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bugging out.



BEDEFINING WHAT MATTERS

Hurdle after challenge after obstacle, Florida superintendent PJ Salter and his family have learned to balance work demands with life changes.

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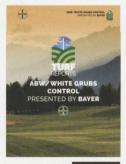
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INFUSION OF POSITIVITY

hese are anxious days and weeks for golf maintenance professionals. At least that's how it always seems when August stretches into September. The summer crew has returned to school, customers continue filling tee sheets, high temperatures refuse to dip, superintendent jobs begin opening, and your favorite team played a Week 1 clunker.

September, in many ways, has become the new August. The stakes and temperatures remain high, respites remain rare.

Before doing something impulsive such as submitting a two-week notice or composing a social media tirade, consider the abundance of good happening within the game and industry.

PUBLIC GOLF IS THRIVING

Spend any time at a public course lately? Hopefully so. Our *Golf Course Industry* team patronizes a slew of Northeast Ohio public courses, affectionately referring to each one as our "home course." We're blessed to have an abundance of well-maintained, architecturally interesting and affordable courses within a 40-mile radius of the headquarters.

We started noticing younger and newer faces at our golf hangouts beginning last spring. We're spotting many of those same faces this year. Account manager **Andrew Hatfield**, a second-year golfer in his late 20s, and I started a round at 11 a.m. on a recent Sunday. The four groups playing before and after us were filled with millennial and Generation Z customers. Forty-one never felt so old on a golf course!

Data is matching our observations. The KemperSports Golfer Insights Survey, which queried 24,774 current, lapsed and new golfers, revealed that 27 percent of new golfers are 18-34. The industry experienced a net increase of 500,000 golfers and the number of female golfers increased by 8 percent to 6.1 million in 2020, according to the National Golf Foundation.

Where are these new golfers playing? Public facilities account for more than two-thirds of the U.S. golf supply and the number of rounds played at those facilities were up 25.8 percent through June compared to the same six-month stretch last year. Public golf had a solid 2020 financial performance, with 85 percent of facilities reporting they were profitable or broke even, according to our State of the Industry report.

The bridge to deeper golf experiences (translation: more individual spending on the game) appears reinforced.

THE YOUNG WOMEN AND MEN ARE GOOD

Students helped solve summer labor conundrums at facilities of all levels. We only heard one gripe about them in our summer travels: *they have to go back to school*. In all seriousness, many younger employees are embracing tasks, asking the right questions, working well with others and recruiting classmates seeking summer work. Some have even approached their bosses about pursuing golf course maintenance as a career.

MARKET STABILIZATION

Remember those misguided predictions last March about the possibility of "thousands" of golf courses potentially closing within a few years? Here's the reality: only 60 U.S. golf courses closed in the first six months of 2021, a 46 percent drop from the first six months of 2020, according to the National Golf Foundation. The stabilization follows a 15-year period from 2006 to 2020 when 1,606 18-hole equivalents shuttered.

NEW PRODUCTS

There haven't been this many new plant protectants entering the golf market at the same time in

more than a decade. Pick a pest, disease or weed, and there's a good chance a recently released chemistry will help control the potential problem. Innovation reduces potential turf issues. It also reduces the stress of the people responsible for staying ahead of those issues. **GCI**



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GOLF COURSE

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NOTEBOOK



TWO THINGS YOU CAN'T BUY

Somebody with a curious job title goes inside what culture and coaching entails — and how the concepts can help the golf industry.

By Guy Cipriano

his massive industry serving this mostly happy game features myriad job titles and descriptions.

Consider the possible titles within one agronomy department. Director, superintendent, assistant superintendent, equipment technician, irrigation technician, spray technician, assistant-in-training, horticulturist, crew lead, equipment operator, intern, seasonal employee. Yes, we know we're probably missing a few. And we know that's just

one department at many facilities.

Gautam Patankar possesses a job title not imbedded on many business cards. Patankar holds the position of vice president of culture and coaching for Bobby Jones Links. VP of culture and coaching? It's the question Patankar fields often.

"By and large," Patankar says, "we have a lot of people in our company who are introverts, and we have to teach them how to be extroverts."

Bobby Jones Links is in a position

similar to nearly every company in the golf business. Getting the most from people — and creating an atmosphere where they interact well with strangers — shapes the customer experience.

Formerly known as Mosaic, Bobby Jones Links is a Georgia-based management company overseeing operations at public, private, resort and community golf facilities. A collegiate golfer at Rutgers University who grew up caddying in New Jersey, Patankar joined the company in 2006. He was the general manager at a pair of Georgia clubs before shifting into a vice president of operations role in 2014. Understanding

the need to elevate the customer experience, the company moved Patankar into his current position at the start of 2021.

"We said, 'What's our biggest gap and how can we differentiate ourselves from other management companies, whether big or small?" Patankar says. "We all landed on the fact that one thing the industry says it does really well, but it really struggles with, is customer service."

Patankar visits clubs within the Bobby Jones Links portfolio — the company's highest-profile property is the renovated and rejuvenated Bobby Jones Golf Course in Atlanta — and works with department heads, including directors of agronomy and superintendents, on leadership skills. The overarching goal, though, is to connect with frontline workers, whom Patankar says represent 90 percent of the company's workforce. "By sheer volume, they are the ones that make this company go, so we tell them how important they are, and we teach them how important they are," he adds. The training program has evolved to the point where frontline workers are now leading Zoom calls or in-person sessions.

Like any company relying on hourly workers, Bobby Jones Links has experienced challenges hiring and retaining quality employees, Patankar emphasizes in his interactions with department heads that companies and facilities with an empowering and caring culture have the best chance of succeeding in the labor market.

"People want to be part of something where they are really valued and that's why it's important that we follow through on what we talk about," he says. "There's more to it than giving somebody \$3 (more) an hour and thinking this person is going to be great and they're going to stay forever. I understand money means a lot, but I still think it comes down to recognition and being valued. We have a work family and people want to be included in the work family."

Providing opportunities for career advancement is a proven way a department can show employees they are valued. On the turf side, that means explaining to employees they can make the leap from an hourly or seasonal employee into a full-time position such as an assistant superintendent or technician. The golf industry lags behind other industries in this area, Patankar says.

"Our industry has to start giving people a legitimate trajectory or a legitimate path to keeping them in the business or otherwise we are going to continue to lose really great leaders to industries that allow them to see a path that they don't have in our industry," he adds. "All these other companies do that ... they put you through school if you need to, they educate you if you need to, they take time with different programs for your personal growth.

"The golf industry has been a little bit archaic in that regard. Some do it better than others. It usually takes the cart attendant or server to do something awesome where they turn around and say, 'I have to do it with that person.' I can't afford to lose them. This isn't about affording to lose them, it's about cultivating talent and giving them a reason to stay because they can be a future leader."

Investing in culture and coaching takes times, a scant resource for department heads and employees who are already overexerted because of labor shortages. The upfront time, in Patankar's view, is worth the investment, especially considering the alternative. "If your employees are happier and they come to work more, you don't have that churn of trying to rehire," he says.

Happy employees. Happy customers.

"In the last year, golf membership sales are skyrocketing," Patankar says. "If you go to the club and talk to the members and ask how it's going, they say, 'I have never seen a chef come out now as much as in the past. I was out on the course the other day and hit one into the woods, and the guy on the mower got off the mower and gave me three golf balls.' You start hearing and seeing those stories, and it starts penetrating through the team."

Tartan Talks No. 62



Harrison Minchew has an opportunity few of his peers receive these days: He's overseeing construction of a new golf course.

Minchew joined the Tartan Talks podcast to discuss his collaboration with former PGA Tour player Fred Funk at RainDance National, a 300-acre Colorado site between Denver and Fort Collins. The scenery and terrain are an architect's dream. "The site is extraordinary," says Minchew, who started his career with Arnold Palmer Design in 1982. "I have never had a site this nice. I just come out here and say, 'Wow, am I really doing this?'"

RainDance National has occupied the bulk of Minchew's work thoughts since construction commenced last September. In addition to being the lead architect, he's serving as project manager. The Floridabased architect has been living in Colorado throughout construction.

"It's a little stressful being away from Ponte Vedra Beach for this long," he says. "But you only get one opportunity in life to do something this special, and this is it."

To learn more about RainDance National and Minchew's career, download the podcast on the Superintendent Radio Page of Apple Podcasts, Spotify and other popular distribution platforms.







Submissions for the annual December issue are due Friday, Nov. 5, 2021.

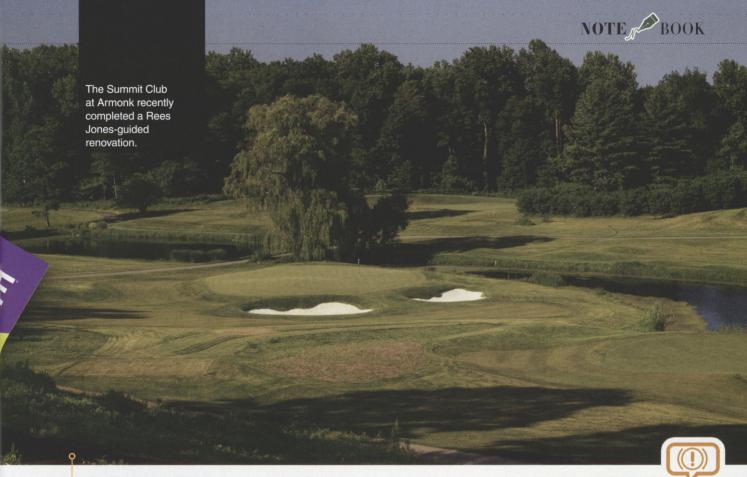
verybody has a story to tell.
Even you.
Why not share your story — of accomplishment or struggle, of friends acquired or lost, of lessons learned, of your year in review — in the sixth annual Turfheads Take Over issue, which will be published in December?

Feel free to write about any industry topic you feel is relevant. Topics covered in 2020 included the importance of mentors, how to (subtly) tout your value to the club, how assistants (or anybody, really) can better serve themselves and their club, what makes local golf courses special, thinking about the course as a story, returning

to the industry, and the end of the line.

Everybody with an interest in the golf industry and helping others is encouraged to write. Past contributors have included current and former superintendents, assistant superintendents, designers and architects, teachers and researchers, consultants, and manufacturer and distributor representatives.

Stories of 600 words or more with accompanying photos or other images can be emailed to **Guy Cipriano** (gcipriano@gie.net) or **Matt LaWell** (mlawell@gie.net). And if you need any help throughout the writing and editing process, just call or send an email. We're here and happy to help you however we can.



COURSE NEWS

The Summit Club at Armonk in Armonk, New York, celebrated the official grand opening of its Rees Jones-renovated golf course. Improvements include three new holes on the back nine, the rebuilding of all fairway and greenside bunkers, and the adjustment of some bunker locations. Several greens complexes were added to provide new greenside chipping areas, and multiple landing zones were created on a few holes to improve their playability. The range and practice facilities also were upgraded and a new short game area was added.

TPC Deere Run, host of the PGA Tour's John Deere Classic, is undergoing a major bunker renovation. Led by PGA Tour Design Services, with input from course architect and former PGA Tour professional D.A. Weibring, the renovation is expected to last 132 days (weather pending). Each bunker will have the entirety of the sand, surrounding grass, existing liners and drainage removed before being updated with an all-new drainage system and sand. Upon completion, the bunkers will then be sodded with Turf Type Tall Fescue sod. The course will remain open for play during the project.

Duininck Golf announced it has completed second phase tee renovations at Paako Ridge Golf Club in Sandia Park, New Mexico. Paako Ridge sits just a few miles east of Albuquerque, in the shadows of the Sandia Mountains. The project focused on modifying and modernizing the tee complexes, plus enhancements to the irrigation system and surrounding native areas.

Richardson | Danner has broken ground on bunker work at Anchorage Golf Course, which will play host to the 2022 U.S. Senior Women's Amateur. The work follows several years of master planning and greens work at the 30-year-old public facility, originally designed by Bill Newcomb for the Municipality of Anchorage.

Arcis Golf acquired six Mickelson Golf Properties in Arizona from Phil Mickelson and his business partner, Steve Loy. The clubs in the sale include The Stone Canyon Club, The Golf Club at Chaparral Pines, Rim Golf Club, McDowell Mountain Golf Club, Ocotillo Golf Club and Palm Valley Golf Club. Arcis Golf now has 15 properties in and around Phoenix, and 66 total clubs across the country.

INDUSTRY buzz

The PGA Tour will make two major donations to the GCSAA through the GCSAA Foundation. The PGA Tour will contribute \$250,000 over five years to help implement BMPs on the golf facility level and to support the First Green. The PGA Tour has also pledged \$50,000 over the next 10 vears for the Allan MacCurrach Jr. Award. which is a scholarship with the purpose of recognizing an outstanding non-traditional student seeking a career in golf course and turfgrass management.

Jeff Steen is the new director of agronomy at Big Cedar Lodge, where he will oversee the resort's five golf courses. Steen has more than 24 years of experience managing premier golf resorts, including 13 years with the Pebble Beach Company.

Quali-Pro announced Suprado insecticide has received EPA registration. The new product features the insect growth regulator Novaluron, which provides ABW control.



PUTTING CHAMPIONSHIPS IN PENNSYLVANIA

The USGA has awarded five more U.S. Open Championships and four U.S. Women's Open Championships to a pair of storied Pennsylvania venues:

Oakmont Country Club and Merion Golf Club.

The USGA also committed to bring its national championships to the



Keystone State with greater frequency, even beyond the now 18 championships scheduled to be played in the commonwealth through 2050. This year's U.S. Amateur at Oakmont marked the 88th USGA championship conducted in Pennsylvania, the most of any state and the latest in a relationship between the state and the USGA that began with the 1899 U.S. Women's Amateur at Philadelphia Country Club and continued with the 1904 U.S. Women's Amateur at Merion and the 1919 U.S. Amateur at Oakmont.

Oakmont, which was previously announced as the host site for the 2025 U.S. Open, will host the 2028 and 2038 U.S. Women's Opens, the 2034, 2042 and 2049 U.S. Opens, the 2033 Walker Cup Match and the 2046 U.S. Women's Amateur. It will become the second U.S. Open anchor site named by the USGA, in an effort to return to storied venues with deep and meaningful USGA championship history every five to six years. Pinehurst Resort & Country Club was designated an anchor site last year.

Merion, which was previously named the host site for the 2022 Curtis Cup Match and the 2026 U.S. Amateur, will host four additional Opens — the 2030 and 2050 U.S. Open and the 2034 and 2046 U.S. Women's Open, with additional championships to be named in the future. Merion, a key long-term strategic partner of the USGA, has hosted 18 USGA championships — the most of any site.

Pennsylvania boasts 671 golf courses and a thriving \$2.3 billion golf economy that employs more than 50,000 people statewide, according to the National Golf Foundation.





MAJOR **MOMENTS**

he major championships have come and gone and the Ryder Cup is on the horizon, but it didn't take me long to determine my favorite event of this year.

Augusta was impressive, as always, particularly as I'd walked the grounds the week before the event. Torrey Pines was set up well, albeit with the usual diabolical U.S. Open rough heights, but the pressure of the national championship took its toll on Sunday afternoon. And, of course, Phil gave us old guys a thrill at Kiawah in winning the PGA Championship.

However, the event I enjoyed the most – by a long shot – was The Open at Royal St. George's.

I love real links golf, and I like The Open's new position as the final major on the golf calendar. It comes early enough in the season that it can still inspire us to make the most of summer play while, hopefully, providing a few teachable moments for golfers and golf course superintendents.

What I think I love most about The Open – and, for that matter, on most courses in the UK – is that golfers must play the course as they find it. It's how golf is meant to be played, on firm, dry conditions, not on manufactured or tricked-up surfaces. That means shots can be affected, for good or bad, by nature, geography, terrain, or weather. And that makes golf challenging and fun.

Admittedly, the field at Royal St. George's got a break from Mother Nature this year, with warm temperatures and little, if any, wind. But it's proof just how good the course and the conditions were that the absence of those outside agencies didn't diminish the

wonderful play and outcome of the competition.

What did we learn from this year's Open Championship? Here are my takeaways:

GREEN SPEED

How great is it to see green speed NOT being an issue? How fast were they? "A smidge over 10 feet," said head greenkeeper Paul Larsen, who became an overnight internet sensation during the run of the championship. How refreshing was he and how sensible were those green speeds? (And you gotta love that hair!)

Slower green speeds allow for a wider variety of hole locations, which keeps things interesting. Faster surfaces force the hole to the center of the green, making the approach shot easier for the elite player. Super-fast surfaces take away the player's need to "figure out the speed." Putting then requires a mere nudge, followed by lots of patience as the ball creeps to the hole and, one hopes, doesn't trickle away and off the putting surface.

It's probably surprising to many recreational golfers that slower greens are harder to putt. The golfer can't be afraid to hit the ball. Slower greens require more skill as players need to read the break, judge their swing, gauge the takeaway, and take the contours into consid-

While we're talking about green speeds, what is it that makes us so concerned about pace? Stimpmeter envy? Bragging rights? If you think it's a badge of honor to reach 13- or 14-foot speeds, I suggest you

think again.

Are you getting pressure from the better players at your facility? Is it something to do with the size of your (cutting) unit?

Find a speed – particularly in this economic climate - that makes sense for your golfers, staff and budget. Fast greens cost more to maintain. Consider the cost of materials, plant protectants and, at least right now, the shortage of labor. At a busy daily-fee or in a golf community with average players, excessively fast putting surfaces mean you're spending a lot more money to make a lot of golfers unhappy.

HOLE LOCATIONS

Another consequence of fast greens is fewer good hole locations. The skills needed for hitting effective approach shots virtually disappear. Slower speeds allow putting holes in more "interesting" locations, including in tight corners and along slopes and angles.

At The Open, it was a joy to watch the best players in the world creatively work their way around and onto the putting greens. How cool was it to see a hole location on the back side of a mound? And then watch the player figure it out?

Of course, we walk a fine line here. There are challenging hole locations and there are those that are too hard. Making things too difficult or intimidating for beginners so they don't understand what the game is about is a really bad idea. And bad hole locations slow play.

MORAGHAN continues on 62



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









move without inhibition. He is the kind of person who dances like nobody is watching. He dances through the end of the first song and into another.

Salter is a different person at 39 than he was at 29, than he was at 19, than he was at 9. He might not have danced back then (though he probably would have). He certainly was not in charge of the turf at an esteemed private golf club — he returned to Riviera Country Club in Coral Gables, where he had previously worked nearly four years as an assistant superintendent, in February 2016, this time as the director of agronomy. He was not a father. A

third song begins. His form holds up.

Salter and his wife, Lisa Marie Jess, have experienced more, evolved more, these last five years than some people will in a lifetime. They have cleared hurdle after challenge after obstacle. There are more to come. They seem as prepared as you can be.

Salter returns to the table in time for entrees a little sweatier than when he departed. No different than a humid morning out on the course.

MORNING TEMPERATURES ARE CLIMBING high into the 80s but Salter is not sweating - not yet, at least - when he pulls around the front of the new Riviera clubhouse into the parking lot. He is wearing an aqua golf shirt, purple socks festooned with mushrooms and Jordan Brand golf shoes. When he was just starting out, he would occasionally wear shorts to the course. One mentor mentioned that pants

are more professional and his work

shorts disappeared. Dress for the job you want.

"It's hot," he says, "but it's just the humidity. It doesn't seem to ever get above 94 but it's 94 and humid every day." He checks his phone. The Weather.com thermometer reads 94. "The thing about the heat down here," he continues, "is you get to some point every fall, typically in October, where the edge is gone in the morning. It's 72, the humidity isn't too bad, and that lasts through March maybe. And then it changes back and you're belly sweating through your shirt at 7 a.m. because it never gets much below 80 at night.

"In Michigan, there are plenty of nights when it gets into the 60s. But

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AMGUARD ENVIRONMENTAL TECHNOLOGIES

you get used to it, and the tradeoff is I have to put a jacket on when it gets below 60 now."

A quick professional biography: As he just mentioned, Salter is a Michigan native and a Michigan State University graduate, with a degree in crop and soil sciences framed on one wall of the stuffed office he shares with his three managers. He graduated in 2005 and headed south on Christmas Day to start his professional career as the second assistant at the Golf Club of the Everglades under Jason Gerlach. A year later, he moved to Riviera as an assistant under Eric von Hofen. In 2010, less than five years removed from East Lansing, he landed the superintendent position at Ocean Reef Club in Key Largo, working under director of agronomy Juan Gutierrez. He considers all three of them mentors and has incorporated many of the lessons and policies they passed along. He worked at Ocean Reef Club for four years, then nearly two years as the superintendent at Riomar Country Club in Vero Beach, where he oversaw an extensive Tom Fazio II renovation. Everything lined up in 2016 for a return to Riviera.

Five moves in a little more than a decade. A dizzying ascent, especially with a proposal, a wedding, the birth of one child and the imminent arrival of two more mixed in.

At Riviera, an early **Donald Ross** design approaching its centennial, Salter oversees a veteran maintenance crew that normally includes 12 full-timers and two mechanics in addition to Salter and three managers — superintendent **Drew Nottenkamper**, first assistant **Mike Smith** and second assistant **Mike Heinz**.

Nottenkamper arrived first, in January 2017, from Desert Mountain Club in Scottsdale, Arizona. A California native, he tends to be the most outwardly relaxed of the four — his resting heart rate during an afternoon check of irrigation stations was 58 bpm—and is arguably the best golfer after a college career at San Jose State

University.

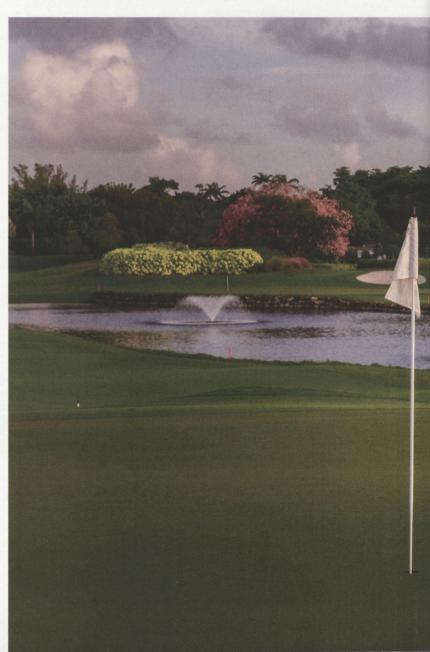
A high school baseball player who originally wanted to work on the diamond, Smith followed in 2018, his career path altered after he realized there are far more golf courses than professional ballparks. He likes to joke that after a handful of years in Florida, he is confident at least in his ability to grow grass. "I don't think I'd kill anything," he says.

Heinz has the longest professional relationship with Salter — they worked together at Ocean Reef starting nearly decade ago — but arrived most recently. He loves baseball, pre-

viously interning for the Baltimore Orioles and head groundskeeper Nicole Sherry, and would love to teach the game to young players. For now, he is leading Riviera's efforts to gain Audubon Cooperative Sanctuary certification.

The quartet tends to both complement and compliment one another.

"Drew knows what needs to be done, he understands priorities very well, he knows how to get across to the guys what's important and he's really good at managing the crew," Heinz says. "I've tried to learn crew management from him, because I'm



Riviera membership has signed off on nearly \$50 million over the last six years in course renovations and clubhouse construction. not a natural manager. Smitty will tell you he's an over-communicator. He's like PJ: he's repetitive and he wants to make sure you get what's going on. And I'm there for where I'm needed. There's a role to play here and I'm going to play it to the best of my ability. That's how you're successful."

"I think we all bring something different to the table but it all jells real well," Smith says. "I don't think I've seen any of us have an argument." They joke around but mentioned in separate conversations that they have never raised their voices with each other. "I've heard stories about people

yelling, fighting with mechanics. Just be positive around people."

"I enjoy this crew," Nottenkamper says. "I enjoy managing the guys. Delegating tasks is definitely something I've gotten better at. ... Just because you want to do something doesn't mean that you should. It's not always beneficial to what we're trying to accomplish at that time."

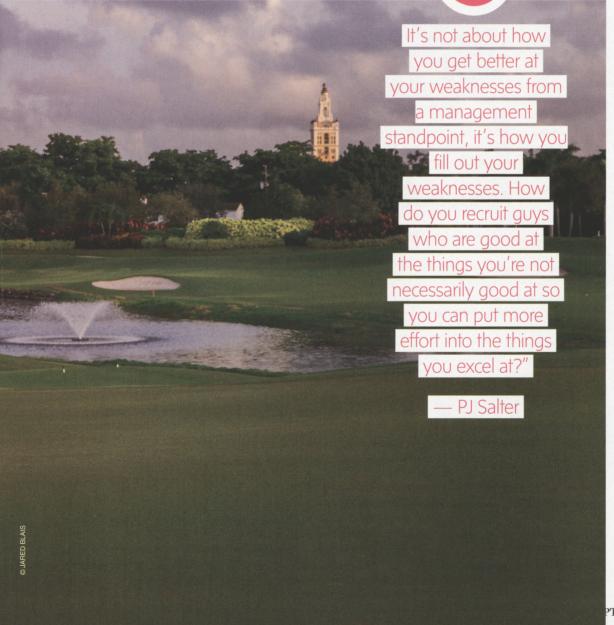
Salter brings all three with him to green committee meetings each month, to gain more confidence and comfort in boardrooms, to master different parts of the job. He also makes sure each of them calls the

shots during the weekend at least once a month. These are things he learned on the way up and things he wants to pass along.

"What Eric (von Hofen) was trying to explain to us was that it's not about how you get better at your weaknesses from a management standpoint, it's how you fill out your weaknesses," Salter says. "How do you recruit guys who are good at the things you're not necessarily good at so you can put

more effort into the things you excel at?"

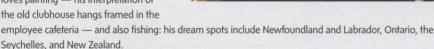
The results are



EXPERIENCE MATTERS

Labor is and will most likely always be the top challenge for most turf pros. PJ Salter is fortunate that, at least during his second run at Riviera Country Club, he can rely on a series of strong assistant superintendents and a maintenance crew filled with folks who were at Riviera even before Salter first arrived there in 2006.

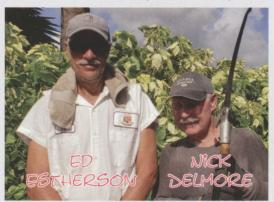
Nobody on the crew has worked at Riviera longer than Ed Estherson, a Queens, New York native who has worked at the club the last 25 years. He loves painting — his interpretation of the old clubhouse hangs framed in the



Superintendent Drew Nottenkamper calls Estherson "a character" and "a great guy." "He's one of those people who are just ingrained in Riviera. It's hard to think about trying to replace him. With certain guys, you can say a few words and they're on the same page."

Nick Delmore is an expert arborist who no longer works full time but can still turn trees into art with the best. Florida has certified more than 10,000 arborists over the decades, doling out numbers sequentially from single digits into the low five digits. Delmore's card is No. 201.

Equipment technician Bill Petro is a 21-year Riviera veteran who Salter describes as the last to leave before a storm comes in and the first to report back for cleanup. "I treat everything like it's mine," Petro says. "If I



work on your car, I'm going to treat it like it's mine. I would have to not work here to not care about something."

"Somebody who can get the most out of the guys but also remember we're all human beings here is huge on my list of priorities of what I look for in a manager," Salter says. "Some guys have it, some guys don't. Some guys are just assholes. If you just treated people a little bit better, you'd get more out of them and they'd be happy to come to work."

— Matt LaWell

obvious: Members have approved more than \$10 million in renovations over the last six years, the undulating TifEagle greens and Celebration Bermudagrass tees and fairways shine, and all three managers seem poised for career climbs.

"I got into golf course maintenance because I really like to work hard, I like to be outside and I wanted to play free golf," Salter says. "And as it developed into a career, I started to appreciate the people management and I started to understand it's the people and not my college education that produces results."

When he started, Salter was more likely to opt for negative reinforcement, telling crew members what they were doing wrong rather than what they were doing right. After years of learning and years of teaching, he now opts for a hello and a "how are you?" to start most conversations. He wants to humanize changing cups, pulling weeds, setting up ropes and stakes, remembering we all are humans. "If I can do my part to keep the guys happy," he says, "they are going to do a much better job on the golf course. I really learned to appreciate that part of it."

FOR AS MUCH AS SALTER HAS MATURED on the course, he is a far more evolved person off it today than he was in 2005 or even 2015.

He and Lisa welcomed their oldest daughters, Tallulah, in 2012, then twins Colette and Persephone in 2017, just a year after Salter returned to Riviera and a month after he hired Nottenkamper. Tallulah and Colette were born without any complications, but Persephone was born with Axenfeld-Reiger Syndrome—a genetic condition that involves the eyes, ears and central nervous system—with Peter's Anomaly. The condition is present in fewer than 500 babies born globally every year.

When the twins arrived, doctors were initially unsure of how to diagnose Persephone, nicknamed Persi. She shuttled between hospitals,



traveled out of state, and met specialist after specialist. She endured 10 surgeries on her eyes before her first birthday, then a pair of openheart surgeries before her second. The last of her 12 total surgeries was the result of a microbacterium infection in her chest cavity that has a 60 percent mortality rate.

The two years of medical struggles for Persi, of trying to find answers and care for her, sent Salter and Lisa down so many rabbit holes.

"Before you enter into the rare syndrome world, you think everything has a diagnosis, a clear path - this happened because of this, this happened because of that — and that the medical world is filled with straight lines," Lisa says. "But entering the rare syndrome world, you

have to be fine with, 'Well, we don't even know exactly what that is.' You kind of give up all your understanding of the medical world because sometimes the answer is, 'We don't know. We don't know how this is going to turn out and we don't know what direction this is going to go.'

"And that's just how it is. There's just not the research or the understanding."

The Salters relied on their Catholic faith throughout those years. "I'm a very faithful person, but I don't think that God chose me because I was some superhuman person," Lisa says. "God helps you get through the challenges you're presented but I don't think He awards challenges based on your worthiness."

Persi and Colette are 4 now and

outstanding spirit."

— PJ Salter

attend the same preschool. Persi has limited vision but she had enough for long enough that her brain interpreted sight at age-appropriate levels that she is as developed if not more so than most children her age. The plan is for the twins to be in the same kindergarten class next year and for Persi to eventually be her school's first visually-impaired graduate. Learning Braille is high on her to-do list.

"She's extremely determined and strong-willed and fearless, which can be difficult because she's opinionated. You cannot make her do something that she does not want to do," Lisa says. "She likes to do things herself. She likes to do things that everybody else is doing. She's also very sweet, and she's extremely funny.

She speaks well beyond her years, and she has a very funny sense of humor."

"All we know is the world as typically-sighted people," Salter says. "We asked ourselves, 'How is this going to hinder her world?' The reality is she's opened our

eyes to what's important in the world and how to experience it. She's always had this outstanding spirit."

She is also the inspiration for the Persephone Mae Foundation, a 501(c)(3) nonprofit designed to help other families with children born with rare conditions or visual impairment. The foundation has raised more than \$175,000 thanks to annual golf outings — the next is October 14 at Trump National Doral Miami — along with donations and merchandise sales. Lisa has plans to launch an auction.

"It's an enormous amount of work," she says, "but I'll get an email back from someone: 'Oh my gosh, you made my day, we're crying over here,' and that's worth it. I have so many plans for the foundation in the future and I would have liked to have grown it faster,"—the COVID-19 pandemic slowed the process as it slowed so much of life the last two years—"but if we can touch 12 families a year and they feel celebrated, if they get something special for their child, that's still important.

"The rare syndrome world is hard to understand unless you're in it. Every person is a different person."

SAITER IS BEHIND THE WHEEL of a golf car, checking in on a handful of holes on a Wednesday afternoon. The car never tops 15 mph but he keeps the windshield clipped in place. "I have to keep the windshield up so my hair doesn't get messed up when I go into the pro shop," he says with a laugh.

"Is that really why you do it?" I ask.

"That's why I do it," he says, laughing harder now. "You'll probably put that in the story right with the Jordans."

He steps out for a couple minutes to walk around a green, then climbs back in. "Everything has gotten so stark," he says, "you can't have any personality." He pauses for a beat and laughs again. "Probably why I do so well."

"You think so?" I ask him.

"No," he says immediately. "No." He pauses for another beat. "I don't know. Probably hard work and trying to treat people with respect, I think that's what it really comes down to. Realizing that you can't treat every situation the exact same."

Years ago, he says, before the maturation of middle age, before fatherhood, he was riding around, checking setup, and he





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spotted a 4-year-old girl climbing out of a bunker, the same age then that Colette and Persi are now. She was playing and laughing. He had no idea who she was or why she was there. He asked her her name and whether she was lost. He told her she wasn't safe in the bunkers, that she could be hit by a ball, and that she needed to leave. The girl was the daughter of a friend of one of Salter's superiors. Her father worked in a restaurant and couldn't bring her to Take Our Daughters and Sons to Work Day, so she wound up on the course. After bringing her back to the maintenance facility, Salter explained the situation to his direct superior, who delivered a verbal lashing, telling Salter that the girl had every right to be at the club and on the course.

Nothing prepared Salter for the moment but he remained calm and listened. Then he maintained that the girl should not be on the course. His superior walked out and returned a few minutes later with the girl, who was in tears.

With emotions boiling and pouring, Salter was finally able to relay the situation to his other superior, who was out that day and who delivered the same message, albeit in a little different manner.

"Listen, listen," he remembers hearing. "Just tell him to come back. He can stay on the clock, he can give the girl a tour of the tennis facility, a tour of the clubhouse. Just let her ride around with him the rest of the day and we'll be good.'

"And I was like, 'Shoot. Why didn't

I think of that?"

There is no manual for how to live your life. As soon as you think you know how to teach, how to parent, how to love, you experience something new, and you learn, and you move forward. You get a little smarter, you get a little wiser. You stay curious. Over time, life makes a little more sense. Never total sense, just a little more. You never do figure out everything.

"Some things you get right just through intuition," Salter says. "Other things you learn the hard way."

Every person is a different person. Be curious, not judgmental. Wear pants, maybe. And dance. GCI

Matt LaWell is Golf Course Industry's managing editor.



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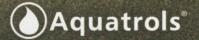


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Q&A WITH RRY LENNERT

What do you want superintendents to know about AMGUARD™ Environmental Technologies?

First of all, they might not recognize the new company name because we have rebranded our businesses from AMVAC Environmental Products (AEP) to AMGUARD™ Environmental Technologies this year. The name change reflects our strategic commitment to providing a compelling portfolio of new technology and innovative solutions to the markets we serve, including the golf course industry. We are a leading provider of proven chemistries and low-impact solutions to the professional pest, public health, golf, lawn care, ornamental, and greenhouse markets.

For the golf course industry, we offer a portfolio of herbicide, insecticide, fungicide, and fumigant products.

O Does AMGUARD Environmental Technologies have any unique chemistries and products?

Absolutely, and we will continue to seek out even more new technologies and develop innovative solutions that can help make the golf course superintendent's job easier.

The proprietary chemistry we're best known for is pentachloronitrobenzene, or PCNB for short. Besides being a multi-site contact fungicide, PCNB is the only FRAC Code 14 fungicide available for use on golf turf, making

it a very valuable fungicide resistance management tool. PCNB is widely recognized as the most effective single active ingredient for control of all three major snow mold pathogens. More recently, PCNB has been shown to be one of the most effective active ingredients for control of anthracnose as well. We have four PCNB-based fungicides: two granular products - FF III® (PCNB, chlorothalonil, propiconazole) and Turfcide® 10G (PCNB), as well as two liquid products, PREMION® (PCNB + tebuconazole) and Turfcide® 400 (PCNB).

It's late September and snow mold fungicides will be applied in the next few months. Any advice, and what are some of the best ways to use PCNB in snow mold control pro-

As a Regional Sales Manager for AMGUARD Environmental Technologies in the Midwest, and a Wisconsin native, I've very aware of the damage snow mold can do to unprotected



ENVIRONMENTAL TECHNOLOGIES

golf turf. We had some very severe snow mold pressure in southern Wisconsin and northern Illinois last winter for the first time in several years, and it caught many golf course superintendents by surprise. Because we haven't seen much snow mold pressure in our area for a while, and given the changing weather patterns, some superintendents had started to wonder if they needed to apply snow mold fungicides to fairways anymore - and those that didn't got hit hard. It was a cruel reminder to hope for the best, but plan for the worst with snow mold.

I've found that one of the best and easiest ways to incorporate PCNB into a snow mold control program is to use Turfcide 400 instead of chlorothalonil as the contact fungicide component in snow mold fungicide mixtures. PCNB consistently outperforms chlorothalonil in snow mold field trials, so you will get much better snow mold protection simply by making the switch from chlorothalonil to Turfcide 400.

Another great way to use PCNB is to use one of the four Turfcide 400 snow mold fungicide programs in our 2021 Turfcide 400 Snow Mold As-

surance Program. Download it at our dedicated snow mold website amvac.com/snowmold.

It's also EOP season. Tell us about your new AMGUARD™ Defenders Early Order Program. How does it work?

Our AMGUARD Defenders Early Order Program is very easy to participate in, with no order minimums, no forms to complete, and no invoices to submit. Just place an order and we'll take care of the rest. We know there are many early order programs out there, and we wanted to make ours as easy to use as possible, to earn your savings.

The AMGUARD Defenders Early Order Program runs Oct. 1 - Dec. 17, 2021. Order any of our eligible products during this period and earn rebates in the form of a distributor credit, to be applied to your account in 2022. Learn more at amvac. com/eop.



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GLOBAL CHALLENGES, LOCAL DEMANDS

surge in COVID-related infections, broad and deep labor shortages, and volatile market and supply chain conditions. As every golf course superintendent knows, the challenges facing the U.S. population at large also reach deep into their own ranks.

And as superintendents are also sometimes painfully aware, no one is cutting their profession any slack just because it's tough out there. It's the darndest thing: Expectations of employers and golfers are at an all-time high for superior turf and playing conditions and meaningful member experiences.

How do superintendents reckon with these circumstances? How do they meet increasingly arduous expectations, maintain crew morale and pursue the ever-elusive work/life balance? Three respected superintendents and the COO of one of the nation's most venerable clubs offered their opinions.

Mike Kitchen, general manager and golf course superintendent, Teton Pines Country Club, Jackson Hole, Wyoming

"It really depends on the level of course that you are at as to what may be most important. However, I always tell our interns that the priority is attention to detail supported by advanced powers of observation. Excellent communication and management skills are also essential these days.

"The duties of a golf course superintendent require attention to detail, alertness for changing and evolving circumstances, and

the know-how to implement solutions. Agronomic knowledge is assumed to be a capability that superintendents bring to the job."

Rafael Barajas, superintendent, Boca Grove Golf and Tennis, Boca Raton, Florida

"One must be professional, well-respected by peers and a great communicator, proactive, honest and a quality individual."

The former GCSAA president ticks off other qualities and characteristics on his list:

"Smart, well-organized, one who understands the business side of the industry and works well with others in achieving the overall goals and standards of the company/club, not just his or her department. You must also be an innovator who stays current with industry standards and adapts to the ever-changing industry."

Matt Ceplo, superintendent, Rockland Country Club, Sparkhill, New York

"I think sometimes we feel that our industry is unique, but the characteristics that you're looking for (in a high-achieving superintendent) would be the same as those in any industry—if you want to succeed, that is. You need to be a hard worker, work well with others and be a good listener."

Then he adds two more characteristics that are rather specific to golf superintendents: "Getting up early and a love for the outdoors are critical."

Ceplo, a director for Audubon International, says a well-articulated environmental plan should be a part of a superintendent's program. "A long-range plan for the course provides turf professionals with the tenacity and staying power today's job requires."

Frank Cordeiro, COO, Colonial Country Club, Fort Worth, Texas

"Colonial values a professional, someone who is well-respected by their peers and an industry leader. One must be a great communicator, proactive, honest and a quality individual.

"Colonial members – like most golf enthusiasts – have high expectations that their course will provide tournament conditions on an everyday basis. High expectations paired with sophisticated care and upkeep standards require proactive, clear, and easy-to-understand communications from the golf course superintendent. Bear in mind that Colonial members have a ringside seat to see some of the world's finest players test their skills."

So, there you have it. All it takes to be a top-performing, highly respected and sought-after golf superintendent is to be a strategic planner who is well-versed in the latest agronomic practices and a great communicator, proactive, innovative, honest and hardworking.

In other words, a pro. And it sure helps if you like to get up early. **GCI**



HENRY DELOZIER is a partner at GGA Partners, trusted advisors and thought leaders. He is currently Chairman of the Board of Directors of Audubon International.



INNOVATION WITH

REAL-WORLD IMPACT

BASF launched a pair of DMI fungicides in 2019 with much fanfare. Two years later, we asked superintendents if the products lived up to the hype. The answer was a resounding YES.

BY PAT JONES

In 35 years covering this industry, I have seen a steady flow of game-changing turf technologies: PGRs, improved seed varieties, vastly better irrigation systems, sophisticated cultivation equipment. high-efficiency fertilizers, etc. Major innovations on the disease-management side seem to come less frequently due to the massive cost and effort required to bring a new fungicide to a relatively small market like golf.

As a result, broad-spectrum actives that are safe for turf and provide more than a week of efficacy have been harder to find. The holy grail - a summer-safe DMI that works on a bunch of major diseases - seemed out of reach as more and more options fell out of rotations. Supers had largely given up on the idea.

A few years back, when we started to hear about testing and trials for the DMI active ingredient Revysol® our ears perked up a bit because it promised to deliver the goods: superb control of dollar spot, fairy ring and more without fear of phyto. Many of the top plant pathologists in the world studied it and liked what they saw. The question remained: How would the technology perform in the real world of turf?

Two years after the Revysol-powered products Maxtima® fundicide and Navicon® Intrinsic® brand fungicide hit the market, the folks at BASF asked me to independently benchmark how supers who tried the products liked them.

I created and distributed a survey to let users rate the product and, more importantly, give some feedback to BASF - good, bad or otherwise. More than a hundred of you responded in detail. What follows are the results of that study and what I learned.

SUPERINTENDENT SATISFACTION

AFTER TWO YEARS IN THE MARKET, SUPERINTENDENTS DON'T LIKE MAXTIMA AND NAVICON ...



THEY LOVE THEM.

90% of supers said they were satisfied with the performance of this product. I've done quite a few satisfaction studies like this in the past, and I've NEVER seen superintendents say they liked something this much.

Even more remarkable is that 60% of superintendents who have used one or both products say they are VERY satisfied with the results. The comments I got from supers across the board – north, south, high-end, modest budget, etc. – seemed almost giddy because the products work so well.

Why? What's behind that kind of enthusiasm from veteran supers who face some of the toughest disease challenges out there? I took a close look at their verbatim comments to find out. 90%

of supers said they
were satisfied with the
performance of this product.

HANDLES THE HEAT



Maxtima's chemistry gives me the peace of mind to spray it on my 100-year-old annual bluegrass greens during hot weather."

STEVE HAMMON

Traverse City CC, Michigan

EXTENDED CONTROL



Both products give me 21 days of control, which saves me money and time. My roots are the healthiest they have ever been, which means [they're] firmer, drier and faster. I haven't seen any soil-borne diseases since I started using these two products."

TAD MILLER

Spring Lake CC, Illinois

DISEASE PREVENTION



Having another DMI to fight my perennial dollar spot issue is great! We tweaked our program last year and added Maxtima and had no dollar spot for the first time in years."

ALAN FITZGERALD

MG, LedgeRock GC, Pennsylvania

FROM THE PhD PERSPECTIVE

Superintendents clearly feel good about the Revysol products two years into their use. What about the university researchers who studied the experimental compounds that eventually became Maxtima® fungicide and Navicon® Intrinsic® brand fungicide? What have they observed since the launch in 2019?

I asked a now-retired Clemson legend, Dr. Bruce Martin, how he'd sum up the impact Revysol has had over the past two years. "One thing we've confirmed more recently is its absolute safety on overseeded grass (Poa trivialis), on bermudagrass greens [and] even when seed[s] were just germinated and plants were very young," Martin said. "We also confirmed excellent efficacy for mini-ring disease, and we observed significant disease suppression beyond 28 days from the last application for mini-ring," he said.

Additionally, Martin echoed what many supers said about take-all root rot (TARR) and spring dead spot (SDS). "In the southeast, we have to contend with both TARR and SDS. Revysol has very good activity against both diseases versus SDHI fungicides, which have variable efficacy for SDS and very low efficacy for TARR. So apps timed for SDS will also take care of take-all for a time in the fall."

I also spoke with Dr. Jim Kerns of North Carolina State University. Dr. Kerns said the products have largely performed as his trials predicted, but he's been pleasantly surprised by the level of TARR control. "The products worked well in trials prior to registration, but for some reason they have really performed exceptionally the past two years. It also seems that Revysol has pretty good activity on gray leaf spot. So those that struggle with GLS in non-residential areas would have another option for that challenging disease," said Dr. Kerns.

What has impressed me the most about working with Maxtima and Navicon is how versatile these fungicides are and how they have enhanced spray programs across the country."

DR. CAM STEPHENS, PhD

Technical Market Manager at BASF

THE REST OF THE STORY

Finally, we asked those 80-plus superintendents who have tried the Revysol products in the past two years one more question: How likely would you be to recommend these products to a colleague?

9 out of 10 said they would; that blows my mind a little because, in my experience, supers are often hesitant to endorse or recommend anything. Yet, in this case, more than half of them (53.5%) said they were highly likely to do just that for the Revysol products.

TAKEAWAYS

I've done a lot of this kind of research over the years, and usually, the best conclusion you can draw is something like, "The majority of customers felt Product X achieved good control of brown patch."

In this case, it is pretty hard not to say, "Nearly every super who's tried Revysol likes it, and more than half of them love it."

Why? The products check a lot of important boxes for supers:

Summer-safe DMI with no phyto or growth-regulation issues

Long-lasting go-to spray for dollar spot, fairy ring and brown patch

Strong broad-spectrum control on both cool and warm-season turf

Hammers TARR and SDS in the transition zone and southeast

Enthusiastically recommended by their local sales pros

High-value EOP buy

OUT OF

Supers said they would recommend these products to a colleague.



BASF supports us where it matters most - by continuing to develop and deliver exceptional new chemistries that are really meaningful to a key part of our facility's success. When you combine that with outstanding technical support it makes BASF a cornerstone partner for so many courses - big and small budgets alike."



Hear from more peers about the science and results behind Maxtima® fungicide and Navicon® Intrinsic® brand fungicide http://betterturf.basf.us/realworldinnovation

ROSS MILLER



TO GOLF COURSE INDUSTRY'S PODCAST SERIES



their career paths, current and past work, design trends, and how they work with superintendents and operators to improve the func-tionality, playability and marketability of golf courses.





recent issue of Golf Course Industry, including a chat with one of





Candid conversations with superintendents, directors and other industry professionals about anything and everything other than their work. Episodes focus on physical and mental health, outside interests, family, and the constant pursuit of life-work balance among

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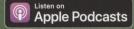
Editors Guy Cipriano and Matt LaWell discuss the many (many, many, many) courses they've visited during the last month. Guy brings the decades of play and maintenance; Matt brings the fresh perspective of a hack golfer who appreciates the beauty of courses and the work required.

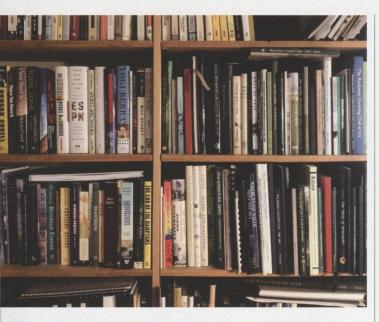


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CLUB HISTORIES

he literary genre of the club history is vastly underrated as a resource in golf. Maybe that's because some of them are clunkers, filled with photos of weddings, swim teams and debutante balls and with scant reference to the golf course. But a lot of them are wonderfully done and help document aspects of design, course evolution and maintenance that would otherwise be lost.

I have been collecting them for decades and have noticed an uptick in their quality of late, in part due to the enhanced attention paid to such books as we enter the 100th anniversary of the Golden Age of Golf Course Architecture and thus are seeing many serious centenary volumes. These piggyback on the recent revival of classical design appreciation, evident in the course restoration movement.

A good part of Olympia Fields Country Club's centennial volume, "Golf Under the Clock Tower" by **Tim Cronin** explores the complicated tale of how the country's biggest private club went from 72 holes to 36 – and how the remaining North and South Courses have fared in terms of presentation and playability. Likewise, **Jeff Neuman**'s "Mountain Ridge Country Club: The First One Hundred Years" pays close attention to what are some of **Donald Ross**' most elegant greens and how they fared in the hands of **Ron Prichard**'s restoration. Kudos to Neuman for also presenting detailed material on the club's famed Tudor-style clubhouse and its legendary architect, **Clifford Charles Wendehack**.

Superintendents at clubs contemplating a club history can help

the process along by opening their files and encouraging the book committee to do a serious deep dive. It helps hiring a qualified researcher/writer for the job rather than leaving it up to some amateur committee person who might have an interest.

Clubs should be prepared to spend some money if they are interested in getting anything of quality. Having written three such books and now at work on a fourth, I can assure you that the budget needs to be reasonable in allowing room not simply for research and writing but also for design of the pages, quality color photography and printing. It also makes a big difference how many copies are printed, with unit costs going down the more you print. Most clubs print between 1,000 and 2,000. Fewer than that and your unit costs are high. More than that and you should be prepared to have them boxed in the basement for a while.

Budgets can range dramatically, from \$35,000 at the low end to as much as \$200,000 for a high-quality hardback that involves aerial imagery and extensive reproduction of vintage posters. Clubs should not expect to make money on the project but can recoup upwards of half their costs through pricing the volume appropriately. It's best to think of a club history as a glorified branding device, an oversized business card for publicizing the club's reputation. Along the way you instill a sense of pride among the membership that you have something valuable to document.

Having a famous architect's name on the course makes tell-

ing the story easier because you can always include biographical narrative that brings to life that designer's overall work. It helps if the club has hosted major events or state championships. But it's also possible to use visits by great golfers as material for vignettes. I also think it worthwhile to highlight the service of distinguished employees — not just golf pros, club managers and superintendents but also caddies and wait staff.

Members who think of themselves handy with a camera prove no match for experienced photographers who know how to create interesting imagery. Drone photography is a great tool but can be overdone if you ignore the perspective that golfers actually see. Sometimes oddball shots can also convey a lot. Among my favorites are photos from the maintenance area showing off equipment or the mechanics boneyard. In a book about a Devereux Emmet-designed course on Long Island, "St. George's Golf & Country Club, 1917-2017," I was able to show the openness of the place and its shared fairways through a closeup of a single sprinkler head displaying the yardage to two greens, 173 to the second and 169 to the 18th.

Club histories don't have to be dull recitations of land lease arrangements or who won the 1953 club championship. They can explore the natural history and geology of the place as well as the culture of the membership. They are best thought of as a marketing tool to showcase what makes the place special. **GCI**



BRADLEY S. KLEIN, PH.D. (political science), former PGA Tour caddie, is a veteran golf journalist, book author ("Discovering Donald Ross," among others) and golf course consultant. Follow him on Twitter (@BradleySKlein).





ABW/WHITE GRUBS CONTROL PRESENTED BY BAYER





ABW/WHITE GRUBS CONTROL PRESENTED BY BAYER

he Environmental Science business of Bayer is proud to sponsor the following report on managing white grubs and annual bluegrass weevil (ABW) as well as tracking the use of GPS technology.

The golf industry continues to struggle with ABW as it spreads west and south from the Northeast United States into areas previously undetected. The longer ABW resides in a particular area, the chances increase for both insecticide resistance and multiple overlapping generations, making control more difficult. Control of ABW revolves around season-long multipronged programs with multiple insecticide applications targeting primarily overwintering adults and 1st generation larvae as well as later generation larvae. Rotating insecticide modes of action is critical to limit the chance of resistance development in ABW populations at your course.

Though white grubs traditionally have been more problematic in the eastern half of the country, turf managers throughout the U.S. are now accounting for these insect pests. Unlike ABW, insecticide resistance has not been documented in white grubs and likely will not occur since they have only one generation per year. However, we are seeing population shifts in white grub species. Where Japanese beetles and northern or southern masked chafers were the most predominant species, we are now seeing more oriental beetles, Asiatic garden beetles and May/June beetles. The white grubs themselves rarely cause significant damage; it's actually the racoons, skunks, feral hogs, and other vertebrates foraging for the larvae that cause the most problems. Controlling larvae in late summer with long-lasting soil insecticides should minimize the damage from the foraging animals.

Earlier this summer, Bayer officially launched Tetrino™ – an exciting new tool in the fight against ABW and white grubs. Featuring the active ingredient tetraniliprole, Tetrino is a new diamide insecticide that joins the ranks of other Bayer favorites like Merit and Dylox. This new active ingredient is taken up quickly into the turf plant providing knockdown within days of application. It offers unrivaled control of white grub and ABW larvae, as well as billbugs, black turfgrass Ataenius, and caterpillars like armyworm and cutworm. As is the case with all insecticides targeting soil larvae, optimum application timing of Tetrino is when adults are present in order to control the larvae appearing shortly thereafter. Tetrino offers tremendous flexibility to the superintendent with two rates and up to four applications per year depending on your geography and pest pressure. You can learn more about this game-changing new technology at es.bayer.us/tetrino.

Again, Bayer is honored to support the following ABW and white grub report based on a survey administered by *Golf Course Industry*. If you have questions regarding controlling these pests or others on your course, our Green Solutions Team of turfgrass technical specialists are just a phone call, email, or text message away, as is our nationwide team of area sales managers. Let us know if we can help!

Zac Reicher, Ph.D. Rob Golembiewski, Ph.D. Green Solutions Team, Bayer





ABW/WHITE GRUBS CONTROL PRESENTED BY BAYER





Some turfgrass pests are potentially more destructive than others – and it often depends on geography. To gain a better understanding of how golf course maintenance teams attempt to control two turf wreckers, Golf Course Industry partnered with Bayer for a "Turf Reports" focused on ABW and white grubs control. Working with Signet Research, a New Jersey-based independent research firm, we sent a 20-question survey to a list of 4,455 print and/or digital subscribers who are superintendents, directors of agronomy or assistant superintendents. The survey was distributed via email July 20 through July 29. Results are based on 280 completed responses and the confidence level is 95% with a sampling tolerance of approximately +/- 5.9%. The survey is the second of three "Turf Reports" studies that will be published in 2021.



Where is your course located



NORTHEAST

28%



SOUTHEAST

20%



CENTRAL

34%



WEST

18%





ABW/WHITE GRUBS

White grub damage is a concern for many golf maintenance professionals.

he good news about annual bluegrass weevil and white grubs is that they are, for now, still a relatively regional problem and large chunks of the country are unaffected. The bad news is that, if the turf you work on is affected, they can be an unrelenting and unpredictable scourge.

Just as all people are different people, to quote the fictional football-turned-futbol coach Ted Lasso, all ABW and white grubs are different ABW and white grubs. There is no simple solution. The superintendent 30, 20, 10 or even three miles away might have figured out what works for them but apply their chemistries to your turf and the results could differ radically.

"Everyone's different," says Shaun Marcellus, the golf course superintendent at Wanumetonomy Golf and Country Club in Middletown, Rhode Island, located on Aquidneck Island not far from The Breakers. "Some people have red hair, blond hair, green hair, how you tan is different, where you're from is different, what attracts you to this or attracts you to that." With ABW and white grubs, Marcellus says, the microclimate, the trees, the shade, the fertilizer, the wetting agent, the stress of the turf "all factor in, for sure. But that's the fun

part, to stay ahead of them. How can you outsmart 'em?"

There are no simple answers, nor is there an answer that will work for everybody. Marcellus is in his fourth season at Wanumetonomy and is still honing on exact chemistries.

Tom Bolon has experienced better luck in Ohio. Bolon is the longtime director of agronomy at Lake Forest Country Club in Hudson, Ohio, almost equidistant between Cleveland and Akron. Schedule the first application in late May and the second in early August. That approach has worked almost since Bolon first spotted ABW.

"We were noticing them early when they moved into the area and we got smacked right in the teeth" Bolon says. He organized curative measures immediately then shifted to a preventative program "that has not failed us." He remains on high alert, though. "I'm waiting for the day I walk in and the stuff we're using isn't working."

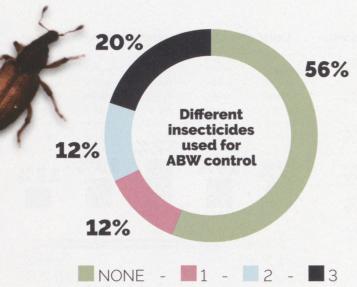
Charlie Fultz has had a different experience with ABW and white grubs than either Bolon or Marcellus.

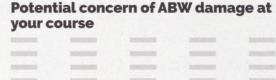
Fultz was in the golf course maintenance industry for 13 years, then left for another 13. Now the golf course superintendent and interim general manager for the city of Harrisonburg, Virginia, as well as the turf manager for the City of Harrisonburg Parks and Recreation, Fultz says ABW was nowhere to

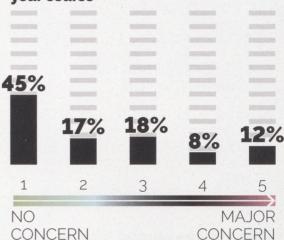


ABW/WHITE GRUBS CONTROL PRESENTED BY BAYER









Preventative ABW control applications per year (courses that make applications only)



be found in Virginia when he left in 2008. That was a problem for the superintendents in Pennsylvania, New Jersey, maybe Maryland. When he returned last year, though, they were everywhere.

"It was going to be a learning experience for me," he says, "because I had never dealt with it."

Fultz started to watch old webinars, poring over information and best practices, and applying what he learned. When he searched his plant protectant building, he discovered row upon row of different products, thousands of dollars of different chemistries. His predecessors, it seemed, had tried anything and everything in an effort to "see what would stick." But just like Marcellus and Bolon, Fultz learned what works for somebody else will probably not work for you. "There is no cure-all for it," he says. "You just

hope you do your best."

Fultz talks with other superintendents in and around Harrisonburg, including one, he says, just half an hour away, who spotted active ABW in January. "How do you have grubs active in January?!" he asks incredulously. "And he was actually seeing damage! In January!"

That superintendent works on a course tucked back into a ski resort valley, which provides a different microclimate where temperatures are five to six degrees cooler than other area courses. All courses are different courses.

"You have to find the niche that works for you nine months out of the year," Fultz says. "We never seem to totally get away from it and we're always on the watch for it. You have to determine what your tolerance level is, too. It's an interesting issue

Areas of course that experience **ABW damage**

APPROACHES/ COLLARS	27%
FAIRWAYS	26%
TEES	20%
GREENS	17%
ROUGH	6%
BUNKER FACES	1%
NONE OF THE ABOVE	60%

Use of insecticide for preventative **ABW** control

	YES	NO
NORTHEAST	86%	14%
SOUTHEAST	15%	85%
CENTRAL	25%	75%
WEST	14%	86%



ABW/WHITE GRUBS CONTROL PRESENTED BY BAYER



Resources used to time insecticide applications

NONE	5%
OTHER	12%
DIGITAL APPS OR PLATFORMS	21%
ADVANCE WEATHER REPORTS	25%
SALES REPRESENTATIVE RECOMMENDATION	26%
RESEARCHER RECOMMENDATION	36%
HISTORICAL COURSE DATA	73%

Other responses included: Threshold damage, phenological indicators, Growing Degree Days, scouting techniques, soap flush, input from peers, soil temperatures, personal experience. turf appearance

Annual insecticide budget

3%	21%	19%	26%	31%
NONE	\$1 TO \$2,999		ТО	\$10,000 OR MORE

Insecticide budget by region





NORTHEAST SOUTHEAST

CENTRAL

WFST

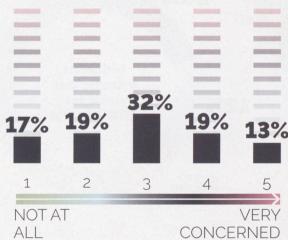
and we don't have a solution that works for everybody."

Fultz, Bolon and Marcellus all ranked ABW as a "high concern" on our recent ABW and white grubs survey, which was distributed in conjunction with Signet Research. The survey received 280 responses and carries a 95 percent confidence level. Among that group, 53 additional superintendents or agronomy directors reported that ABW ranked as a "high concern," either a 4 or a 5 on a 5-point scale. More than 77 percent of that subgroup work in the Northeast. (For comparison, about 16 percent work in the Midwest, a little more than 5 percent work in the Southeast, and a little more than 2 percent work in the West.)

About 40 percent of all respondents use an insecticide for preventative control of ABW, including nearly 86 percent of respondents in the Northeast, with the average number of annual applications at 2.90 and the average number of products at 1.17. (In the Northeast, those averages are 3.41 and 2.87, respectively.)

Why the variety? "It's like if you're a coach and you run the same play seven times in a row," Marcellus says, "the opposing coach is probably going to figure out how to stop it. How do you make those adjustments? That's what we're trying to do, to stay two

Concern about insecticide resistance





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ABW/WHITE GRUBS CONTROL

Describe

your white grubs

control program

Describe

your white grubs insecticide control program

58% PREVENTATIVE

> 6% CURATIVE

36%

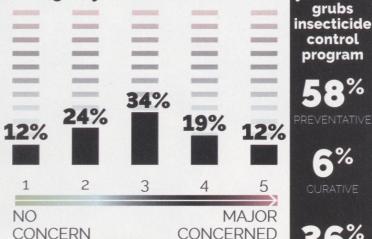
COMBINATION

OF BOTH

PRESENTED BY BAYER



Potential concern of white grub damage at your course



Areas of course that experience damage from white grubs

ROUGH	65%
FAIRWAYS	54%
TEES	31%
APPROACHES/ COLLARS	26%
BUNKER FACES	25%
GREENS	18%
OTHER	2%
NONE OF THE ABOVE	15%

Other responses included: Green and tee surrounds, fescue areas, club lawns,

steps ahead so we don't get caught."

White grubs have more of a range. About 30 percent of respondents ranked them as a "high concern" again, a 4 or a 5 on a 5-point scale -including 42 percent of all respondents working in the Midwest, 29 percent in the West, a little less than 25 percent in the Northeast, and about 21 percent in the Southeast. At least they're far more likely, according to the survey results, to hang out in the rough. (About 65 percent of respondents said their white grubs had damaged their rough. The other major damaged area was fairways, at about 54 percent.)

"I hope companies are seeing this can be a devastating problem," Fultz says, "and we need more tools

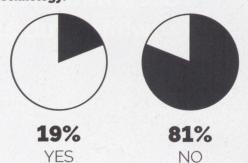
Use of insecticide for preventative white grubs control

3.000 00111.01			
YES	NO		
87%	13%		
75%	25%		
98%	2%		
64%	36%		
	87% 75% 98%		

Annual preventative applications for white grubs control (courses that make applications only)



Has your course invested in GPS spraying technology?



in the shed."

Who knows where ABW and white grubs will pop up next. If you don't deal with them, be glad and know that you might soon enough. And if you do, well ... good luck.

"When the world blows up, the only things left will be cockroaches and weevils," Marcellus says with a laugh, "because we got nothing to kill 'em."

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They're trying to



MHAT??? do

A bill introduced earlier this year threatens municipal golf in California. Industry leaders deftly navigated the front nine, but hazards still lurk as the 2022 legislative cycle approaches.

By Judd Spicer

hile a California legislative attempt to swing a 5 iron to the heart of accessible golf in the state may have proven a strike askew, the ideology behind the issue has yet to reach the back nine.

Introduced in early 2021 by California Assembly member Cristina Garcia (D-Bell Gardens), California Assembly Bill (AB) 672 targeted the state's municipal golf courses as potential sites for low-income housing in high-density areas. Specifically, the bill threatened:

To remove municipal courses from the protection of the Public Park Preservation Act, the game's public golf protector against commercial/residential development for a half-century;

Provide exemptions to the California Environmental Quality Act;

Make it easier for rezoning of public open space land with a one-size-fits-all zoning element.

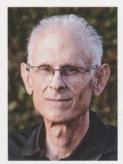
Referred to both the state assembly's Housing and Community Development and Local Government Committees, respectively, AB 672 died before it could reach a vote in either. Though AB 672 didn't gain much tread in the 2021 cycle, the Southern California Golf Association called AB 672: "The most damaging

piece of legislation (regarding) golf to be filed in a generation."

And said generation is far from expiration. A two-year bill, AB 672 automatically comes back alive at the onset of 2022. And with the return comes a shot anew at the lifeblood of California golf, for both players and employees of the state's public game.

According to a 2013 report from "Golf 20/20," the game creates more than \$13 billion annually and supports nearly 130,000 jobs in California.

UBLIC



▲ Kessler



▲ Jensen



▲ Ferrin

Many golf experts believe the game's growth amid the pandemic timeline may have only enhanced such figures.

California, the nation's most populous state (and owning what would be the fifth-largest economy in the world), sports the second-most golf courses in the country, behind only Florida.

As the game's numbers pertain to accessible golf, the SCGA states that 22 percent of all California courses are municipal, though it's estimated that 45 percent of all golf is played across those courses on a daily basis. In addition, if not moreover, about 90 percent of the state's junior and developmental programs take place across that 22 percent.

"It's all indicative that municipal golf has for 100 years, is today, and will continue to be to the degree to which it survives, the growth and sustainability engine of the game's much larger ecosystem," says Craig Kessler, director of governmental affairs for the SCGA. "And without the feeder, at some future stage, the top disappears."

The attack on municipal golf — inept though it may have been in this go-round - is, at its core, very much a battle for land.

"While this bill was an example of clumsy, legislative overreach which is why it never even got to committee - it does get to the heart of the challenge to municipal golf," Kessler says. "And that is its encumbrance of large tracts of land in places where there's incredible competition for use of that land. In this case, it was housing. And the truth is that if you closed every course in the state and turned it into housing, it wouldn't even put a dent in the problem."

In concert with the reaction and messaging from the SCGA, AB 672

received stark opposition from the California golf community at large, ranging from the Northern California Golf Association to the NorCal and SoCal PGA sections to The First Tee chapters to Audubon International to beyond.

"Why were we in the gunsights? Why were we singled out? It doesn't make sense," says Jim Ferrin, past president of the California Golf Course Superintendents Association and current president of the California Golf Alliance, a non-profit that coalesces a unified voice for the industry. "When you're trying to take something away from a local community and put it under the umbrella of the state, what was once yours is no longer under your jurisdiction. It's under the ownership of the state to do what they want."

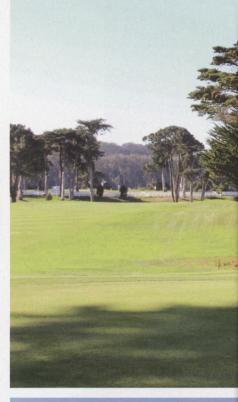
According to the Golf Course Superintendents Association of America, 480 California course employees namely superintendents—made contact with 92 different legislators across the state in opposition to AB 672.

"We had a lot of response from our superintendent network in opposition to the bill," says Jeff Jensen, Southwest regional field representative for the GCSAA, who put out an action alert to mobilize said response. "And it wasn't just municipal course folks, but also people from private clubs and daily fees. Everybody in the state has a big stake in this. Yeah, this was specific to municipal golf, but further down the line a lot of this comes back and it's a cascading effect."

Adds Kessler: "We think it received a very strong response. And there's no substitute for people who live in a state assembly or senate district to contact their representatives and express an opinion. Golfers and the golf industry turned out on this issue."

AN ATTACK ON THE GAME'S SPIRIT

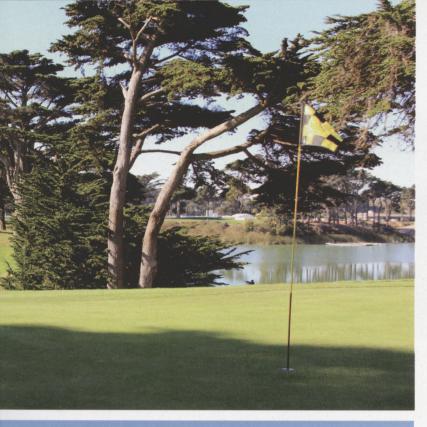
AB 672 not only posed a direct threat on golf's key feeder system, the bill





also evidenced a legislative lack of comprehension about the game's communal, recreational and environmental benefits.

"Publicly-owned courses are crucial to the future of our game," Jensen says. "They provide affordable golf to all lev-





els of players, including reduced rates for seniors. And many of the municipals host junior programs and serve as feeder market for other facilities, such as resort play and also for private club golf members down the line."

The belief system is shared across

the game's guardians.

"Muni golf, public golf, really facilitates the entrance of people into the game," Ferrin says. "Affordable and accessible golf, it brings juniors into the game, facilitates high school golf and also college golf to a de-

gree. Without muni golf, the game wouldn't be available to the masses. Public golf brings a greater value to the community."

From employment to environment, those outside the game would seemingly need an education on what a course brings to a community.

"The municipal courses provide greenspace in an urban environment and are a great habitat for wildlife," Jensen says. "The courses filter storm water for runoff, prove carbon sequestration, produce oxygen, reduce noise and also provide cooling environments for hotter areas. From a golf perspective and also a history perspective ... once that greenspace disappears, it's gone forever."

Attacks on the game are coming by way of impressions askew.

"There needs to be a greater understanding that golf represents good stewards of the land," Ferrin says. "We're not polluting, we're not overfertilizing, we're not throwing around pesticides left and right, and we're some of the most responsible users of water in the world. We need to better get that word out, because when that image changes then we won't get attacked the way we are right now."

Those employed at municipal courses across the state took note of the bill's dangers.

"We may not have been as much under threat as muni courses in high-density areas, places where they're really having issues with affordable housing, but we were definitely paying close attention to it, keeping our finger on the pulse," says Josh Heptig, director of golf course operations for the County of San Luis Obispo Parks & Recreation, whose duties involve overseeing three courses. "A bill like that gets passed, and you never know exactly what the unintended consequences are going to be, or what it could open the door to and try to change a golf course into something different."

Heptig says that messaging from this bill cycle mowed fairways for the

▼TPC Harding Park (top) in San Francisco and SilverRock in La Quinta are among the 184 municipal golf facilities in California.

▶ The South Course at Torrey Pines Golf Course, a municipal facility in La Jolla, hosted the 2021 U.S. Open.

fight ahead. "I think the various organizations did a good job trying to get in front of this, sending out notifications," he adds. "A large group of people are now well aware, so moving forward, it might not take as much of an outreach or education effort

to rile the animal as it did the first time."

BACK NINE BATTLE

When AB 672 or bills akin return anew, the golf industry best be prepared for a strategic fight, while also readying more curated, if not creative messaging.

"It's not going away any time soon. Much more tailored, well-crafted assaults are going to continue to come forth," Kessler says. "There's an entire political ethic in the state which doesn't believe golf is a good use of the land. Golf should not take a victory lap. It should see it as a warning shot for much more intelligent, well-honed, well-focused and well-crafted things that will come in the future based on the same thinking dealing with land use and water use."

Avoidance of premature bows appears a uniform thinking.

"While we were happy with the response, what comes out of the AB 672 situation is that if it had garnered the right sort of political support, it had the feasibility of becoming a reality," Ferrin adds. "(Garcia) wasn't able to foster the support of trade unions that she was hoping to get. Had they gotten that, the bill could have passed and we wouldn't have had the available resources to fight it."

An improved message of municipal golf's true optics may be a means of effective strategy.

"I'm very concerned about where this is going, and there's a lot at stake

> in this game for us," Jensen says. "This is a threat to our industry, and in California's particular political climate right now, golf is often seen as rich, white and elitist by many folks. But when you go to any of the state's municipal golf courses, you see that's not even close to being the case. Whether it's Rancho Park in Los Angeles, Tahquitz Creek in Palm Springs or any of the munis up in San Francisco, you see a melting pot of players. And we need to get that message out there."

> Working forward may involve looking back. Taking a page from the Home of Golf, Heptig

believes that, like the Old Course at St Andrews, opening one of his courses as a community park space one Sunday a month (the Old Course is closed for golf almost every Sunday) may bring needed allies to the golf cause.

"I think that the biggest thing the golf industry as a whole needs to do is get more non-golfers involved, and how they see golf courses, how the golf message is being told to them," says Heptig, who works as a government advocate for the GCSAA. "A lot of times, the golf message isn't being told to non-golfers by us, but by groups that don't necessarily support what we do or how we operate."

Whether such messaging and outreach borrows from the past or reaches for the future, the battle is now afoot. And the public game defenders believe, candidly, if not gravely, that golf needs to be better prepared for the fight ahead.

"The golf community needs to be aware that this thinking is out there, and it's going to pop up again in different ways moving forward," Kessler says. "This was a shot across golf's bow, in that golf needs to stop being complacent in assuming that the California body politic isn't hostile to golf's continuation, especially in the state's big cities. And golf is not particularly well-equipped to deal with it." GCI

Judd Spicer is Palm Desert, California-based writer and frequent Golf Course Industry contributor.

Most municipal facilities bu state

Mootimamorpai	radilitios by state
California	184
Illinois	183
Texas	179
New York	117
Florida	99
Minnesota	90
Ohio	89
Colorado	85
Michigan	74
Kansas	69

Source: National Golf Foundation 2021 Golf Facilities in the U.S. report



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En-Joie Golf Club was a wintry mess last December, yet it recovered to dazzle during its annual television appearance. Superintendent Anthony Chapman describes the resolve required to ensure the popular southern New York muni fulfilled its obligations to the masses and pros.

By Rick Woelfel

by winning the Dick's Sporting Goods Open and recording his first PGA Tour Champions victory. It was a day for Anthony Chapman to celebrate as well. Chapman is the superintendent at the En-Joie Golf Club in Endicott, New York. Chapman and his team faced down significant challenges to prepare the course for not only 81 of the top 50-and-over professionals in the world but for the approximately 30,000 rounds the county-owned club expects to host this year.

The winter of 2020-21 saw Chapman dealing with perhaps the biggest challenge of his career. On the evening of Dec. 16 stretching into Dec. 17, a Nor'easter covered the area with 40½ inches of snow. On Christmas Day, the course received two inches of rain. The Nanticoke Creek, which flows through the course, left its banks and the nearby Susquehanna River came through the east side of the property.

Days later, temperatures dropped once more and Chapman found himself looking at a golf course covered in what he estimates was 40 inches of snow, three inches of ice and 1/8th of an inch of silt. Six greens were covered in ice. Chapman's first priority was getting the silt off the greens.

"There were only three of us here at the time," he says. "It was dangerous. You can't go out there when it's all iced over. You don't know how deep the water is out there, plus the river flowed through and left a bunch of trees,

Golf Club grounds team celebrating with 2021 Dick's Sporting Goods Open champion Cameron Beckman.







The west end of the course flooding on Dec. 25, 2020

The seventh green surround on Dec. 28, 2020

old trees that had been put in one of our dump areas. All that debris came out onto the golf course, so there was that cleanup. (The flood) washed away one of our cart paths. There were tee signs all over the place.

"But my main focus was the greens. I'm not worried about anything else. I need to get those greens cleared off and ready to go. And then you're worried about the silt layer getting into the canopy. So now you're changing what you're going to do in the spring. You're not just going to come out and do your normal spring cleanup. Your main focus is on getting those greens to where you want them, then we'll deal with everything else after."

"Everything else" included preparing for the traditional opening of the golf season on or around April 1 and the Dick's Sporting Goods Open 13 weeks later. En-Joie has hosted the PGA Tour Champions event since 2007. The course, which is owned by the village of Endicott and operated by Broome County, previously

hosted the PGA Tour's BC Open from 1972-2005.

Chapman received plenty of help getting the course ready for the 2021 season. His allies included his friend and mentor Rocco Greco, who hired him as a technician at En-Joie in 2010 when Chapman had no golf course experience. Chapman grew up in the Binghamton, New York, area not far from En-Joie before migrating to Lantan, Florida, near West Palm Beach with a friend. He worked in sports turf before returning to southern New York so he and his wife Andrea, a psychologist and Binghamton-area native, could be near their families while Andrea completed a residency closer to home.

After two years of selling real estate, Chapman reached out to Greco and launched his career on the golf side of the turf industry. He was promoted to an assistant superintendent's position in 2012 before succeeding Greco as En-Joie's head superintendent in September

of 2014 when the latter received the superintendent job at Binghamton Country Club.

"He told me 'Hey, if you have any issues at all, you need to know something, you need any help, you call me anytime," Chapman says. "I took advantage of that so much, I think Rocco was probably ready to throw his phone at me. Rocco didn't want to see me fail. He was the one who convinced me I could do this.

"I didn't know if I wanted to become a superintendent. I was comfortable as an assistant. You go home and you go to bed. As a superintendent, you go home and you lay in bed and you're constantly thinking "What happens if this happens tomorrow? What happens if this happens?' It takes you a good two hours to fall asleep because you have so much on your mind."

In the aftermath of the storms, Greco was not only a lifeline for Chapman, but also a sounding board.

"I had Rocco come down," Chapman says. "We both kind of stood





The first green was covered with ice on Jan. 1

The fourth green on March 8

there and came up with something. We brainstormed. You have to have that. You can't just go at it on your own. You have to have that support system."

That support network also included some industry sales professionals who had formerly worked as superintendents. "These guys that come from the chemical companies, being former superintendents, know what you're up against, what you're going through," Chapman says.

Chapman's ad hoc support team also included PGA Tour agronomist Mike Crawford.

"We were constantly talking," Chapman says. "I'm constantly showing him pictures. I'm constantly sending him the plugs that I took out of the greens to make sure that they're growing in our break room. I'm trying to simulate the spring for him. Maybe raking them off with a fork. Those plugs were growing as soon as I brought them inside, they were growing right up through the silt. Him and I, we have a really good relationship. He came here back in 2017. We've actually become friends and we speak to each other frequently."

To accelerate the recovery process, Chapman applied enhanced gypsum on greens in April. He then aerated around the same time. As

the spring progressed, he became more confident the course would be ready to host the Dick's Sporting Goods Open. But that confidence came only gradually. The weather, after all, included a cold snap in April and early May.

"Our nights were cold for a while after aerification," he says. "After aerification we're using Verticutter on our approaches, then it gets cold at night (mid to high 30s) so everything kind of slows down and goes backward.

"My agronomist came sometime in April and we're going through things. It's not where I wanted it to be at that time, but you're knowing things are going to start popping here shortly, right? Getting into May, getting into June that's the best growing season, those months. So, you're going from maybe a '5' confidence level and gradually



TEAM-BUILDING TIPS

By Rick Woelfel



▲ Chapman

If you were to ask **Anthony Chapman** what his greatest strength is as a superintendent, he would likely say it's his ability to motivate and encourage his team. Chapman, the superintendent at En-Joie Golf Club in Endicott, New York, site of the PGA Tour Champions' Dick's Sporting Goods Open, oversees a staff that includes 25 to 28 peak-season employees.

"The most important part of this job is motivating your crew, because if you don't have the crew, what are you going to do?" he says. "You can be as knowledgeable as anyone. You can have all the money you need. You can know everything about chemicals, but if you don't have the people, you're going to fail."

Much of Chapman's crew consists of high-school and college students. During the summer, they are on the job early.

"Getting high school kids or college kids in here at 5:30 or 6 o'clock in the morning is a challenge," he said. "But I think my success here is really motivating the staff. You're getting each one of those guys to go out there, do their work, take a step back and look at it and say, 'That looks pretty damn good.' And that's hard to do. It's hard to find those people."

Chapman says he tries to create a positive work environment for his team. "I make it fun for them," he says. "If they screw up, I don't go out there and get all over them about it. I make it look like, 'It's OK. It happens. Everybody's done that. Just get it back next time."

But mostly what Chapman does is lead by example and get his hands dirty.

"I once had a six-month intern who had been at multiple courses," he says. "He told me this was the first time he's ever seen a superintendent in a bunker. I go out there every day and help. I'm working just as hard as (the crew). You don't ever want to have somebody say 'All he does is sit in his office.' To me, that's not a leader. To me, the leader is the guy who is out in front of his crew. And they're behind him, ready to go."

In the summer of 2018, the course flooded during the Dick's Sporting Goods Open. Chapman and his crew stepped up to make the golf course suitable for play.

"You're asking these guys who are making minimum wage to wade out in waist-deep water to put a pump out there and clean drains out," Chapman says. "To get those guys to do that, you had to be here. Your crew is right here, you're leading them into battle. How can you do that when you're sitting in your office all day?"

Newcomers to Chapman's team have a way of picking things up in a hurry. That mattered more than ever this year in light of winter flooding that left the golf course covered in snow, ice, silt and debris, and the fact that the Dick's Sporting Goods Open was held over July 4^{th} weekend, several weeks earlier than usual.

Chapman was proud of the fact that his team stepped up when it mattered.

"I have guys coming in here in mid-May that have never used a greens mower before, never used a walking greens mower or approach mower or whatever. They're mowing along ponds with a footand-a half of room with these \$15,000 intimidating mowers.

"I have them come in here in mid-May and in a month and a half they're doing it like they've been doing it for 10 years. They're having competitions; who can mow the straightest line? In a matter of a month and a half. So, when that tournament comes, it's smooth. We're breezing through the tournament with no issues."

going up as the year progresses."

The final countdown began on June 20 when the golf course was shut down. It remained closed to public play through July 5, the day after the tournament concluded.

Tournament week is always special for Chapman, but perhaps especially so this year. Over the course of the week, he received an assortment of voicemails and texts from around the country from natives of the area who had moved away but enjoyed seeing "their golf course" shown on national television. Then, there was the reaction of the professionals themselves.

"It's always nice to hear compliments,' Chapman says, "but to hear them from these guys who play on some of the finest golf courses all over the world ... to hear Paul Goydos say, 'What these guys do here is amazing.' That's why we do the job. We do it for golfers to come out here and say 'This place is amazing.' You do it for your own satisfaction, but it really completes it when you have these professionals complimenting your golf course like that."

John Karedes is the tournament director for the Dick's Sporting Goods Open. He is in a unique position to observe the evolution of the golf course. The tournament office is located at En-Joie, adjacent to the golf shop. Karedes celebrated the work of Chapman and his team.

"What they faced back in December and January, between the snow, the melting, the ice, the river silt, the freezing again and all while trying to protect the turf, just goes to show their dedication and passion for this golf course, not just for one week during the year, but year-round to make it the best," Karedes says. "The amount of rounds Anthony faces on a daily basis compared to other superintendents who host similar events, it's night and day." GCI

Rick Woelfel is a Philadelphia-based writer and frequent Golf Course Industry contributor.



Editor's Note: BASF and Golf Course Industry are working together to tell the story of how three new products are coming to life for the golf market. This is the second part of a three-part series. The first part appeared in the April issue.

hev listened, researched, developed, sent their work out for testing and examined the encouraging results of those trials. The BASF team involved with creating Encartis fungicide then spent more than a decade waiting to share their linear triumph with the golf industry.

"One of the things we kept hearing," says BASF senior technical representative Kyle Miller, "is that Encartis is the best fungicide never launched, because people didn't think we would be bringing it to the market."

Best. Fungicide. Never. Launched. Quite a description. Quite a reason why that description lasted a decade.

"One of the reasons we decided

not to bring it to market is that we had Xzemplar," Miller says, "and Xzemplar has changed dollar spot control." At the time, BASF also had another blockbuster innovation coming down the pipeline in Maxtima® fungicide, a broad-spectrum, summer-safe DMI which was launched in 2019. Amidst all this innovation, BASF didn't stop thinking of new solutions to help end-users.

Building upon the success of Emerald® fungicide and following the widespread embrace of Xzemplar® fungicide and Maxtima fungicide, BASF moved to make Encartis™ fungicide its latest dollar spot and foliar disease tool available to golf





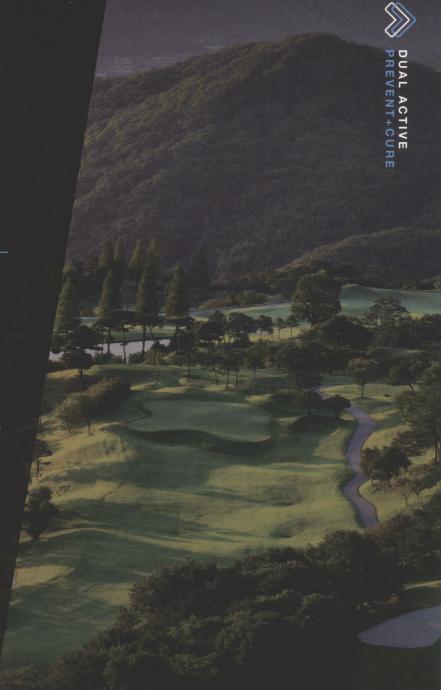
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courses. The company introduced Encartis fungicide in July and the fungicide is available for purchase starting in September.

The origins of Encartis fungicide stem from Emerald fungicide, an SDHI labeled for dollar spot control launched in 2003. Boscalid, the active ingredient in Emerald fungicide, is also an active ingredient in Encartis fungicide. "Emerald is a huge part of where we are with Encartis," says Miller, who has been involved with 15 product launches in more than three decades with BASF. "The first few years of Emerald, people said, 'Well, it would be

nice if it controlled some other diseases. It would be nice if it worked curatively.' And that's what spurred us to look at Encartis. There were a couple of little things that we felt we could improve upon and here we are."

Encartis fungicide is a pre-mix formulation, featuring a second active ingredient in chlorothalonil. The presence of two active ingredients allows Encartis fungicide to provide preventative and curative control of diseases beyond dollar spot, including anthracnose, brown patch, and gray leaf spot. Encartis fungicide is being positioned as a product to control disease on fairways, although, Miller says, "there are other places on a golf course, such as greens and tees, where it can be placed just because of the diseases it picks up."

BASF worked with university researchers on wide-ranging Encartis fungicide research in contrasting environments. NC State professor and extension specialist Dr. Jim Kerns performed dollar spot trials on cool-season turf during his tenure at the University of Wisconsin-Madison. Kerns left Wisconsin for NC State in 2012 and he continued those trials in parts of North Carolina using preventive applications with a disease forecasting model.

"With our trials at the University of Wisconsin, it was a different environment, and we were typically getting 21 days of control," Kerns says. "I have always been a proponent that anything much past that is dictated by the disease pressure and environment. There are times where 28 days is not going to be sufficient because dollar spot ebbs and flows.

What about warm-season turf?

Yes, the potential to use Encartis fungicide on warm-season turf exists. Let Clemson University turfgrass pathology professor emeritus Dr. Bruce Martin explain.

'The fit is going to be on greens," he says. "We do see dollar spot on Bermudagrass greens and it's misidentified sometimes as leaf spot, and the two diseases occur simultaneously on Bermudagrass greens. Chlorothalonil has activity on both pathogens. On other warm-season grasses, we do see dollar spot on zovsia and there's increasing interest with zovsiagrass greens in the South. I can see a nice fit there. almost similar to what you might have on bentgrass greens, because zovsiagrass is more susceptible to dollar spot than Bermudagrass. Seashore paspalum is a major turforass in various parts of Florida and dollar spot is probably the No. 1 disease on seashore paspalum, so it would have similar uses to what you would see on a bentgrass fairway in the Northeast."

> If you are timing it right and using some type of forecasting system, you can easily get 21 days of control. We have done some follow-up testing with Encartis in the mountains of North Carolina and we have gotten 21 days. That's pretty remarkable, because some of these areas get 60 to 70 inches of rainfall every year and to get 21 days is outstanding."

> Purdue University professor emeritus Dr. Rick Latin first observed Encartis fungicide before the solution was known as Encartis. "It first appeared in our research program as a numbered compound, but we knew that it was a combination of boscalid and chlorothalonil," he says. "It proved to be very effective in terms of disease control for dollar spot."

Multiple advantages exist when combining two proven active ingredients such as boscalid and chlorothalonil.

"The first one is simple," Latin adds. "By increasing the spectrum of activity, you're reaching more target pathogens. But I really think the more important advantage is the increase in the potency of the treatment. Two active ingredients attacking a fungal cell at different targets will ensure greater likelihood of cell death. The more we reduce the number of pathogen cells, the greater we reduce pathogen populations—and reducing pathogen populations is the key to longer periods of control. In terms of combining these two active ingredients in an optimized formulation ... I think it's something that's long overdue in our industry."

Clemson University turfgrass pathology professor emeritus Dr. Bruce Martin started studying Encartis fungicide in 2009 on 'Crenshaw' bentgrass greens in South Carolina, Encartis fungicide was just a numbered compound at the time. Martin says his team picked 'Crenshaw' to perform the trials because the variety "is maybe the most susceptible bentgrass that we had ever seen for dollar spot."

"We did that purposefully," he adds. "If there's a weak point in a fungicide to dollar spot, it would come out in 'Crenshaw' and we could detect it. We also have other diseases on greens because we are in a more humid. hot environment in the summer-

time, so we have anthracnose that can come into bentgrass and we have brown patch. The addition of chlorothalonil helps with a broad spectrum of diseases that we may see on bentgrass greens."

When and how is Encartis most effective? Consider it a potential leadoff hitter for dollar spot control.

"I would position it early in the season," Latin says. "You have chlorothalonil as a protectant and you have boscalid attacking any infection that may have occurred, keeping the population low. You can go anytime through the season, but early in the season for that first application is advisable."

Encartis fungicide can also be the pesky No. 9 hitter. Miller calls the first and last sprays of the season "the foundation for everything that goes in the middle," and he says Encartis fungicide fits nicely into both slots.

"This bookend program that we talk about is getting off to a great start, putting Encartis out before you have any disease problems, so that you stay clean going into the season, then at the end of the year we want to go into the offseason with really healthy, good-looking turf," Miller adds. "It nails down the end of the year. That's how I think of a bookend program, ... it sets you up for success."

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BEYOND THE SEA PAR 3

Coastal bluffs, gorgeous views and a strategic sustainability effort make The Links at Terranea a special spot along the SoCal coast.

By Judd Spicer

porting a scorecard of playability and sustainability, The Links at Terranea proves worthy of its annual reference among the nation's top par-3 courses since debuting in 2009.

Boldly situated on the Mediterranean-inspired, 102-acre Terranea Resort spread in Rancho Palos Verdes, California, the nine-hole design from **Todd Eckenrode** plays perched above the coastal bluffs, with panoramic views of the Pacific on nearly every hole.

Charting at nearly 1,300 yards from the tips (and about 700 yards from the forward tees), the course's dozen year run to-date has done more than redefine the possibility and potential of short course play across golf-avid SoCal – it's concurrently served as a seminal golf resort en vogue amenity for

name architects creating shorter courses across the country.

"I won't say we set the trend, but we were one of the first of this modern wave of walking-only, shorter courses," says Mike Hill, director of golf operations at The Links at Terranea. "Out here, we see a huge mix of play; we're not pegged into one demographic of golfer. Avid players, seniors, beginners, women, juniors – the course fits the need for all segment of player."

The golf grounds are far more than just a resort add-on.

"The course was designed with the entire master plan," Hill says. "Sometimes, when you think about a par-3 course at a resort, you think 'pitch-and-putt,' or the design thinking was, 'Hey, we had a little bit of land left, and we're gonna add a little course.' That's not the case here."

A modern consideration for family and generational vacation time also finds a sweet spot in nine holes.

"Being less than two hours, the course lends itself to being a resort amenity and activity; whether the day also includes, say, a kayaking tour or some off-site horseback riding," Hill says. "Everything is kind of in that two-hour window."

Open to the public and resort guests – and offering an on-site Golf Academy and swing studio – The Links will test both the sticks and nascent alike; to wit: Defending the dearth of distance, the grounds present continual challenge on sizeable, swaled putting surfaces and green complexes enjoy the ongoing surrounds of comely, fescue-capped rustic bunkering sure to test players of all levels.

"It's a golfer's par-3 course. And even



though it's a par 27, I think of it as a second shot course. You may not need the big stick here, but you'll need to be sharp with everything else," Hill says. "And it really is a links-style course, in that it incorporates many of those strategic design elements; our greens are really large, with lots of undulation and feeder-slopes throughout the course. They're challenging, even for avid golfers. Once you get off the tee, you'll find every kind of short game shot you can imagine around the putting complexes; lots of little swales and tight lies. You need to be able to chip and pitch to really score here."

Nearly every hole presents personality across the 90-minutes play, and while the Big Blue backdrop offers the most fetching highlight, multiple holes contend for the marquee.

The top-handicapped No. 3 ("Captain's Bluff") plays uphill at 172 yards with ample trouble both long and left.

"It's a great test, playing out to the bay on the far side of the course toward Pelican's Cove and the Pt. Vicente Lighthouse," Hill says. "Being on that green feels like you're on an infinity pool, looking out toward Catalina Island; and when its super-clear, you can see all the way to tiny Santa Barbara Island way off the coast."

A punchbowl green on No. 7 and

a burly, 173-yard eighth set the stage for a challenging finisher. "There's one tree on the course," smiles Hill of the 121-yard, downhill ninth, playing over a ravine, "and it guards the right side of that green."

Enhanced Links' fame and frame comes via a laudable sustainability effort, which extends from resort to course. Prior to Terranea's debut, the prime perch stood dormant for more than 20 years as the former site of the Marineland of the Pacific amusement park. A highly focused eco-friendly effort across all aspects of the property has been a core philosophy of Terranea's operation since its inception.

Among the most visible on-course eco-aims are native plantings, ranging from Coastal Sage to California Sunflower Bush to Saltbush. Natural irrigation and water treatment via wet ponds and bioswales also play as elements of the Links' routing.

"You play around them, over them," Hill says. "So, it's kind of cool that they're environmental features, but they're also unique features of the course strategy."

A sizable investment in the property's StormFilter systems both reduce and treat runoff.

"Beneath the property are seven different vaults; you can see the labeled manholes around. and if you were to look underneath, you'd see these huge filters which are filled with a product called PhosphoSorb," says Lauren Bergloff, sustainability leader at Terranea Resort. "So, when it rains, all of the runoff - including any pesticides or oils from cars or any trash - instead of it going straight into the ocean like it once did, it gets filtered through either the bioswales, the holding ponds or the storm drain filters. And you can see the bioswales on the course. They're basically creek beds, but they're big rocks with plants within them and they lead to the holding ponds. So, they serve as a natural barrier."

The Pacific below has reaped benefits, seeing the return of the Kelp forest and biodiversity, and with local divers long remarking on far clearer waters.

From sea to tee, the property's commitment to sustainability and natural habitat generally finds some added members to one's foursome.

"One of the founding values of Terranea, from the beginning, was giving back to nature. It's all con-

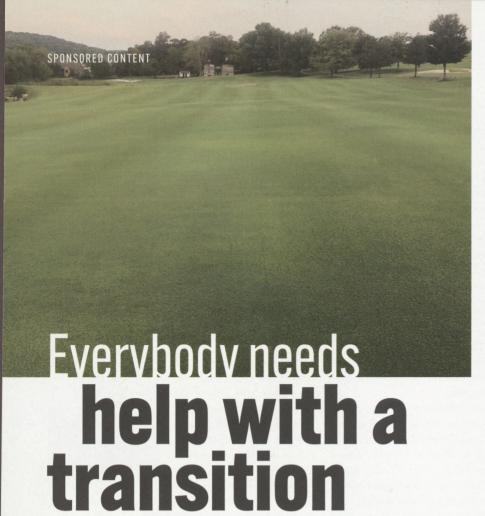
> nected, and the golf course has a big part to do with it," Bergloff says. "When you're playing, you'll see all of the animals that have come back; from bunny rabbits to foxes to lizards to hummingbirds, hawks, falcons and snakes. And they've all come back because of the native plantings." GCI



▲ Bergloff







By Guy Cipriano

haune Achurch hails from Oueensland, Australia. Seeing the splendor of American courses while watching televised golf events convinced him to move across the world to pursue a turf management career.

Steve Ellis landed a job with an agriculture cooperative and started working in a fertilizer production facility in 1983. He has spent his career in Tennessee, helping farmers and subsequently turf managers improve the quality of their respective products.

Consider them the unlikeliest of ideal professional matches.

Achurch is the superintendent at The Governors Club, a private golf community in Nashville's rapidly growing south suburbs. Ellis is a territory representative for Simplot Turf & Horticulture who covers most of Tennessee and parts of northern Georgia, northern Missis-



Achurch



In their own words

Shaune Achurch and Steve Ellis joined Superintendent Radio Network to discuss their careers and how superintendents and company representatives can work together to elevate golf courses. The podcast is available on the Superintendent Radio Network page on golfcourseindustry. com, Apple Podcasts, Spotify and other popular podcast distribution platforms.

sippi and southern Kentucky for the expanding company. The pair has cultivated a mutually beneficial relationship since Achurch arrived at The Governors Club following a stint as an assistant superintendent at famed East Lake Golf Club in Atlanta.

Needing to learn a new market and growing environment as quickly as possible, Achurch immediately contacted people connected to the Tennessee turf community. He made a new friend on his first day at The Governors Club.

"I got Steve's number through a vendor

MORF THAN A

presented by Simplot Turf & Horticulture

who was in Atlanta and we struck it up on the phone," Achurch says. "I said to him, 'I'm going to be in Tennessee. Drop in on the first day.' I think it was right around 9, 10 o'clock my first day, Steve showed up. We got straight down to business creating a program."

From helping Achurch control weeds in The Governors Club's 60 acres of fescue areas to conversations that extended into personal realms, Ellis instantly helped a middle Tennessee outsider adjust to a region where warm- and cool-season turf thrives (and sometimes struggles). The Governors Club features four acres of MiniVerde Bermudagrass greens and 70 acres of Meyer zoysiagrass hitting surfaces. "With Bermudagrass greens, the challenge is in the wintertime and cooler temps and making sure we make the right decisions for the greens," Achurch says.

Helping others handle freezes and summer stresses represents Ellis's work focus for nearly four decades. He moved from the fertilizer plant into the materials department before leading GPS fertilizer and spraying demonstrations for farmers in the 1990s. When the agriculture industry started to contract, Ellis became a custom applicator who provided services to golf courses. He moved into a golf and turf sales job in the early 2000s and joined the Simplot Turf & Horticulture team in 2018. "Understanding all aspects of the business instead of just being generally one-sided ... I'm thankful for that," Ellis says.

And Achurch is thankful somebody as experienced and dedicated as Ellis covers his territory. "Steve was a big help with the fescue and pre- and post-emergent and that sort of stuff," Achurch says. "We work as close as probably two friends do. I know Steve is there for me when I need him, and he wants me to succeed as much as anyone."

Ellis views success in his role as a matter of trust. That fast start with Achurch has evolved into a candid relationship.

"I enjoy listening to their ideas and bringing new ideas to them," Ellis says. "Superintendents moving into a new area really need to get to know their sales reps, especially if they have been there for a while. They can put their heads together and come up with an agronomic plan and programming that's going to be the best for them. It might not be exactly right the first go-around, but things can be adjusted to be successful."





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ENCOUNTERS WITH FOUR-LEGGED CRITTERS ARE
AN ENCHANTING PART OF THE JOB – AND THEY
SOMETIMES CREATE INTERESTING PREVENTION AND
REPAIR DUTIES FOR GOLF MAINTENANCE TEAMS.

By John Torsiello

olf courses are a natural animal attractant. With lush turf enticing animals to search for insects, their plentiful trees, vegetation, and bodies of water prove, well, simply irresistible to a host of different species. The marauders include skunks, deer, raccoons, beaver, muskrats, armadillos (yep), and, with a nod to "Caddyshack", groundhogs ... and more. Many animals, such as deer and geese, have become very comfortable in suburban settings. They no longer fear people and often will allow golfers to get very close. Andy Neiswender, director of facilities and operations at Belleair Country Club in Florida, tosses another four-legged pest into the mix: "Since I've been at Belleair," he says, "we have a constant headache from coyotes digging holes in bunkers. The number of coyotes ebbs and flows, and generally when the population is up so is the damage." At his previous superintendent's position at Lake Jovita Golf and Country Club in Dade City, Florida, Neiswender says damage to greens and fairways was done by horses that found their way onto the course and "got spooked" when he approached. "There were places they dug four to six inches into the surface. That ended up costing several thousand dollars in labor to repair and plug the damage." When he was at Sundance Golf and Country Club, also in Dade City, Florida, Neiswender encountered "about 10 cows that got out on the course. They walked all over a couple holes and across a green. Fortunately, it was a push-up green with Tifdwarf. It was firm and ended up being more like repairing a couple hundred ball marks." Also at Sundance, he says, "a sandhill crane got into one of the greens looking for something and 'roto-tilled' a 50-square-foot patch of green." While the equines, bovines and wandering sandhill crane are rather unusual to find on a golf course, they do point out the damage that animals can do. At Bull's Bridge Golf Club in Kent, Connecticut, superintendent Steve Hicks deals with deer making tracks across his greens. "Fixing them is similar to ball mark repair, but more time consuming," he says. Occasionally, Hicks's crew must hand topdress with sand to fill the indents. Turkeys will sometimes scratch up the greens and tees at Bull's Bridge, leaving a lot of "free fertilizer" to clean up, Hicks says. Coyotes chew on stakes and



wetland areas" that provide "a perfect place" for muskrats and beavers, superintendent Matt Cavanaugh says. "The muskrats burrow in the soil from the water's edge and they can go a long way. These burrows create some pretty impressive sinkholes in all areas of the course, including greens. We had a skid-steer fall into said sinkhole. Many of our waterways are connected via culverts and beavers love to plug these up. It has

drainage and water levels." Foxes and coyotes digging in bun-

caused some pretty big issues for our

kers, all kinds of birds leaving their calling cards on greens, squirrels getting into the outside restrooms and chewing "everything they can get their face on" and animals such as turkey and skunks digging in the rough areas for food (mostly grubs) all keep Cavanaugh up at night.

insecticide product to control grubs so you don't lead to turkey and skunk damage, it helps but can get a little costly," Cavanaugh says. "We have dug channels along some greens, tees and fairways, about 18 feet wide that go down past the water line. We then backfill them with a 2- to 3-inch stone. This makes it very hard for muskrats to dig their burrows in these areas."

Great Oak Inc. owner Sean Mc-Namara is often contacted by golf courses about problems with geese. "Excessive geese droppings on fairways and greens can be a disgusting problem for groundskeepers and golfers. We are working on a repellent to be named 'GoosePro'. The problem with most repellents is they don't work well or last long, or they're very expensive. We are

ter where they are, Hicks has also had

to fight mole damage. "We had a few

winters with no damage, but this past

winter, with unfrozen ground and a

lot of snow cover late in the winter,

one of our greens was badly

damaged by tunneling."

It took his crew

a couple of

days of plug-

ging and

topdressing to repair the hoping to develop something that is more effective, works longer and costs less."

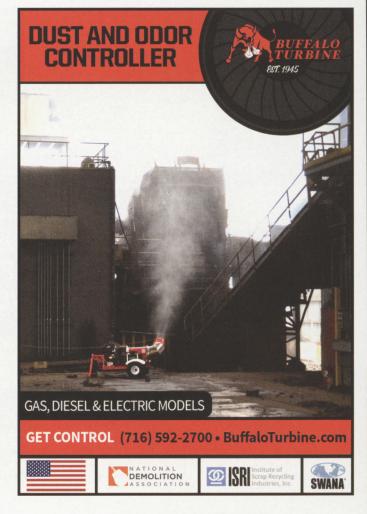
McNamara is also asked often about deer browse damage to ornamental plantings on courses. "Deer often eat arborvitae, rhododendrons, azaleas and other woody ornamental plants during the winter," he says. "I have seen thousands of dollars in deer browse damage caused in one winter. Spraying winter animal repellent in the fall will protect expensive evergreen trees and shrubs from deer browse."

Michael Gaunya, president of American Deer Proofing, says that putting up thin 6-foot stakes around greens and threading monofilament, or fishing line, from stake to stake about two feet apart from ground level up, will force deer to steer clear. "They can't see the line and when the walk into it they get scared and stay away," he says.

Elliott Dowling, a USGA Green Section Northeast Region agronomist, says courses in urban and suburban-type settings are a natural animal sanctuary in the middle of a town or city. Tree-lined courses or courses with a lot of naturalized rough have more damage because this provides a prime habitat. Dowling has seen "some pretty serious digging" in rough areas, some that required a few pallets of sod or more to repair. "I have not seen, how-







ever, the type of damage that courses further south see with wild boars. I've seen photos that look really bad."

Skunks or rodents can best be controlled by eliminating white grubs from turf so that the animals do not have a reason to dig. "There will always be some foraging in areas with a history of white grubs, but as the grub population is reduced, animals will move out," Dowling says.

Paul Jacobs, a USGA Green Section Central Region agronomist, says the best way to stop animal damage is to be proactive in controlling grubs, especially in rough areas that sometimes get overlooked. "Skunks and even armadillos in the Southwest cause damage by going after the grubs," he says. Jacobs advises planting shrubs that deer don't like to eat as a way to minimize damage.

Golf courses and country clubs were among the earliest clients of Brad Lundsteen, owner and operator of Suburban Wildlife Control. "No matter where golf courses are located it is safe to assume all have had conflicts with animals. Because the animals do not understand boundaries and are naturally just doing what wild animals do, the best thing to do is live trap and relocate them."

Lundsteen "has seen it all" with animal damage on courses. "The worst situations have been raccoons that tore up the grounds so badly that it looked like a rototiller had gone through," he says. He has also seen beaver dams that have flooded out whole sections of golf courses.

"Another bad scenario I've seen, and oddly more than once, is maintenance (crews) mowing the sides of ponds where muskrats caved in the banks and having the mowers fall in or tip over into the pond as the mower passed over unstable areas," he says. "Luckily, there were no injuries but those could have been very dangerous situations."

Lundsteen believes that most, if





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not all "gimmicks" and "animal prevention" devices do not work. "Stuff like mothballs, playing radios loudly, and using coyote or fox urine to try and deter wildlife does not work and is a waste of time and money," he says. Really, the only good and humane solution is to live trap and relocate the animals as they are discovered, far from the course so they do not

Gaunya says that for superinten-

return."

dents to be effective in preventing or at least minimizing damage from animals, they must remain vigilant. "You need to keep spraying," he says. "A good rule of thumb is to spray monthly with a quality repellent.

If you get heavy rain, you may need to reapply the repellent. If the plants are in a growth stage, you will need to spray more often to get the repellent

on new growth that was not there on previous rounds of application."

Because blasting away at the critters is not a humane option (just look at the results of Carl Spackler's efforts to eliminate his gopher problem in "Caddyshack"), animal damage is unavoidable to some extent. "We work very hard to create a natural, appealing landscape and I don't think we are the only ones who appreciate it," Neiswender says. "The proverbial 'grass is greener on the other side of the fence' holds true for golf courses."

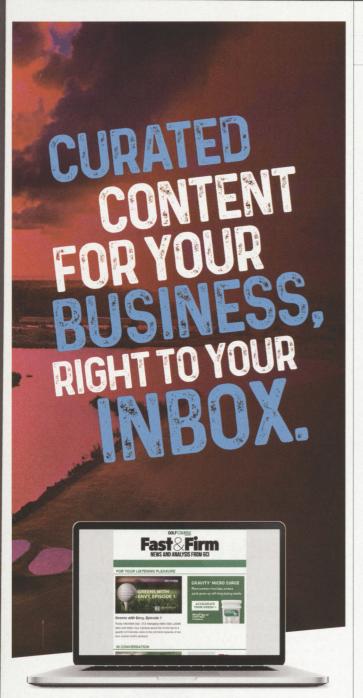
Hicks concurs that animal damage comes with the territory. "Our course is in a serene environment, surrounded by nature," he says. "We deal with what Mother Nature throws at us, and that includes damage from our wild neighbors."

A nice sentiment, but there is also no reason to lay down your tools and sprays and surrender your course to animals. GCI

John Torsiello is a Connecticut-based writer and a frequent Golf Course Industry contributor.







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OUTSIDE/THE ROPES

MORAGHAN continued from 11

LENGTH

Royal St. George's proved that a championship can be contested on a shorter golf course with

Slower green speeds

locations, which keeps

Faster surfaces force

the hole to the center

of the green, making

the approach shot

easier for the elite

player."

allow for a wider

things interesting.

variety of hole

a great set of greens, undulations and fair hole locations. It was great to see that distance didn't matter and the course didn't need bombers like Bryson or Dustin to identify the Champion Golfer of the Year. Coinci-

dentally, shorter bodes well for Merion, which appears to have earned a permanent place in the future U.S. Open Championship rotation.

CREATIVE SETUP

The golf course setup at The Open was creative and made players think. Isn't that what the game should be about? Golfers should have to think their way around the property, using club selection, course management and strategy to score.

With the overhyped emphasis in the U.S. on conditioning, plus long rough and fast greens, these subtle nuances are lost to the average player. This occurred in 2013 at the U.S. Open at Merion, in 2017 at Erin Hills where rough was harvested mid-U.S. Open week and again, a Shinnecock in 2018 on the 13th green where **Phil Mickelson** seemingly lost his mind.

RELEVANCY

Most weeks of the year, the golf we see on television is meant to be entertainment. The PGA Tour wants to showcase the skill and talent of its players. Its courses are set up to give players opportunities to score and excite their fan base.

This means perfectly raked bunkers with "firm" sand, greens of perfect and consistent speeds, and predictable surface firmness regardless of turf type with mostly accessible hole locations.

The majors offer some variation. Because the U.S. Open,

PGA Championship, and Open Championship move from site to site, players must figure out the conditions. But they pretty much know what to expect at the U.S. Open now (until the powers that be change their philosophy ... again), and the PGA Championship.

Year in and year out, the one event the shows us something different is The Open. That's largely because in the UK the approach to golf is different and, frankly, more human. The courses are far more natural and require strategic thinking. They test all levels of player, from beginners to the best in the world. Anyone who's had the chance to take a golf trip anywhere in the UK has experienced that. And, I'll bet, enjoyed it immensely.

Watching golf played smartly, creatively, and managed well should be a teachable moment for all of us. Seeing courses that more faithfully follow nature and inject a little serendipity is great. Whatever we as superintendents can do to give our golfers more fun and challenge should be applauded. 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.



FERTILIZER SPREADER TRANSPORT BRACKET

racket measures 40 inches by 30 inches with the lock pin hole of ball mount to front cross bar 181/2 inches. Materials used are 1½-inch by 1½-inch by 1½-inch square tubing, 1½-inch by 1½-inch by ¾-inch angle iron and 1½-inch by ½-inch by ½-inch formed channel steel. The Andersons Model 2000 Rotary Spreader's wheels fit nicely in-between the square tubing. The spreader's rear bracket "foot" slides into the angle iron to further secure it in place. No bungee cords or ropes are needed during transport, as the weight of the spreader holds it firmly in place. A Class 2 Receiver Hitch measuring 11/4 inches

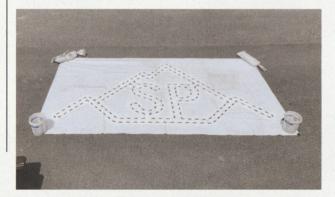


by 11/4 inches is mounted to the rear of the 2015 John Deere TX 4x2 Turf Vehicle. Materials in bulk cost about \$175 and the first one took about 16 hours to design, build and paint. Peter B. Rumery, equipment manager, Zachary Tyson, master technician, and Brendan Parkhurst, superintendent, at the Cape Arundel Golf Club in Kennebunkport, Maine, are really good at what they do. Bruce Hepner is the club's restoration architect.



DECORATIVE CLUB LOGO

ailey Smith, assistant superintendent, at the Spanish Peaks Mountain Club in Big Sky, Montana, manages the club logos placed on the course. The template is made of a durable, foldable 8-millimeter UV stable plastic material measuring 17 feet long by 91/2 feet tall. It was made by US Specialty Coatings and it took two to four weeks to manufacture deliver. The initial painting takes about eight or nine cans of 18-ounce US Specialty Coatings water-based eco stripe turf marking paint (\$36.95 for a case of 12 cans) by painting all the dots and then connecting them to make it solid. It is refreshed every one or two weeks using three to five cans of paint. Four cases of paint are ordered for each summer. Ryan Blechta is the senior director, grounds and mountain operations. Tom Weiskopf and Phil Smith designed the course.





Terry Buchen, CGCS, MG, is president of Golf Agronomy International. He's a 51-year, life member of the GCSAA. He can be reached at 757-561-7777 or terrybuchen@earthlink.net.

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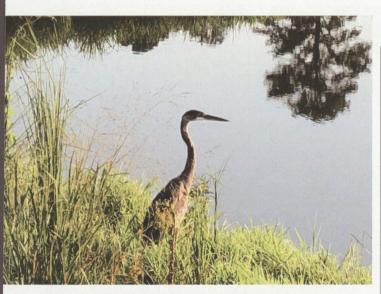
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GOLF COURS



GOLF IS WILD

Pritish composer Leslie Bricusse wrote a song titled "Talk to the Animals" for the 1967 film "Dr. Doolittle." Although you are probably too young to remember the original version, the song has been covered by numerous artists and was performed in the 1998 remake of the film starring Eddie Murphy.

In January 2016, I attended a Turfhead Summit where Paul Carter, CGCS from Bear Trace at Harrison Bay State Park in Harrison, Tennessee, delivered a passionate presentation about wildlife on the golf course. Known for their resident bald eagles and their eagle camera, I was surprised to learn that is only the tip of the iceberg when it comes to nature for Paul and his team.

Paul pointed out many projects completed in-house by the agronomy team to promote and enhance the wildlife on The Bear Trace golf course. Whether it was constructing nesting boxes for various species of birds and ducks, or simple low-cost feeders for deer attached to the far sides of trees adjacent to fairways, you are guaranteed to see wildlife during a round at Bear Trace.

Paul's message "Just Do Something," a play on the Nike slogan "Just Do It," was an impassioned plea for golf courses to be caretakers for our resident critters. Ironically, I grew up in Castlewood, Virginia, less than 25 miles from Paul's hometown of Wise. Perhaps our mutual love for nature and the outdoors stems from that rural, southwestern Virginia upbringing.

Another proponent and advocate for nature on the golf course is **James Hutchinson**, BIGGA's Ecology and Sustainability expert. His role is to assist BIGGA members and their clubs with environmental, ecological, woodland and grassland management. James helps with preparing reports and provides advice and

guidance on rare and protected species.

He has visited over 140 golf courses carrying out nature walks and developed numerous environmental management plans. His monthly feature in *Greenkeeper International* is one of my first stops as I always enjoy the photos of rare birds, ancient trees and creative bug hotels. I have even been known to tag @Ecology1BIGGA when posting photos of the resident wildlife at our course.

For 16 years, I have been the golf course superintendent at Carolina Golf Club in Charlotte, North Carolina. Located less than four miles west of the city's center, it is a true urban golf course bordered by the railroad on our north and roads on our south, east and west.

Despite our location, the golf course is home to a plethora of wildlife. Rabbits, squirrels and deer roam freely. We have spotted our share of coyotes, too. Our pond banks are always crowded with sunbathing turtles. For birds, I have seen everything from finches to robins, cardinals, bluebirds, red-winged blackbirds, purple martins and even red-headed woodpeckers. The two birds that fascinate me most are the red-tailed hawk and the great blue heron (Paul's favorite).

It is no coincidence the first deer I ever saw was on a golf course – Lake Bonaventure Country Club back home in Virginia. Just two years ago, my wife and I were playing golf in Ireland at Enniscrone Golf Club, when on the 13th hole,

we were greeted by the most beautiful fox. There really is something to this wildlife/golf course thing.

The older I get, the more I appreciate this deep connection we share with the animals that call Carolina Golf Club home. I enjoy watching ospreys and herons fish in the ponds. I've watched fawns frolic while mama stands guard. I even once saw a den of coyote pups come out to play when we were closed for maintenance, and nobody was around.

One morning while getting an early start taking TDR readings via headlamp, an ambulance raced down the street bordering the course with its siren cutting through the darkness. I heard coyotes down near the irrigation lake howling in reply. It was funny and a little chilling at the same time.

This industry has made great strides through the years, and everyone has a better understanding of our role and responsibilities with regards to the environment. Golf has been around a long time, but Mother Earth has been here much longer, and it is important we continue to become more sustainable so our children's children can enjoy a round of golf while laughing at the site of some critters in the wild.

And if we could talk with the animals, just maybe I can get our resident blue heron to stop fishing long enough to pose for a selfie with me. That would be epic. **GCI**

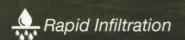


MATTHEW WHARTON, CGCS, MG, is the superintendent at Carolina Golf Club in Charlotte, North Carolina and past president of the Carolinas GCSA. Follow him on Twitter @CGCGreenkeeper.



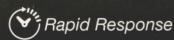
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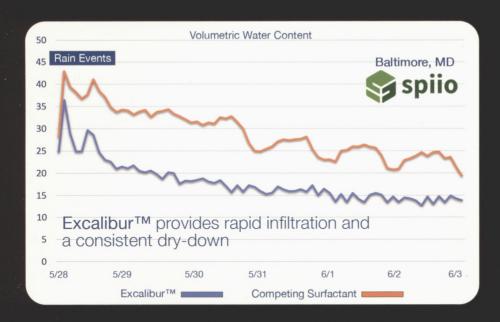




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