide into a spoonfeeding regime quickly if temperatures rise rapidly," Miller says. "Additionally, if nitrogen was applied earlier when temperatures were cooler, don't forget it, since it may release quickly in high temperatures."

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promoting turf density is an important aspect of management. This could include adjusting mowing heights – "mow as high as practically possible," Bigelow says – and judicious use of nitrogen fertilizer as appropriate. Also, be mindful of mechanical damage that could reduce overall vigor and handicap turf entering stressful weather.

Moeller advises collecting clippings from at least one green (a consistent performer), measure and monitor growth. Compare clipping yields with recent cultural practices like nitrogen and PGR apps to understand their impact on turf growth. Also, don't try to outcompete cool weather with

fertilizer applications because it will likely result in a significant growth flush once the turf finally begins to grow more evenly with warmer temperatures. Not only could this likely result in a flush of growth, which negatively impacts playing conditions, it will consume valuable energy reserves the turf needs to survive during summer.

"Probably the worst thing one can do if there is a late warm-up is for turf managers to go about their business like normal," Daniels says. Turf managers need to avoid focusing on the events on the calendar and instead concentrate on the condition of the turf. "Rushing to complete a particular main-



tenance practice by a specific date or trying hit a certain green speed right out of the gate can result in damage that last well into summer," he adds. "Instead, let the condition of the turf dictate the agronomic program."

Unlike a popular movie, let's hope there is no sequel to "The Miseries of 2018." But if the worst-case scenario returns, there are steps to ensure turfgrass comes through in much better shape. **GCI**



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Innovation Never Stops:

THE REVYSOL STORY

Part 2 University Testing: Where the Rubber Meets the Road By Pat Jones

(Editor's Note: This year, BASF and GCI are working together to tell the story of how a new active ingredient is coming to life for the golf market. The idea is to help you learn the scope of the R&D, testing, investment and plain hard work that goes on behind the scenes of product development. The specific formulations are not yet approved by EPA but indications are they will be available in 2019. The products discussed in this article are not registered and not available for sale, this article is provided for informational purposes only and not intended to promote the sale of the products. This is part 2 of a 4-part series on the remarkable process of bringing new chemistry to your golf course.)

f you've been around the golf course business more than a minute or two you've probably been to a field day. They are turf nerd heaven. You get the chance to eyeball new plant species, compare how different cultivation practices impact turf quality and, most of all, see side-by-side comparisons of how many of the insecticides, herbicides and fungicides in the market perform in your area.

Yet, there are also tests going on around you at those field days that aren't part of the tour. They are the experimental products, the yet unnamed actives and compounds that industry companies feel have promise on turf. In many cases, they are products being transplanted from ag. For example, many of today's strobilurin fungicides came from the rice fields of the South.

But, in rarer cases those "Product X" plots contain an active ingredient that's coming to turf on a parallel testing program with ag. Revysol® fungicide, BASF's newest disease management technology, is one of those rare compounds that is being simultaneously developed for ag and turf. And, for the past 5-6 years, you've probably been walking right by it at your local field day.

Recently, the experimental

versions of Revysol fungicide (trade name for the new active ingredient) under your feet at those field days got product names: Maxtima® fungicide – the standalone version – and Navicon® Intrinsic® brand fungicide® – a combo with BASF's strobilurin Insignia® Intrinsic® brand fungicide. And, according to some of the best plant pathologists in the world, their performance in university testing is exceptional.

We talked with several scientists who've been heavily involved in the field trials process about what they did and what they saw. Here's what we learned

from Dr. Jim Kerns of North Carolina State University, Dr. Bruce Martin of Clemson, Dr. Rick Latin of Purdue and Dr. Bruce Clarke from Rutgers (see sidebar).

First, from the transition zone, Dr. Jim Kerns:

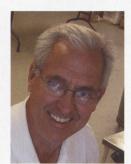
We have worked with Revysol - without knowing what it was - since 2013 or 2014. Initially we worked with the products as numbered compounds and the first diseases we tested were dollar spot, brown patch and anthracnose. Our first observations were strong in that the products provided excellent control of these three diseases. We continued to work with these diseases and started expanding into other diseases such as spring dead spot, fairy ring and take-all root rot of ultradwarf bermudagrasses.

When we finally learned it was a DMI, we were shocked. We had applied this material to creeping bentgrass and ultradwarf bermudagrass greens during periods of the year where other DMIs are usually phytotoxic but we hadn't observed any phyto damage. Honestly, with the flush of new SDHIs, we were happy that a new DMI was being introduced especially one that did not result in phytotoxicity because many supers were moving away from DMIs in general.

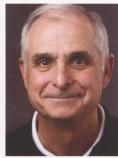
We have a unique system here at NC State where we develop testing protocols specific to what the companies tell us about the product and they vary widely for each disease. In this case we typically made 4 to 6 applications of Maxtima or Navicon for diseases like dollar spot or anthracnose, but only two to three applications



Mike Kerns



Bruce Martin



Richard Latin

for diseases such as spring dead spot or take-all root rot. We also varied how the products are applied based on the disease. For example, we irri-

gate fungicides in immediately after application when targeting diseases that affect the roots and stems like spring dead spot, fairy ring and take-all root rot.

We have found that Maxtima is an excellent fungicide for dollar spot, anthracnose, fairy ring, spring dead spot and take-all root rot. Navicon is also excellent on these diseases but brings better brown patch and summer patch control to the table with the addition of

Bruce Clarke on the field testing process

If plant pathologists are the rockstars of the turfgrass management business then Bruce Clarke is our version of Paul McCartney.

He started his formidable tenure at Rutgers in 1981. For four decades, he's been one of the very best in the field. Why? Because he doesn't do anything halfway. I asked him to give us a better understanding of the process and how it has and hasn't evolved over the years.

Is testing fungicides different today than in 1981?

The process itself has not changed much for us. We get materials as experimental products 5 or 6 years



Bruce Clarke

before they are released to the market. We evaluate them based on a lot of factors including the number of diseases they might control, rates for specific diseases, compatibility, etc.

Most superintendents go to field days and hear presentations on various research programs but there are always those double-secret plots tucked away with no names on them. Revysol was one of those up until recently. What's the deal

When I first came to Rutgers, there were very few unnamed experimental products or "RU" plots as we call them. Supers see them and ask about them but they often aren't the final products that will be released. So we can't divulge anything about the experiments because we're looking at how various versions of the "RU" products work at various rates. That's fundamentally what our research is all about.

What did you see from the process of examining Revysol?

We looked at the product and found it was quite effective for a number of diseases. It also worked at fairly low use rates which is important these day. Remember, we didn't know what the chemistry was - we often don't - so we're just working off what we see. The other thing we noticed that was it didn't have much if any phytoxicity (yellowing) on Poa annua. We didn't see that with either product (Maxtima or Navicon fungicides) we were testing.

So how do those observations become a recommendation for use?

When we make recommendations, we look at the bulk of research that we've done plus all the published literature and plant management disease reports. We also check around with colleagues to see what they've found. We often publish the field-trial results (at turf.rutgers.edu) to get feedback and discussion from outside. Must have at least 10 reports from unbiased sources. We will be very conservative and cautious about how we do those rankings. Then, I distill the results and come up with an average efficacy rating of 1-4 and only then do we make our recommendations.

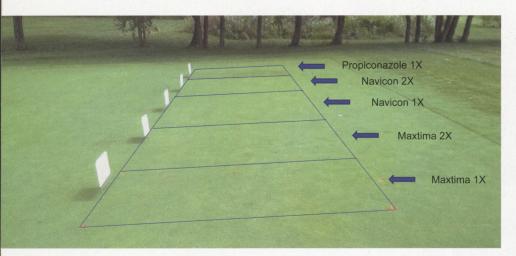
Insignia to Maxtima fungicide. The major observation is we did not see any phytotoxicity associated with Maxtima applications in any scenario we used. We applied the fungicide in fall, winter, spring and during the extreme heat of summer and observed no adverse effects.

I think these products will provide an excellent tool to complement the current suite of SDHIs and other products. These products have a broad

spectrum of activity and can be inserted into programs easily and offer flexibility as we have not observed phytotoxicity with Maxtima like we have with other DMIs. These two fungicides should give superintendents options to manage difficult diseases well.

From the South, Dr. Bruce Martin:

I started evaluations on what turned out to be Revysol fungi-



▲ Jim Kerns of NCSU and his colleagues around the country tested the products extensively in turf field trials.

cide for dollar spot and brown patch in 2014. We also did an initial look at the growth regulation potential on ultradwarf Bermuda grass. Our later evaluations included efficacy for spring dead spot and take all root rot.

I thought that we needed a new DMI, especially for soilborne diseases that did not regulate growth of bent, bermudagrass or other turfgrasses, especially for putting greens, so it was a pleasant surprise to find out that's what we had.

Our trials were conducted on research greens or other turf swards (including zoysia) at the Pee Dee Research and Education Center. We induced high disease pressure on the plots by inoculation and other methods. We use very accurate sprayers to mimic conditions on golf courses and greens are maintained similarly to golf course conditions.

> What we found was that the Revysol fungicide active ingredient is the best DMI I have evaluated for many turf diseases based on effectiveness against a wide range of important diseases and due to the lack of detrimental growth regulation. So, it has low environmental impact and is and effective.

> > I think it offers

superintendents many new options and flexibility for different diseases. So far these fungicides appear to work very well where DMI resistance has been documented for dollar spot with other products. And Maxtima and Navicon are excellent for spring dead spot and take-all root rot. Both appear to have very good efficacy for fairy ring. Last but not least, the lack of growth regulation means they can be timed best for disease control with no fear of detrimental effects to turf."

And from the North, Dr. Rick Latin:

Dr. Renee Keese of BASF asked me to help look at a new technology (which turned out to be Revysol fungicide) so we included it in my fungicide research trials for several years, beginning in 2014 or 2015.

When I first learned that it is a DMI fungicide I was very interested because the DMI class is very broad spectrum and has efficacy against pathogens that regularly threaten cool-season grasses.

The research trials included replicated field plots at a state-of-the-art turf research center. Our trials were conducted on creeping bentgrass maintained at putting green and fairway height. Fungicides were applied as per protocols supplied by BASF. Some were applied preventatively and others curatively (after appearance of symptoms in plots). The plots are evaluated at regular intervals to assess fungicide efficacy (disease severity) and turf quality.

Our research trials were limited to

the evaluation of Revysol fungicide activity against dollar spot. Revysol performed very well in all trials conducted over the years—beginning when it was a numbered compound. Furthermore, we did not observe any of the PGR and phytotoxicity effects associated with current popular DMI fungicides, even when applied repeatedly to bentgrass greens during the heat of the summer.

Maxtima offers superintendents a potent third-generation DMI. It is broad spectrum, so it will cover a lot of bases, including dollar spot and anthracnose, without the negative effects of conventional DMIs during stressful summer conditions. By combining the Revysol fungicide active ingredient (mefentrifluconazole) with pyraclostrobin, Navicon will further broaden its activity, further improve dollar spot control, and provide plant health effects throughout the season.

Consensus:

As field tests wrapped up and Maxtima fungicide and Navicon Intrinsic brand fungicides head toward EPA for registration, the scientific consensus from some of the best disease researchers on the planet is pretty straightforward: Revysol fungicide can potentially be a much-needed new DMI with great activity on key cool-season and warm-season turf with no apparent phytoxicity issues or PGR effect. Will it be approved for golf this year? We'll find out in our next installment.

Revysol at a Glance

- Proposed tradename for turf is Maxtima
- Active ingredient is mefentrifluconazole
- Class of chemistry is new chemistry class Isopropanol Azole
- Strong potential as a resistance management tool
- Primary diseases controlled: anthracnose, dollar spot, summer patch
- Targeted registration: 2019
- A second proposed turf product, Navicon, includes Insignia (pyraclostrobin)

BASF

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NEXT UP:

Part 3 of our series will focus on how the EPA reviews products. Note: Any sale of the products after registration is obtained shall be solely on the basis of the EPAapproved label, and any claims regarding product safety and efficacy shall be addressed solely by the label.

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Staying sharp

In his business leadership bestseller, "The 7 Habits of Highly Effective People," Stephen Covey talks about the need to balance productivity and effectiveness in order to maximize potential. The most successful leaders maintain their personal equilibrium, Covey says, by staying sharp through an ongoing process of personal change and improvement. He likens the lifelong journey to "sharpening the saw," which he says needs to happen across four dimensions: physical, spiritual, mental and social/emotional.

Staying sharp is a disciplined process that takes shape over a period of time. For anyone who wants to develop a plan for self-improvement, increasing motivation and creativity will be critical. Here are some ideas that may help:

· Rest your mind. Diverting one's attention from the problems of the day and, especially, work-related problems, invigorates the

mind for expanded innovation and problem-solving. A rested mind improves your memory and your mood. A rested mind also empowers self-knowledge for those already skilled in their jobs. Self-knowledge helps us be receptive to talking about other people's problems, needs and expectations. Improving self-knowledge helps managers

learn from their mistakes and deal effectively with criticism and feedback.

· Manage your time. Leaders skilled in time management use their time effectively and efficiently, which allows them to focus efforts on priorities. They are less likely to be overwhelmed by the wide assortment of challenges and demands in their jobs. Effective time managers can address a broader range of activities and delegate with greater clarity because they recognize a start and stop to discussions, tasks and problems.

On the other hand, managers who are unskilled in time management are disorganized and wasteful of time and other important resources. They tend to drift from problem to problem, leaving co-workers confused about priorities. The resulting inefficiency only seems to grow with time.

· Pursue work/life balance. In a servant-leadership capacity, balance is sometimes fleeting because we're always putting the needs of others before our own. Nevertheless, pursuing balance between the professional and the personal is critical to effectiveness in each. This balance is a direct result of taking time to sharpen the saw; it prevents leaders

from becoming one-dimensional and fully capable.

Normally one is considered to be out-of-balance when he or she overdoes one at the harmful expense

of the other. At one end, workaholics seem to find never-ending demands for working while those lacking balance place greater emphasis on on-the-job fun and activities at the expense of effective professional conduct. A clear signal of being out of whack is the inability to address priorities on either side of the balance point.

Bringing harmony to your four-dimensional needs physical, spiritual, mental and social/emotional - helps managers be more productive and fulfilled in their lives. Covey says it's often a matter of working smarter rather than working harder. Here are a handful of activities to consider while sharpening your own saw:

- · Invest time and energy into learning. Learn a new language or how to play a new instrument. It is difficult to worry about problems at work when your mind is at work learning.
- · Read about the lives of great leaders and the challenges they overcame to reach their potential. We're inspired by the trials and perseverance of others, which have a way of making our challenges a little less daunting.
- · Travel to a new city, region or country. Travel provides a literal and figurative escape that often clears our minds and brings new perspectives to problems and challenges.

Finding balance not only takes time to sharpen our saws, it also takes a plan. We can all learn from one of the great woodcutters in history, Abraham Lincoln, who said, "If I had six hours to chop down a tree, I'd spend the first four hours sharpening the axe." GCI



HENRY DELOZIER is a principal in the Global Golf Advisors consultancy. He is currently Chairman of the Board of Directors of Audubon International.

In a servant-leadership

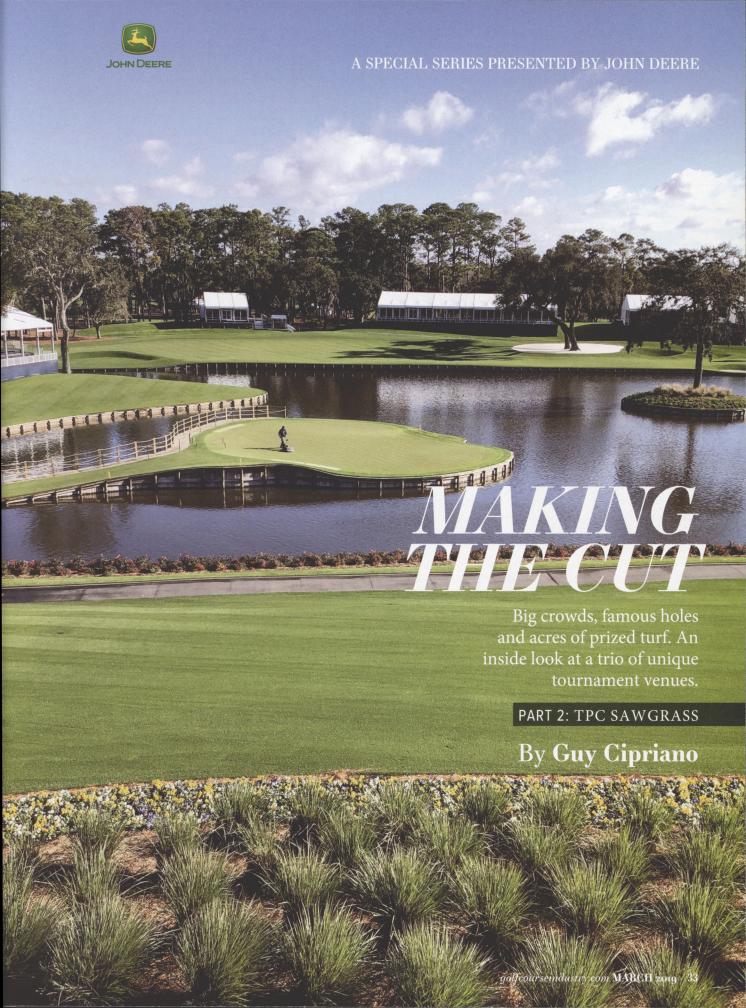
capacity, balance is

sometimes fleeting

because we're always

putting the needs of

others before our own."





▲The18th hole on the TPC Sawgrass Stadium Course.

im Barger is the longest-tenured employee at a facility known for launching the modern tournament golf movement. On a damp, turned delightful morning 44 days before the 2019 PLAYERS Championship, the lore associated with longevity becomes apparent as Barger sits in a utility vehicle parked along the 17th hole and revisits TPC Sawgrass Stadium Course memories.

A Greensboro, N.C., native, the Navy brought Barger to north Florida in the 1970s. He later enrolled at Lake City Community College, a once robust supplier of turfgrass management talent to the booming Florida golf market. Details about the PGA Tour building a tournament-caliber course in a swamp in nearby Ponte Vedra Beach intrigued Barger and a few classmates. The Lake City contingent helped an eclectic team led by Pete Dye, Alice Dye, Dave Postlethwait, Alan MacCurrach Jr. and Vernon Kelly construct a golf course where only PGA Tour visionary Deane Beman and optimistic developers thought one should be built.

The crew averaged 68-hour weeks, working continuously through the spring, summer and fall of 1980. Walking the course shortly after it opened, Barger and a friend spotted the rarest of

About this series

Golf Course Industry is partnering with John Deere to provide an inside look at three unique tournament venues. As the part of the project, social media tours of each facility will be available @GCIMagazine and podcast interviews can be found at www.golfcourseindustry.com.

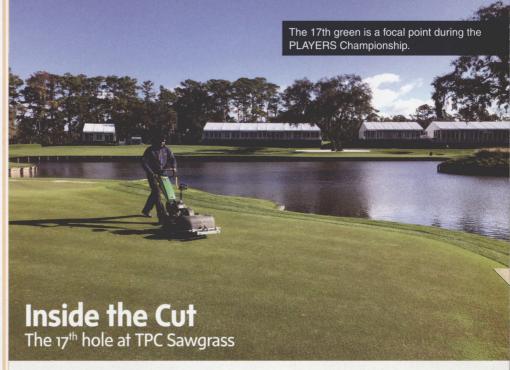
Part 1 February: TPC Scottsdale; Part 2 March: TPC Sawgrass; Part 3 May: Trinity Forest critters, a Florida panther, darting between the 16th green and the 17th tee. In his 39 years working at TPC Sawgrass, where he parlayed the construction opportunity into a golf course maintenance career, Barger has seen Michael Jordan, Lawrence Taylor, Gene Hackman, Larry Bird, Kenny Rogers, Gerald Ford and George H.W. Bush, along with every elite pro golfer of the last 40 years, enjoying the same spot as the panther.

More startling than the celebrities, champions, crafters and critters are the changes within Barger's own department. When the Stadium Course opened in 1980, the entire TPC Sawgrass crew could "fit around a picnic table," he says. The Stadium Course has gone from being reviled to rejoiced and another layout, Dye's Valley, was added seven years later. Barger now has more than 80 co-workers. Director of golf course operations Jeff Plotts and top assistant Lucas Andrews stage pre-tournament motivational staff meetings in a hospitality tent behind the 17th green, one of several massive structures surrounding the photogenic and perplexing hole. Close to 100 agronomy volunteers representing 17 countries converge in north Florida this month to assist one of the most scientific and data-driven operations in turf.

Crew members and PLAYERS Championship volunteers conduct tournament week meetings in a large tent behind a majestic agronomy center built as part of a \$50 million renovation completed in 2017. The tent is adjacent to a research nursery akin to something found at a landgrant institution. Everything about TPC Sawgrass has become bigger than Barger, Beman or the sunniest of Florida's land development optimists imagined.

'OUR DISNEYLAND'

TPC Sawgrass boasts a sizable economy of its own within the \$9 billion golf maintenance industry - and it's positioned for continued growth. The



Mowing or performing a cultural practice on the TPC Sawgrass Stadium Course 17th green might be more pulsating than hitting a shot to the island.

The 4,000 square foot surface features less than 6 feet of separation between the end of the green and water. Working on the hole, especially when the PLAYERS Championship approaches, isn't for the meek. The steps and shifts - operators use turning boards when mowing greens - mean managers must ingrain situational awareness into employees.

"We have to make sure we are not going to put someone at a spot where they are too nervous and not performing at their peak," assistant director of golf course operations Lucas Andrews says. "You almost have to be nonchalant. We're just mowing grass. You have to forget about the grand nature of it and where it is, but at the same time, it's very special to a lot of people"

Pete and Alice Dye's creation includes numbing maintenance realities besides proximity to water. The hole sits in what Andrews calls a "bowl," especially when the two-story hospitality structures stretching from tee to green are erected. Wind alters the amount of moisture on the surfaces compared to other parts of the course, making the hole wetter or drier than the other 17, Andrews says.

Forget completing any significant midday maintenance on the hole, because golfers linger on the tee and green until it peeves the groups behind them. And most golfers aren't just hitting one shot into 17, so ballmarks are plentiful.

Traffic must be micromanaged in the months prior to the PLAYERS Championship. This year, the crew installed a dock on the back of the bulkhead to limit turf damage on the green's back left corner. In one of his early moves at TPC Sawgrass, director of golf course operations Jeff Plotts removed the synthetic turf portion of the walkway, opting for a natural appearance. The dock also helps route traffic off the walkway. "We're trying to preserve that hole for that one week when everybody around the world sees it," PGA Tour senior vice president of agronomy Paul Vermeulen says.

Crooked lines aren't ignored. Name a more photographed par 3 in the world? The hole is so popular that TPC Sawgrass conducts tours of the course for people who never actually get to play the course.

John Deere 18oSL PrecisionCut and 26oSL PrecisionCut walking mowers are used on the green and tee. The hole includes around 12,000 square feet of teeing space. The more than seven acres of spectator mounding surrounding the hole receive the same amount of attention as the playing surfaces. The mounds, which offer space for thousands of spectators, are mowed at 1 inch using a reel unit, the John Deere 2653B PrecisionCut.

"The aesthetics of that hole are everything," Plotts says. "We want the fan areas to look as good as the green itself does. Everything we do there has importance."

Making the 17th hole sparkle requires tremendous support. John Deere dealer Beard Equipment assists the TPC Sawgrass agronomy team during tournament week by delivering extra equipment and providing meals for employees and volunteers. And the quest for stunning aesthetics on 17 extends beyond turf, as landscape superintendent Dave Evans and the crew planted 6,000 delta pansies, 1,000 roses and more than 600 native grasses in preparation for the 2019 PLAYERS Championship.

At 137 yards from the pro tee, the 17th is the shortest hole on the course. But short, in this case, doesn't mean underwhelming.

"Everyone wants to see 17," longtime equipment manager Mark Sanford says. "I'm talking to people all over the country who have seen 17. They don't know what course it's on, but they have seen the island green on 17."

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scope and splendor of the operation enthralls anybody interested in high-level agronomy.

"I don't know what it's like behind the scenes at Disneyland," says PGA Tour senior vice president of agronomy Paul Vermeulen, whose department oversees the maintenance of TPC Sawgrass. "I'm sure it's impressive. We call this our Disneyland just because it's so impressive and so far-reaching."

Plotts and his team maintain a pair of golf courses next to the current – and future – PGA Tour headquarters. Beman still lives in the area and frequently plays the Stadium Course. Imagine former Disney CEO Michael Eisner dropping by Disneyland to ride Space Mountain.

The PGA Tour owns and operates TPC Sawgrass, and an 80-year-old who halted a successful playing career in 1974 to become an administrator still motivates, inspires and challenges the agronomy team; Beman's presence and legacy overshadows all others at TPC Sawgrass.

"Even to this day, when he comes out and plays, his expectation is for it



▲ Equipment manager Mark Sanford started his TPC Sawgrass tenure in 1983. His team maintains more than 500 pieces of equipment.

to be higher and bigger," Plotts says. "Lucas and I are always asking: Is that gold standard? Is that PLAYERS standard? Is that worthy of TPC?"

Something as seemingly repetitious as dispersing seed receives constant scrutiny. Preparing for The PLAYERS Championship's return to March required overseeding more than 200 Stadium Course acres for the first time since the 2006 PLAYERS Championship. Only three members of the crew had experienced an overseed at TPC Sawgrass. Only a few more had experienced an overseed anywhere.

A veteran of the process from his TPC Scottsdale days, Plotts understood the tactics and patience associated with overseeding. His vision involved being "really good" this cycle, becoming even better next cycle and developing an "exceptional" overseed in three to five years. The defined vision helped train a staff to execute individualized tasks such as pushing a drop spreader over a green to create straight lines without overlap.

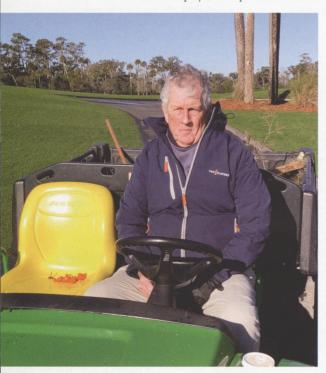
"We are getting there through brute force this year and we're looking forward to bringing some finesse to our execution next year," Andrews says. "The one thing I did learn about overseed is that it does not allow you to have any weakness in your game. You have to prep it perfectly, then you have to apply it perfectly, then you have to water it in perfectly."

Overseeding has sparked changes in mowing practices – and more training. To prepare fairways blended with ryegrass and fine fescue for tournament striping, managers started painting directional lines on surfaces in early winter. When Bermudagrass covered fairways, TPC Sawgrass had two feasible mowing options: a one-directional or 50-50 cut. Neither cut requires the same precision as striping. "Now everything we mow has a purpose," Plotts says.

EQUIPMENT EVERYWHERE

There's no shortage of equipment available to mow the Stadium Course and Dye's Valley turf. Like Barger, equipment manager Mark Sanford has observed the enormous transformation over the last three decades. His TPC Sawgrass tenure started in 1983, and he recalls working long hours to extend the effectiveness of

▼ Tim Barger is the longestturned agronomic employee in the TPC Network.





 Director of golf course operations Jeff Plotts leads the TPC Sawgrass agronomy team.



▲ Assistant director of golf course operations Lucas Andrews joined the TPC Sawgrass team as a full-time employee in 2010.

every mower. "I couldn't talk to the superintendent about getting new equipment unless it was five years old," he says.

Higher stakes requiring lower cuts resulted in an increase in equipment and support. The 1983 PLAYERS Championship featured a \$700,000 purse, with winner Hal Sutton receiving \$126,000. The totals for 2019 swelled to \$12.5 million and beyond \$2 million, respectively.

The tournament staff mowed greens at .125 inches in the 1980s. Greens are now mowed at lower heights for resort play, Sanford says.

Sanford oversees a six-person staff responsible for maintaining more

than 500 pieces of riding, walking and handheld equipment. Besides the nearly six-dozen walking greens mowers, TPC Sawgrass also deploys 11 2500E E-Cut triplexes, nine 7500A fairway mowers, five 2653B trim and surrounds mowers, and 52 Gators. The size of the fleet has increased by "six or seven times" since 1983,

TPC Sawgrass Tidbits

SO, YOU WANT TO WORK THERE ... What type of mentality does it take for an industry professional to succeed at TPC Sawgrass? Senior vice president of agronomy Paul Vermeulen says the PGA Tour seeks team-first managers when filling TPC Sawgrass openings.

"We are not looking for franchise players," he says. "What is being accomplished here at TPC Sawgrass is so big that it takes everyone contributing equally on the team. If we have singular franchise players that do well, but we have others on the team that don't perform equally, then we can't achieve what we are wanting to present to the world during the PLAYERS Championship. We're trying to find the individuals that

want to learn and fit into a team doing the task at hand. That's not to say the top graduates at one of the leading universities is not of interest. But that individual wouldn't be of interest if they don't have a team-oriented perspective."

CLIP IT AND RECORD IT

Speed, firmness and moisture readings are key data points collected at PGA Tour sites. TPC Sawgrass obtains additional data by measuring clipping volume on greens. After mowing a green, an operator empties clippings into a bucket and records the volume. An assistant superintendent gathers the data from operators and inputs daily readings into a spreadsheet. TPC Sawgrass has monitored clipping

volume for the past three years.

The information allows the agronomy team and PGA Tour officials to more precisely predict how a green is going to mature throughout the day and reaffirms the effectiveness of plant growth regulator applications, Vermeulen says.

Measuring clipping yield comes at little labor cost to the crew. "Some people might think it's a little bit overkill," director of golf course operations Jeff Plotts says. "But it gives us a good cross-section of what's going on every day. Somebody has to empty the basket anyway, so they might as well empty it into the bucket and give us an idea of what we are seeing."

MARCHING TO AN ENHANCED APPEARANCE

Shifting the PLAYERS Championship from May to March allows TPC Sawgrass to return to overseeding, a practice it abandoned because of a May tournament date from 2006-18.

"I still think overseeding has a place in the golf industry in the Southeast," director of golf course operations Jeff Plotts says. "I think it's beautiful. I think people like it. It causes some challenges, but that's what we are supposed to do – try to manage that."

Drone footage recorded earlier this year dazzled a staff accustomed to bermudagrass. "This is a beautiful facility and overseeding has dramatically changed the appearance of it," Plotts says.

MAKING THE CUT

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▲ The Dye's Valley course at TPC Sawgrass opened in 1987.

Sanford says. The new agronomy center tripled the size of shop space, Sanford adds. Once viewed as gluttonous for a 36-hole facility, the building storing Gators and riding mowers is approaching capacity. "When we were building this building, nobody thought we would have enough equipment to put in here," Plotts says. "This building is huge. It's silly big. But we are almost at capacity. If we get something new, we will find space for it."

Equipment deliveries are common. TPC Sawgrass operates on a three-year lease, with John Deere dealer Beard Equipment dispatching a mobile technician multiple times per week to assist Sanford's team. John Deere innovations are tested at TPC Sawgrass because of the spacious turf plots. The nursery also provides space to study emerging turfgrass varieties, including zoysiagrass at tournament-level green heights. In addition to the two courses, the agronomy team maintains professional and resort practices areas, turf and landscaping surrounding the clubhouse, and a revamped entryway. Hundreds of PGA Tour employees roam the grounds every day.

"I never thought it would evolve into what it is today," Sanford says. "I remember going to Christmas parties in the clubhouse, and there were 100 of us between the PGA Tour and TPC Network. I used to know just

about everyone who worked for the Tour." The number of managers on the agronomy team, Sanford adds, is comparable to the size of the crew when he arrived in 1983.

'DIVIDE AND CONQUER'

Putting personnel and equipment in proper places represents a daily conundrum facing Plotts, Andrews, Stadium Course superintendent Kyle Elliott and Dye's Valley superintendent Shannon Wheeler.

Plotts, a TPC Network veteran who shifted from Scottsdale to Sawgrass in August 2015, nine months before the renovation commenced. acts as the liaison between the agronomy department and PGA Tour players and officials. The position demands melding compassion and compromise with advanced agronomics. Asked how he appeases numerous high-achieving personalities, Plotts says, "You put everything 1A."

Although he frequently observes activities on the courses, Plotts describes his philosophy as a "divide and conquer" management style. He's the long-term thinker within a department executing a bevy of daily tasks. Following last fall's overseed, for example, Plotts shifted his attention to this year's process, which begins in October. Plotts participates in dozens of formal meetings, but the most productive gatherings are impromptu conversations with his staff.

"We need people to communicate," he says. "When you get into a formal setting, I have found the younger guys get quiet. They don't communicate or share ideas. But if you're in an informal setting, they are



really quick with popping out ideas and thoughts. That is invaluable and makes us better."

Plotts speaks with Andrews more than anybody else on the team. They occupy adjacent offices inside an administrative area featuring computers, copiers, scanners, Stadium Course canvases, motivational boards (the phrase "No whining" hangs above Plotts' door), dry erase calendars with detailed plans and Wall Streetlike conference room. Andrews, an Englishman who interned at TPC Sawgrass as University of Guelph student, joined the full-time staff in 2010, advancing from an assistant-in-training to assistant director of golf course operations in less than a decade.

Andrews, Plotts says, must be focused on the "now," which means knowing every yard of the Stadium Course. Andrews sometimes parks his cart near a restroom behind the 16th

tee and walks the final three holes. The walks allow him to seek input from employees while scouting for ways to enhance the closing stretch.

"Our habitat is out on the golf course," Andrews says. "The staff's creative juices are flowing out there. They are seeing things. They are adapting as they go through the morning and the rest of their day. If you can catch them in that moment when their creative juices are flowing, that's when you get best input."

Elliott and Wheeler, Plotts says, are responsible for leading "day-to-day" efforts on both courses. Elliott, who previously worked at TPC Boston, finds himself mesmerized by the resources available at TPC Sawgrass, especially the size on the crew. "The amount of stuff we can get done in a day or two here is insane," he says.

While the management team has stabilized in the last few years, status

doesn't shield TPC Sawgrass from the hiring and retention challenges within the golf industry. And because the property features nuances as such as severe mounding and bulkheads, the training investment is huge. "There are not a lot of things here where you can just send somebody out and they can do it," Elliott says. "That's difficult as a manager. It requires a lot of management and guidance."

The scrutiny brings pressure and opportunity. Wheeler, a veteran of the South Florida private club scene who became the Dye's Valley superintendent last year, stares at the logo when comparing working at TPC Sawgrass to other facilities.

"It's the flagship of the Tour," he says. "Anywhere you look, whether it's merchandising or advertising, you're front and center. You're part of something bigger. But it's still a golf course. If you can compartmentalize, you realize you're trying to accomplish the same thing as everybody else. It's just a different scope."

So, the TPC Sawgrass team pushes forward, awaiting the next audacious move of bosses preparing to relocate into the PGA Tour's new "global" headquarters. Whatever executives and players decide, it will be backed by significant agronomic brainpower and horsepower. Innovation associated with the PGA Tour's growth, though, will never supplant memories created through decades of working atop a north Florida swamp.

"I would like to know how many people have come through here," Barger says. "I should have counted that and how many greens I have mowed since I have been here. Those are the two numbers I would like to know. It's been fun. There have been a lot of characters come through here." GCI

The TPC Sawgrass agronomy center includes a pair of greenhouses housing thousands of flowers and plantings.







Managing Expectations

Unfortunately, when you improve or replace your irrigation system, the upper management of the golf course think everything on the course will immediately be better. This is especially true if you have been promoting the need for a new irrigation system in order to achieve better turf conditions for years and you finally got it. The truth, to anyone with turf knowledge, is that a new irrigation system, is not an immediate cure-all for every turf-related issue. As a result, it is important to manage people's expectations early in the new irrigation system process.

Other than better turf conditions, you hear two big things

about new irrigation systems from those in charge. One is that hand watering will be eliminated, and the players and members will no longer have to "put up with" (their words, not mine) staff hand watering greens while they are playing. The second is that staff can be eliminated because there will be substantial labor savings in not having to maintain an aging irrigation system or hand water. However, these are minor issues and can easily be handled through

a simple discussion with the powers that be. Hand watering never entirely goes away and the labor will be "reallocated" to do other things around the golf course that were not getting done because of

irrigation maintenance issues, not eliminated.

When a new irrigation system is installed, or a substantial upgrade is performed, everything about how the golf course is watered changes and it takes a while for staff to recognize and diagnose these changes. The majority of dry spots that existed before the new system are now hopefully gone, but there are new dry spot locations, although hopefully not a whole lot. The same can be said for the wet spots. Diagnosing wet and dry spots is not immediate as the dry spots will not show up until the weather is dry, which could be a year or

Today's irrigation systems have a lot of sprinklers. In almost any system, more sprinklers than the system being replaced by as much as a factor of two or three times. These new sprinklers need to be adjusted correctly. Adjustments include proper arc adjustments for part-circle sprinklers and

runtime adjustments for the individual sprinklers, because they are in new locations and have different precipitation rates. The central control database also needs to be completely filled out and that is

not an easy or quick task. Staff has station adjustments to deal with and the flow management software to populate.

If the course changes irrigation equipment manufacturers, staff must learn how to adjust and troubleshoot the new sprinklers, and learn a completely different, sophisticated central control system. If the course changes technology from conventional field controllers to 2-wire, staff will need to learn a new troubleshooting procedure and the superintendent might be forced to learn an entirely new irrigation management regime. Training needs executed and new terms must be learned. If the course has a new pump station as part of the irrigation system replacement/upgrade, staff also has all new equipment to learn about. There are a lot of changes with a new irrigation system and the golf course maintenance staff cannot learn, adjust and manage all the new equipment overnight.

I know all this, and you know it, but how do you get your owner, board and members to understand there is a significant learning curve to the new irrigation system? They need to have patience. Let them know up front what they should expect and how long it will take you and your staff to "dial in the new system" for better turf conditions.

This month is my 94th column for GCI, just short of eight years' worth and will be my last regular monthly column. Thank you for reading my opinions. And to those of you have taken the time to comment back to me on the various subject matters, thank you. GCI



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GINGSTS THEIR GUESTS (HOLL)

SERVING CUSTOMERS MEANS REPLICATING TOURNAMENT-LEVEL CONDITIONS FOR THE HARBOUR TOWN GOLF LINKS TEAM.

By Judd Spicer

he annual playing of the RBC Heritage nears, and the build-out at Harbour Town Golf Links is long underway.

Strongmen with pitch forks carefully

route the course texture with fresh pine straw, jump-suited forecaddies don spotless whites and nearly-finished grandstands frame what's

less whites and nearly-finished grandstands frame what's soon to come.

Above it all, the famed lighthouse on Harbour Town's home hole keeps watch

And for the mid-handicap amateur playing the renowned Pete Dye design (with Jack Nicklaus consult) from the forward tees, it almost feels like PGA Tour tournament conditions.

And that's exactly the intention.

Fronted by Harbour Town, which annually charts among the nation's top resort courses, the trio of tracks at The Sea Pines Resort on South Carolina's Hilton Head Island don't aim for fame simply when television comes to town.

Rather, a complete Davis Love III rework of Sea Pines' Atlantic Dunes in 2017 (formerly the Ocean Course), Dye's redo of Heron Point a decade before that, and a total Harbour Town restoration in 2014 sees the resort raising expectations higher than ever.

From the top down, that's how they roll.







NONE OF THIS WOULD BE POSSIBLE IF WE DIDN'T HAVE A SUPERINTENDENT THAT DIDN'T BELIEVE THESE SAME THINGS. WE BELIEVE MEDIOCRITY IS EPIDEMIC - WE

> **DON'T WANT** MEDIOCRITY.

WOULD YOU

EVER REFER

SOMEBODY TO A PLACE WHERE YOU HAD AN AVERAGE TIME? OUR SUPER KNOWS THAT WHEN A **GOLFER STEPS** TO THAT FIRST

- John Farrell

MARCH 2019

TEE, THEY'RE

A CERTAIN

"If for a minute I get complacent and don't think this one day for a guest is a visit to a Bucket List course - shame on me," says John Farrell, director of golf at Harbour Town Golf Links. "But that can't just be on me: I need to make sure that our entire team - our caddie master. bartenders, driving range attendants, everybody - we all need to understand that a guest has fresh film in the camera, and it's not unusual that somebody has saved money all year to come have a week the way we live every day. We can never lose sight of that. We can't afford a bad day. We have to be on our game."

For Farrell - who oversees all three of The Sea Pines' courses - being on his game means ensuring quality control from the links to the loo.

"The worst thing I can do is sit at my desk all day," he says. "And when I have to use the men's room, I never use the same one twice. Sounds

crazy, right? But you inspect what you expect."

Running a luminary locale extends expectations to all facets of the operation. Yet the on-course scorecard is no doubt atop the anticipations for most guests.

"There is a lot of pressure to provide excellent course conditions for our daily fee guests, as well as the PGA Tour players. But most of that pressure we put on ourselves," says Jonathan Wright, golf course superintendent /agronomist for Harbour Town Golf Links. "We are very passionate and committed to doing things smarter and getting better every year. Pete Dye built a masterpiece in Harbour Town Golf Links, and it is an honor to be here; I feel like we owe it to him, the layout, the PGA Tour and the ownership to provide the conditions that this golf course deserves."

Wright's boss agrees.



INDUSTRY



"None of this would be possible is we didn't have a superintendent that didn't believe these same things," Farrell adds. "We believe mediocrity is epidemic - we don't want mediocrity. Would you ever

refer somebody to a place where you had an average time? Our super knows that when a golfer steps to that first tee, they're doing so with a certain expectation."

Said expectations aren't presented without combat from the grounds' geographic setting.

"Because we are located on an island, we do face many unique agronomic challenges. Number one being the weather," Wright explains. "We've had two major tropical storms (Hermine and Irma) and one major hurricane (Matthew) visit us (in recent years), and lost close to 500 trees and counting, not to mention that one-third of the golf course was affected by the salt water tidal surge."

Whatever one's opinion on climate change, the wet stuff hasn't simply confronted Sea Pines in pure liquid form.

"In 2018, we experienced the first ice and snow storm that Hilton Head Island has seen in 30 years; and we had a hail storm that brought us ping pong ball-size hail," Wright adds. "We're in constant battle with the elements, whether it be salt in our water, wind, humidity, shade patterns, insects, frost, rain etc. So, we're always paying close attention to weather patterns and continuously taking soil and water samples for enhanced and timely applications to the turf."

And akin to many in the industry, manning a top-level destination doesn't make a property immune from staffing challenges.

"Another one of the major issues that we face being on an island is finding qualified equipment operators and technicians," Wright says. "Unfortunately, this is not solely an island problem. Employment issues have become the most

important concern for agronomy and golf course maintenance - period. We're very fortunate to have an extremely talented, established team, as well as a wonderful relationship with Ohio State's intern and training program that will hopefully yield qualified individuals to help keep our profession afloat, worldwide."

A CONSISTENT CONDITION

Sporting the smallest greens on the PGA Tour schedule (from a square-footage measurement vantage), the Harbour Town experience – like its sister courses - was enhanced with its own rework.

"We were very protective of the original design, and all the shot values were completely maintained," Farrell says of Harbour Town's complete restoration in 2014. "And that was at the insistence of the PGA Tour players and our ownership. So, that restoration was completely from an agronomic standpoint, wall-to-wall, with each inch of grass replaced along with new irrigation, new cart paths, everything. And that was done to provide tournament-type conditions on a year-round basis."

In a bombers' world, Harbour Town's design is a throwback to days of shot-shaping, wedge demands and putting prowess.

"The Tour players have something of a love affair with this course, because of its uniqueness," Farrell adds. "We're kind of a Wrigley Field, a Fenway - we're a small ballpark. So, it's more cerebral, and 18 times you better think out there where you're going to leave the ball."

On a yearly basis, about half of the courses played across the PGA Tour schedule are facilities which are open for public or resort play. But while several Tour/ public/resort crossover tracks "trick-up" conditions between what amateurs play 50 weeks a year and what the world's best play across four days - Harbour Town doesn't deviate all that much in course conditions across the calendar.

"We're trying to give people tournament-type conditions," Farrell says. "Green speeds will generally run about 10.5 on the Stimpmeter; good pace, and if you get them too fast it can negatively impact an experience. That, and you lose certain hole locations. Come the Heritage,



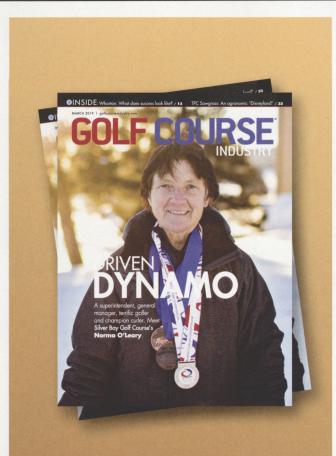
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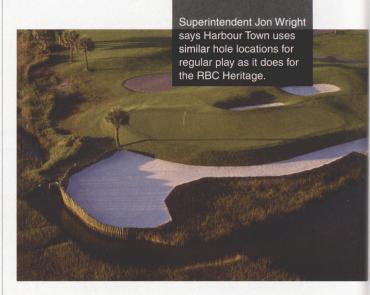


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INDUSTRY



depending on weather, we'll be faster, but the difference between course set-up isn't too different from what players see daily and how we set up for the PGA Tour players."

Wright says, "The only noticeable difference is the length of the course and hole locations. We utilize all tournament hole locations during daily resort play, but the most difficult pin placements are condensed into those four days of the Heritage."

The resulting thread is that daily duffers are essentially taking on the same layout and demands which has seen an average winner's score of just about 11-under par across 50 years of play on the shot-makers' course.

"We try and maintain the same, excellent conditions for both our daily fee guests and PGA Tour players," Wright adds. "The only differences in conditions for the two entities would be in heights of cut and levels of firmness in the surfaces. For the Tour players, we play the greens a touch firmer and all of our closely mown areas are maintained a little tighter. Although, after the Heritage, we do maintain

those same conditions for about a month to give our daily fee players the ultimate PGA Tour experience."

Speaking from his own vast experience (Farrell has been with Sea Pines since 1989), the director saw how thicker rough during the RBC can actually help the PGA Tour pros.

"It's counterintuitive," Farrell says. "The year that our 72-hole record was set (Brain Gay's 20-under in 2009), the rough was really, really high because of rain. Interestingly, the deep rough kept the ball more centered and prevented balls from rolling off canopies under trees. And that allowed better angles to holes."

With daily green speeds and rough heights nearly the same as what Jim Furyk, Matt Kuchar, Brandt Snedeker, Graeme McDowell and other past RBC champs encounter one week a year, the only true Harbour Town difference for the amateur doesn't come in the form of altered course conditions inside the ropes.

The main distinction?

"The amateur doesn't have 30,000 people starting at you and a live television audience," smiles Farrell. **GCI**



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Globetrotting consulting agronomist **Terry Buchen** visits many golf courses annually with his digital camera in hand. He shares helpful ideas relating to maintenance equipment from the golf course superintendents he visits — as well as a few ideas of his own — with timely photos and captions that explore the changing world of golf course management.



PRO DIMPLER 2000

his well-designed implement, attached to a Toro 5020 Sand Pro, is great for "dimpling-in" newly seeded creeping bentgrass greens, tees and other sandy soil seedbeds. The framework, which is attached to the bunker rake mounting bracket, consists of ¾-inch by 2-inch by 4-foot flat steel, 2-inch by 2-inch by 8-foot square tubing, ½-inch by 2-inch by 4-foot flat steel, two 5/8-inch diameter by 4-foot long high-strength all-thread (about \$210 total). Eight 1-inch clamping shaft collars, 60-inch by 1-inch diameter keyed rotary shaft, three 1-inch shaft diameter pillow block bearings with lock, four steel hubs for 1-inch live axles, four Carlisle knobby 2 ply tires with rims, three Carlisle knobby 2 ply tires without rims and 1-foot key stock (about \$878 total). All seven tires are new, so the dimpling pattern is uniform and the tires turn with the axle. The all-thread was needed to provide down pressure and to lift the attachment from side to side. Any small skipped areas are easily picked-up on the return pass. On the cleanup lap, the attachment is in the raised position to prevent washouts from the attachment tires. Labor time was about eight hours total to build the prototype and final version. Gerald "Jerry" Flaherty, CGCS, and Eric Heywood, equipment manager, are a great team at The Valley Club in Hailey (Sun Valley), Idaho.

REEL MOWER WASH STATION

ashing reel mowers at the Bonita National Golf & Country Club in Bonita Springs, Fla, is done efficiently with this portable wash cart. There are three recycled 10-gallon Primo link packs for the three-step washing process. A degreaser if used first to clean the reels and bedknives; a wash and wax sprayable application is done next; and the third step is to spray WD-40 to help prevent rust. The three tanks each have Overflow EF2220 on-demand pumps (\$380), each with 25 feet of coiled hose (\$300) with spray wands (\$150). The pumps are powered by an Interstate deep cycle 12-volt battery (\$125) that rarely needs recharging. The cart is made from a 4-foot by 29-inch pallet turned upside down with four Shepard rubber swivel caster wheels (\$60). A flat 32-inch by 51-inch by 1/2-inch thick piece of plywood (\$15) is laid on top of the 2 inches by 4 inches comprising the rest of the framework. There is plenty of room on top or on the bottom platforms to store the chemicals, supplies, sponges and cleaning brushes. It took about six hours to build. Jesse Metcalf, superintendent, and Doug Meir, equipment manager, bond well together.





Terry Buchen, CGCS, MG, is president of Golf Agronomy International. He's a 41-year, life member of the GCSAA. He can be reached at 757-561-7777 or terrybuchen@earthlink.net.

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A new chapter

By now you may have heard that I am embarking on yet another chapter in my career. Here's the scoop ...

After nearly a decade of running GCI, I'm handing over the editorial reins to Guy Cipriano. Unless you've been under a rock for the past five years, you'll already know that Guy is a vastly better journalist than me. He has a pile of awards to prove it – including the first-ever Golf Writers Association of America award given to a turf editor. He was also lauded last year by Folio as one of the Top 100 innovators, thinkers and disruptors in all of American publishing.

But more importantly, he's built terrific relationships with superintendents, architects, builders and suppliers around North America. He's quite simply the best editor and finest storyteller I've worked with in 30 years, and you folks are damned lucky to have him.

Dave Szy, who is the finest salesperson I've ever met, is already capably running the business side of our group. Russ Warner — who is a close second to Dave in the Best Sales Pro Ever competition — and young Lucas Coleman continue to give advertisers the kind of fabulous service that has made us quite profitable for (get this) eight straight years. The rest of our fabulous team — notably creative director Jim Blayney, production coordinator Caitlin McCoy and e-mail guru Erik Sales — deserve huge applause for what they do behind the scenes every day.

In short, GCI is kicking ass and taking names. So why on earth am I leaving?

First, I'm not really leaving. I'm going to continue to write this column until I run out of stuff to say or they pry my cold, dead hands off the keyboard. I'll also be contributing odds and ends of other stuff and offering lots of sage advice that Guy can happily

ignore as he takes the magazine to a whole new level.

Second, what I am doing is practicing what I preach. Allow me to explain.

For years, I've given speeches and written articles about how to effectively manage your career. I yapped endlessly about how you should be thoughtful about planning your career and try to find a job that rewards you in the ways that matter most.

But I have to confess that I was a hypocrite. I never practiced what I preached when it came to strategizing my career. Instead, I stumbled along through the ups and downs of life: I was drunk then sober, divorced then remarried, fired from a magazine that I created (sorry Herb Graffis), then miraculously hired to run this one.

Somehow I survived the self-inflicted chaos. Last year, I found that I was in the enviable position of being able to consider the future. So, I sat down and thought carefully about my goals. I talked to my wife and other people I respect. I considered which things I loved to do and which jobs would give me the best chance to do them. And I came to some conclusions.

I knew that I had pretty much done what I could do as publisher of GCI. My goal was to give myself a new challenge without giving up the things I love most: writing, teaching, being out in the market and — mainly — being an advocate for turfheads. I knew I wasn't that good at sales or managing a bunch of people. What I do

best is tell stories. I just needed to find some place that would pay me to do that.

Financially, I wanted to make enough money to buy a little retirement place somewhere warmer than Cleveland. I wanted to stay in the industry, but I knew I wouldn't last 10 minutes at one of the giant industry manufacturers. I'm a cowboy and cowboys don't do well in humongous multinational corporations.

Finally, I wanted to work for a company with a great culture that really "gets" superintendents and the green industry. A place that – like GIE Media – feels like family.

I literally wrote all this stuff down on a yellow legal pad. Pages and pages of notes. Dozens of potential companies considered then crossed off. And, finally, at the bottom of the last page, one company name remained:

Harrell's.

I reached out to my friends there and I was gobsmacked to learn they wanted to bring an ink-stained wretch like me on board to help them tell their story and to help you do your job better.

So, I'm incredibly grateful that I get to have my cake and eat it too. I get a new challenge with an awesome company that is just as passionate about this crazy business as I am. And I get to keep ranting and preaching to y'all in this space every month.

I love it when a plan comes together. Stay tuned for the next chapter ... and keep reading GCI. GCI



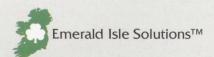
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