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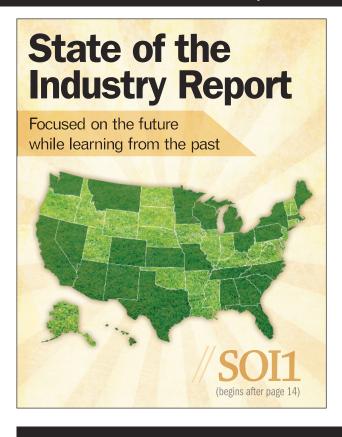
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SINCE 1927—The Resource for Superintendents // Golfdom.com









The industry loses two celebrity superintendents



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"...I asked him if the person to visit in Florida to learn from might actually be the guy I was talking to — Steve himself. It was an idea he quickly laughed off."

SETH JONES, Editor-in-Chief & Associate Publisher

A final phone call

y last phone call to Steve Wright, CGCS — never meant to be a monumental call — goes down as the last time I ever talked with my friend Steve.

Readers of Golfdom will recognize the name Steve Wright, the superintendent at Pine Tree GC, Boynton Beach, Fla., as he was a columnist for our magazine. His column, "I'm Just Saying," appeared a few times a year since I convinced Steve to give it a try back in 2015. (He tried to end every column with the hashtag #justsayin' and it drove me crazy.) Those of you active on Twitter know the name Steve Wright and the handle @WrightSteve19. Steve was active on Twitter (and Facebook), usually sharing beautiful golf photos or pics of him and his wife, Sheree, out on the boat, or just overall positive vibes, with the hashtag #sflalife.

Many of you knew Steve personally, either from his time working in South Carolina or Florida, volunteering on a GCSAA committee, attending the *Golfdom* Summit, etc.

Here is the context — and the sad coincidence — of my last call with Steve. I buzzed him and left him a voicemail, telling him I was working on a story and needed some Florida-specific expertise, and asked if he could assist. That afternoon Steve returned my call and I gave him the lowdown. I was working on last month's cover story, the "Distance Education" article, and wanted to know who he might suggest as the superintendent people would want to road trip to Florida to learn from.

He suggested his friend Jim Ellison, among a few other names, and told me why.

Mr. Ellison passed away on

Oct. 16, age 68. Steve passed away less than a month later on Nov. 5, age 61.

In that phone call, after Steve told me about Jim, I told him thanks for the suggestion... and then I asked him if the person to visit in Florida to learn from might actually be the guy I was talking to — Steve himself. It was an idea he quickly laughed off.

I wanted to include Steve in that November cover story because I believed he was the guy in Florida from whom people would like to learn. But I wanted his blessing to pursue such an idea because, frankly, I was a little intimidated by him.

Yes, I'll admit I was a little afraid of Steve. I think everyone in the business who knew him was. He was a friend and a jokester, but he also had a

serious side. I know I made him mad once. It was following a golf outing we were both in. Following the round, Steve stopped me at the bar and scolded me for driving too close to a green. I thought he was joking.

I quickly figured out he was not joking. I'll never know what hole he was referring to or how close I really was, but now you know why I instinctively pull back to the cart path whenever I get within, oh, 100 yards of any green.

So, now it seems that I did the distance education story on Steve anyway, for a sad reason. Steve will have to forgive me, like he did for driving too close to the green that day. He was a force in the Florida golf industry and in the industry as a whole, and I wasn't going to miss this opportunity — again — to pay him tribute.

Along with insights from those who worked alongside Steve, we reprinted an especially poignant column he wrote for us in 2015. His first bit of advice was to spend 15 minutes a day and "call someone important to you."

You never know when a phone call or a conversation might actually be the last time you talk to that person. I'm thankful that I called someone important to me that day so we could catch up one last time.

#JustSayin'. @

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NEWS, NOTES AND QUOTES



AN INSIDE LOOK AT DEERE & BAYER

BY SETH JONES // Editor-in-Chief

Fifty-seven assistant superintendents from the United States and Canada recently visited Raleigh, N.C., for the annual Green Start Academy, an event put on jointly by John Deere and Bayer Environmental Science.

Attendees were treated to an inside look at how John Deere makes the donuts — or in this case, greens mowers — at its Turf Care plant in Fuquay-Varina, N.C.; a tour of the Bayer Technical Training Center in Clayton, N.C.; and presentations by superintendents like Bob Farren, CGCS, Pinehurst (N.C.) Resort, Carlos Arraya, CGCS, Bellerive CC, St. Louis and Lukus Harvey, director of agronomy, Atlanta Athletic Club.

The group was welcomed by David Wells, Bayer's golf business manager for turf and ornamental. "You're the best of the best, the future of the industry," he

told the assembled assistants.

"I'm amazed that we've got some of the superintendents from these topnotch courses from all over the United States," said Jeff Kerr, assistant superintendent at Country Club of Peoria, Peoria Heights, Ill. "They're so personable... you get the feeling that they were just like you — it's not unattainable."

"I've met a lot of people who have been more than welcoming. Bayer and John Deere have done an incredible job putting this together, it's been an incredible experience," said Collin Harley, assistant superintendent, Gulph Mills GC, King of Prussia, Pa. "If who you're working with isn't pushing you to apply, people should do it themselves, because this has been very beneficial."

For additional photos from the event, check out this month's *Golfdom* Gallery on pages 12-13.

//SORRY, SAN ANTONIO

GCSAA ANNOUNCES 2021 GIS TO LAS VEGAS

The Golf Course Superintendents Association of America (GCSAA) recently announced a change in locations for the 2021 Golf Industry Show. The show previously was planned to be held in San Antonio, Texas, but has now been relocated to Las Vegas.

"The opportunity to return to Las Vegas arose and GCSAA listened to members' wishes to offer more varied non-coastal locales," GCSAA announced via Twitter.

The GIS has been held twice in San Antonio recently (2015, 2018). Both events were plagued with bad weather and travel delays (but both also offered attendees a chance to enjoy delicious What-a-Burger). The GIS was last held in Las Vegas in 2012, and that event/location also received mixed reviews. The 2019 GIS will be in San Diego Feb. 2-7 and in Orlando in 2020, Jan. 25-30.

Regardless of location, *Golfdom* will be there and we will find a good time.

//CLIFFORD IS TOP DOG

PBI-GORDON NAMES COO

Steve Clifford joined PBI-Gordon as chief operating officer, effective July 31, 2018. He was previously an audit partner and the managing partner of Ernst & Young's Kansas City office from 1999 through his retirement in 2015.

Clifford has served as an advisory director on the PBI-Gordon board of directors since his retirement. He's also a director on the board of Ferrellgas Partners (NYSE: FGP), an American supplier of propane.

In the newly created position of COO, Clifford will direct operations of PBI-Gordon's three business units: Pest Management, PetAg and Pegasus Laboratories. Additionally, he will oversee the company's information technology and enterprise resource planning teams. He will report directly to PBI-Gordon CEO Don Chew.

"(Clifford's) experience in helping companies make their businesses better through strategic development, a focus on financial performance metrics and attainment of immediate and long-term growth objectives will be vital as we continue to grow and increase market share across all the sectors we serve," said Chew.

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//CLICKBAIT

The top stories of 2018

Here in the *Golfdom* offices, we have a good-natured in-house competition: Whose story will engage the most readers in any given year?

This year, that award leaves the office at 1360 East 9th Street in downtown Cleveland and heads out west to California, where Gail Gu is the assistant superintendent at the Club at Ruby Hill in Pleasanton. According to web statistics, the former graduate student, along with Dave Gardner, Ph.D., and Karl Danneberger, Ph.D., nab the top story of the year with their research article, "Brushing stress away, or causing it?" which appeared in the January 2018 issue (visit https://tinyurl.com/yar49eah to read the story).

The rest of the top five stories were:

- Demystifying Pythium diseases of golf course turfgrasses, by Jim Kerns, Ph.D., and Lee Butler (https://tinyurl. com/y8rvnr52)
- 2018 PGA Championship preview: A superintendent for the people, by Seth Jones (https://tinyurl.com/ycdr8jwc)
- Controlling ultradwarf bermudagrass diseases, by Ed Hiscock (https:// tinyurl.com/y9bnm4yl)
- An inside look at Shinnecock Hills GC, by Seth Jones (https://tinyurl.com/ yamyd7hl)

What story will be our most-read feature in 2019? We're not sure, but maybe you are. Email us and let us know what features we should pursue in 2019, and we'll get on it.

And congrats to Gail, Dave and Karl!



QUATTLEBAUM JOINS TURF CONNECTIONS

Turf Connections, a producer of turfgrass sod and sprigs in the Carolinas, announces the addition of longtime turf industry professional Glenn Quattlebaum to the staff as sales manager.

Quattlebaum brings more than 35 years of golf and turf industry sales experience in the Carolinas and the Southeast.
Quattlebaum has a B.A. in biology from Erskine College. Based in Manning, S.C., he will serve customers in the Southeast in the golf course, sports turf, home building and landscape industries.

"I have personally known Glenn for more than a decade," said Marc Marsh, president of Turf Connections. "We are thrilled to have him on our team. His integrity and knowledge are aligned with our company mission and will be of great benefit to our customers."

Turf Connections has four sod farm locations, two in North Carolina and two in South Carolina, where bermudagrass, zoysiagrass and fescue sod and sprigs are grown. The company offers delivery and installation services.

#FRESH TURF

J.R. SIMPLOT EXPANDS IN THE SOUTHEAST

The J.R. Simplot Co., a diversified global food and agriculture company headquartered in Boise, Idaho, is expanding its turf, horticulture and specialty plant nutrition business to the southeastern U.S.

"We're excited to establish a presence here," said Jeff Higgins, manager of business development for Simplot's Southeast locations. "We're a 90-year-old, family-owned company that operates in a range of industries serving food, agriculture and other related, specialized industries like golf course and turf management. Our focus on long-term relationships is a true differentiator for our partners' business."

Simplot Partners will now operate locations in Alabama, Georgia, North Carolina and Texas. The new locations will offer a complete line of plant nutrients, plant protection, specialty products and maintenance options. The company also offers a proprietary line of turf colorants and ornamental plant management products.

Simplot Partners has locations in 16 western states, and two in Australia.









EMAILS @ TEXTS # TWEETS

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Thanks for sharing your article about Twin Oaks and Jeff Burey ("A Nickel Tour with a \$5 Round," November). I got to know Jeff well when he was still at Wolf Creek (Golf Club, Olathe, Kan.), my first job after graduating college. Jeff is one of the most caring people I know and a class act all the way. I spent a few hours at Twin Oaks helping Jeff repair irrigation leaks back in the day. I haven't been back to Kansas City in a number of years but was happy to hear that he is still doing what he does best — sharing his love for the game with kids. The Red Bridge Wee Links sounds like a real winner.

Keep up the good work,

Garrett Luck

Superintendent, Hidden Glen at Bentdale Farms, Cedarburg, Wis.

The Golfdom (F) (D) (E) (S)

FROM THE ARCHIVE

Each year, we take a look at how the golf industry is performing in our State of the Industry report, and superintendents consistently report that labor is their No. 1 issue. It seems that 70 years ago was no different, as turfgrass research pioneer O.J. Noer began his October 1948 column in *Golfdom* by discussing labor and golf courses' reliance on transient labor from high school and college students — with one club in particular having a turnover of more than 60 workers in a single season.

Noer offers suggestions for the labor issue and other turfgrass topics from 1948, including snow mold prevention, wind burn injuries on fairways, shallow-rooted turf on greens and spiking greens. To read the full article, visit **golfdom.com/exclusive**.

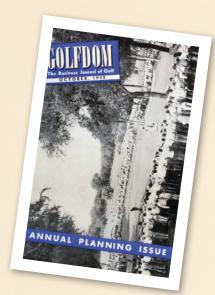
Highlights of golf turf maintenance

BY O.J. NOER

abor continues to be a major golf course problem, even more serious than during the war. Most clubs were worse off at the start of this season than ever before. They limped along until June and relied upon high school and college students during the summer. The boys were satisfactory for mowing, but not for painstaking tasks. Now that they have returned to school, the complaint about being shorthanded is prevalent again.

Labor efficiency has been low, which is to be expected from transient workers and inexperienced youths. One club had a turnover of more than 60 during the season. Some may wonder where they come from. Recruiting and training new men is costly. Good men will not take temporary jobs when they can have permanent work. Clubs must recognize that fact.

The change to mechanized equipment and higher hourly rates of pay have been the excuse for reducing the number of workmen on the course. Some clubs have cut the force in half, others have tried to



operate an 18-hole course with three and four men. It means less frequent mowing of the greens and skimping in other places. Everything goes fine for a year or two. Then troubles multiply because there has not been enough help to do the essential things. Power greens mowers save fewer man hours than is generally believed. The big saving is in efficiency during hot weather. Workmen are less exhausted and more fit physically to do

other tasks afterwards.

DETERMINE WORK REQUIREMENTS

Greenkeepers and club officials should analyze work requirements carefully and then provide a minimum crew of reliable workmen and provide permanent work for them. This skeleton crew can be augmented with students during the summer. Courses will be better, at little or no extra cost, when this is done.

The season of 1948 started out as a bad one for turf on golf courses in the section from Montana to New England. The winter was severe for greens and patches of matted creeping bent on some fairways. Recovery was very slow because the weather in early spring was dry with cold nights.

A mild fall and early snow in 1947 favored snow mold. Grass was green and in active growth when snow blanketed the ground in November. Very few green-keepers had applied fungicide that early for snow mold prevention and didn't get a chance because the ground stayed covered until the midwinter thaw in February. Springlike temperatures in the seventies prevailed for a time then. Winter returned with a vengeance in March when temperatures dropped to 10 to 20 degrees below zero.

Snow mold was bad for two reasons. The grass did not stop growth before being blanketed with snow. Very few greens got the protective application of calomel-corrosive mixture, which is still the most effective fungicide for snow mold. One greenkeeper mixed calomel-corrosive mixture with topdressing and applied it on top of the snow. The amount of topdressing was one-half to two-thirds of a yard per green. His greens came through without damage. ①

Historic Approach // LIKE TREE WORK



"As I work out our budget here at Meadow Club, I'm often reminded that I'm steering things that will one day be judged by my successors as history; in other words, how well we did."

SEAN TULLY, superintendent, Meadow Club, Fairfax, Calif.

Returning golf to golfers

istory is my thing. I like it on all levels. I get lost in golf's early history, and I find myself arguing about the importance and the intent of original golf course design.

As I work out our budget here at Meadow Club, I'm often reminded that I'm steering things that will one day be judged by my successors as history; in other words, how well we did.

Our team does not take this idea lightly. We always look at things with some reflection on what has been done in the past, while also looking toward the future. We ask ourselves how we can best look after the golf course and our immediate surroundings so as to provide a great golf course for our members and guests.

In doing this, tree management often gets more thought than other items. To the surprise of some folks, we spend quite a bit more time pruning,

spraying and watering trees than on cutting trees down. As with anything on a golf course, nature takes a back seat to aesthetics and safety. We prune trees to assure proper growth and balance and remove any broken or dead branches that can pose a safety concern.

For instance, some of our older trees are challenged by bark beetles and sudden oak death, which is a fast-moving disease caused by Phytophthora and has killed off thousands of older oak trees in northern California. We spray our more susceptible trees in the spring for bark beetles and have still seen issues on some of our older Monterey pines that are coming to the end of their lifespan. As for

oak trees, we manage them with a recommended spray of phosphite and Pentra-Bark, which has shown some positive results but is less than adequate at protecting the oak trees. For now, it's our best option.

As with many golf courses, we are dealing with an overplanting of trees that changed the appearance and playability of our golf courses. We may have hit peak tree about 10 years ago, and there has been a concerted effort to redefine our course by its golf course architecture instead of its tree plantings.

My favorite time of year is fall and winter, when tree work is done on a number of courses around the world. I can follow along on Twitter to see the progress and watch as golf courses are returned to golfers — with more sunlight on turf, healthier turf and improved angles and vistas on the golf course.

Every course has its own architectural story. I have courses that I like — they may not be what you like and that's all right. I will seek out the golf that I prefer, and when I play a golf course that I find to be over treed or with fairways that are too narrow, I may not enjoy the golf as much, but I will certainly give my respect to the super there for the work they are doing.

At the end of the day, we are tasked to provide a great golfing experience. We can see this simply as keeping the grass mowed, having fresh cups cut, and above all else having cart paths edged and ball washers full of water. Not every course can be designed by a noted architect or be next to the ocean. Sometimes making one's course better comes down to striping the fairways or planting a bunch of annuals.

As much as we like to elevate Augusta National, we need to spend time promoting the opposite extreme, where golf courses highlight balance and the ability to provide golf at a reasonable price while providing a fun and challenging golf experience. I sure hope that plays a bigger part in all of our futures. @

Sean Tully is superintendent at the Meadow Club in Fairfax, Calif. He can be reached at stullv@meadowclub.com or followed at @tullfescue.



Not quite the cover of the Rolling Stone At a recent reunion party of former GCSAA employees, former GCSAA President (and staff member) Dave Fearis, CGCS-Retired, was presented with an oversized Golfdom cover of the September 2013 issue, on which he appeared.

The peanut gallery After being eliminated from the Rocky Mountain GCSA cornhole tournament, (left to right) Sid Swanson, Broadlands GC, Broomfield, Colo.; Seth Swanson, Littleton (Colo.) Golf and Tennis Club; Don Frantz, PBI-Gordon; and Brian Robbins, Inman Interwest, Inc., do their best to encourage... or heckle... the remaining teams.

Don't mess with Fort Collins CC (Left to right) Michael Veile and Chris Law make for a formidable maintenance duo at Fort Collins (Colo.) CC, but they make for an even better cornhole team. Seriously, these guys should play professionally. Rocky Mountain GCSA President Craig Cahalane, Pole Creek GC, Winter Park, Colo., presents the champs with their plaques (and cash!)

Happy retirement, Hoof! John Hoofnagle, CGCS (center), was honored at the recent Rocky Mountain GCSA Annual Meeting, as he is turning in his keys to the shop of Bookcliff CC in Grand Junction, Colo., at the end of 2018. Golfdom Editor-in-Chief Seth Jones (left) and Editor-at-Large Ed Hiscock were there to help Hoof celebrate.

You can win 'em all! Tim Palko, superintendent at Boulder (Colo.) CC, was happy to show off his winnings from the silent auction — two giant bottles of wine.





Green Start veterans A handful of the speakers at the 2018 Green Start Academy included Billy Weeks, Houston CC; Grant Murphy, The National Golf Club of Canada; Logan Murphy, Pinehurst Resort; and Michael Stevens, regional director of agronomy — Southeast Region, Billy Casper Golf. Murphy was an attendee of the event not that many years ago.

Class is in session Chenxi Zhang, Ph.D., Bayer Environmental Science, gathered the group together on a green at Bayer's facility in Clayton, N.C., to talk to the Green Start Academy attendees about the latest advances in identifying turf stress.

Know thy enemy Cory Griess, assistant superintendent at Ballyneal GC, Holyoke, Colo., gets a look at Pythium at the Green Start Academy.

Sharp-dressed men More heavy hitters in the world of turf maintenance were on hand to speak to the 50-plus attendees of this year's Green Start Academy, including (left to right) Bob Farren, CGCS, Pinehurst Resort; Lukus Harvey, Atlanta Athletic Club; Andy Morris, CC of Peoria; and Carlos Arraya, CGCS, Bellerive CC.



"Most people have no idea what we even do, let alone that greenkeeping is a legitimate profession that requires a formal education."

MATT NEFF, assistant superintendent, Wedgewood G&CC, Powell, Ohio

Spread the love

recently had a conversation with one of my neighbors and he asked me about my job. You've all had the same conversation, and my neighbor and I hit all the major talking points. Yes, I work all winter. Yes, you actually can get a degree in Turfgrass Science. No, I don't "just mow grass all day." Yes, I'll look at those weird spots in your lawn.

After our conversation, I laughed to myself about how many times I've answered those same questions. Then it hit me that the widespread lack of knowledge the general public has about what we do may be a big factor in why fewer people are getting into this business. Most people have no idea what we do, let alone that greenkeeping is a legitimate profession that requires a formal education.

When was the last time you heard a kid say they want to be a superintendent when they grow up? Probably never, unless they have a parent or other relative in the business. When I was a kid, I knew nothing about this profession

until I started working at a course in high school. I never even considered greenkeeping as a possible career until my boss mentioned it to me one day.

He asked me what I was planning on doing when I went to college. Because I had far too much respect for him to say, "I'm not really sure, but I assume I'll be getting hammered a lot," I told him what my career plans were at the time.

He then took the opportunity to discuss this profession with me and said that because I seemed to be interested in the work and was good at it, I should keep it in mind. I doubt he ever gave our con-

versation a second thought, but he planted the seed (no pun intended) in my mind.

Full disclosure: I will never forget my first round of golf, and it had almost nothing to do with the game. Of course I thought it was fun, and I've developed a love for the game over the years, but without a doubt, the main thing that drew me to the game at first was the golf course itself.

I was absolutely fascinated by the conditioning and design of the course. Admittedly, I didn't actually see it in those terms at 10 years old, but I couldn't get over how awesome the course looked — how short the playing surfaces were mowed, the

groomed bunkers, the acres of beautifully maintained rolling terrain, the tree-lined fairways (give me a break — I was 10). I guess you could say I may have had a predisposition for greenkeeping.

At the risk of sounding way too corny, it truly was love at first sight. Side note: If your girlfriend (and future wife) ever asks if you believe in love at first sight, make sure you mention her and not a golf course. In my defense, she should've known right then what kind of idiot she was dealing with.

It's not breaking news that there is a significant labor shortage in this business that could ultimately result in golf looking a lot different in the not too distant future. I'm sure many people in this business have a story similar to mine, which is why it's imperative that we support efforts on the industry and personal level to get kids into the game and tell people what we do.

Getting hooked on golf and golf courses as a kid, along with that conversation with my boss, ultimately led to my career in this profession. I will always be grateful for both, otherwise I'd probably be stuck in cubicle purgatory. On the other hand, had I never gotten into golf, the whole "love at first sight" conversation probably would have gone a lot better. **G**

Matt Neff (mneff4@yahoo.com) is assistant superintendent at Wedgewood G&CC in Powell, Ohio.

A Supplement to

Golfdom

2018

STATE THE INDUSTRY

Focused on the future while learning from the past



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STATE OF INDUSTRY

A WORD FROM OUR SPONSOR



Investing in the Now and Later

ufarm is a dependable global partner behind thousands of growing success stories. For more than 100 years, we've been finding effective ways to fight disease, weeds and insect pressure by turning world-leading scientific breakthroughs into local solutions.

As golf continues to grow and Mother Nature hands superintendents some real challenges, Nufarm works tirelessly to ensure the performance, safety and simplicity of its golf turf solutions. We invest in a proven portfolio of fungicides, herbicides, insecticides and PGRs that help maximize time and achieve your maintenance goals.

We offer innovations, including AnuewTM PGR, the industry's highest performing late-stage plant growth regulator. We also deliver top dollar spot defense with TractionTM and Pinpoint® — two must-have MOAs for your fungicide rotation, controlling even SDHI-resistant strains.

Nufarm also is focused on the bigger picture, taking steps to make better the golf course industry and communities we serve. We developed the EXCEL Leadership Program in collaboration with GCSAA. EXCEL offers leading-edge development opportunities for future golf course management leaders.

Each year, 12 assistant superintendents are cho-

sen from many excellent applicants to assemble three times per year for three years. They engage in leadership training in areas such as career, community and industry stewardship. When we announced



Cam Copley

the creation of the EXCEL Leadership Program in fall 2016, we believed it would benefit future leaders. We didn't envision how quickly the positive impact would be realized through new skills, knowledge, alliances and even career promotions.

Learn more about the EXCEL

Leadership Program or connect with our experts any time at NufarmInsider.com. At the end of the day, Nufarm is always here — ready to help solve the turfgrass challenges you face today and the success you grow tomorrow. That's why it's our pleasure to bring you this year's State of the Industry.

Kind regards,

Cam Copley

Cam Copley
Golf National Accounts Manager



STATE OF INDUSTRY

Focused on the future while learning from the past

Fifteen chapter officers from around the country tell us how this year's golf season played out, what their biggest challenges were and what successes they enjoyed

Reporting by Seth Jones, Abby Hart, Ed Hiscock, Sarah Webb and Chris Lewis

uddenly, 2018 is in the rear-

view mirror. Where did the

For our 2018 State of the Industry report, sponsored by Nufarm, we embarked on a journey to learn what the golf season was like across the country. From New York and Florida all the way to the West Coast and even Hawaii, we talked to GCSAA chapter presidents and representatives to learn about regional weather, disease pressures, challenges and successes. This report, spanning 15 different states, covers a lot of ground. From brown patch and

While some problems are practically universal (labor, water), other problems drastically change from state to state, or even county to county. Golf courses a mere 30 miles apart experience different rain totals, different disease pressures, different temperatures. Providing the best

Pythium to raging wildfires, superin-

tendents saw it all this year.

conditions possible is the goal from course to course, but how each course gets there is totally unique.

However, there are some things on which every superintendent can agree. Like what Paul Derry, president of the Northwest Ohio Golf Course Superintendents Association, and superintendent of Catawba Island Club in Port Clinton, Ohio, told us: "If you didn't lose a lot of turf and you kept your job, it was a successful year."

Andy Cordova

PRESIDENT, Central California Golf Course Superintendents Association SUPERINTENDENT, Cypress Ridge Golf Course, Arroyo Grande, Calif.

Generally speaking, how was the golf season this year?

I feel as though we've had a season that has been the same as it's been for the past two or three years. We haven't seen a huge increase in play, but we haven't really seen a decline either. I guess if it's tipping the scale one way or another, we are on the upswing regarding the amount of play.

How did the weather treat you this season?

Weather was very mild throughout the year, with a lower-than-average rainfall for the winter. On the Central Coast (where we are located), there are a lot of micro-climates. We can see a



Andy Cordova

10-degree difference within 10 to 15 miles and a quarter-inch of rain difference within that distance, too. I feel as though we were

actually a little cooler than we normally are throughout the summer and a little warmer through the winter. Right now, we're pretty much on par, though.

How would you describe the disease pressure this year, and what diseases were most prevalent?

The disease pressure was pretty much nonexistent until about a month ago, when we had one of the biggest outbreaks of dollar spot that I have seen since I started here 16 years ago. We sprayed it twice to completely remove it — usually we only spray once and it's gone. The severity of it definitely took us by surprise, so we really had no extra cultural practices in place to help us.

What was the biggest challenge your area had to deal with this year?

The biggest challenge we've had to deal with is — as has been the case the past few years — the water situation. The first year of the major water restrictions was definitely a big challenge, but the past couple of years have been a little easier for two reasons. First, we are getting used to it and have learned how to work with the restrictions. In addition, the more wet winters have definitely lessened the pressure.

— Interviewed by Chris Lewis

Andy Jorgensen

PRESIDENT, Seven Rivers Golf Course Superintendents Association

CGCS, On Top of the World Communities, Inc., Ocala, Fla.

Generally speaking, how was the golf season this year?

We've been having an excellent year for golf. It seems the uptick in the economy is finally starting to trickle back down, as people are spending their discretionary funds again.

We had a better-than-expected spring, as rounds were slightly up heading into summer. Since we are a developer, construction has been booming and we have a lot of new residents moving in who have joined the clubs. These new residents are different from what we saw more than 10 years ago. More discretionary income — along with the need for socialization — has allowed us to keep the courses full.

Additionally, our "Get Golf Ready" programs (for new golfers) are starting to pay off, and we continue to see women picking up clubs for the first time. We added forward tees on a course a few years ago, and these have gained popularity among beginners and aging golfers. We're looking into adding these to another course next year as well, to lead more people to play golf.

How did the weather treat you this season?

So far, so good — no hurricanes or major storms! We had significant rain in June and July, but it started tapering off a bit earlier than normal.

How would you describe the disease pressure this year, and what diseases were most prevalent?

We didn't have any pressure that was out of the ordinary. It is critical to stay on top of preventative applications though. After 13 years of being at the same course, you tend to know what to expect and when. We continue to monitor and adjust our preventative applications for maximum success.

What was the biggest challenge your area had to deal with this year?

Labor continues to be a huge challenge. Even with an increase in starting pay for our staff, we continue to see very few new applicants coming through the door. We've had to rethink our hiring strategies and work better to retain the employees we have.



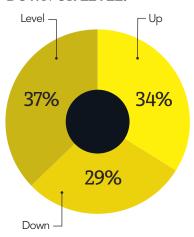
Andy Jorgensen

We've also been trying to reduce as much detail work as possible. We're using non-selective herbicides in areas that otherwise would

need manual trimming, increased our use of growth regulators and purchased larger mowers to cover more ground. We've also improved our employee appreciation program to make this a more desirable workplace.

By adding such things as ice cream trucks at the end of the day, along with employee cookouts and giveaways, our crews remain motivated.

AT YOUR FACILITY, WERE ROUNDS UP, DOWN OR LEVEL?



We also highlight our benefit program and discuss this with the staff. Often, they only look at hourly wage — not the true cost of them working here. Our company provided benefits that are almost double their hourly wages.

Are there any success stories from your chapter that stand out in your mind?

Our Jeff Hayden Memorial Envirotron Golf Classic for Turfgrass Research fundraiser is a success story for the entire industry. Now in its 27th year, this event has been able to raise over \$1,250,000 for turfgrass research and support. This past year, we had a full field of 288 players on two golf courses and we were able to raise more than \$45,000.

- Interviewed by Chris Lewis

Mike Atwood

PRESIDENT, Hawaii Golf Course Superintendents Association

SUPERINTENDENT, Wailea Golf Club, Maui, Hawaii

Generally speaking, how was the golf season this year?

Golf play is currently up 1 to 2 percent (roughly 200 more rounds) year-Continued on page SOI6

STATE OF INDUSTRY

Continued from page SOI5

to-date, and merchandise sales are even further ahead. People are play-



Mike Atwood

ing a little more, leading to a real turnaround for merchandise, which I believe will continue.

The economy is doing well, as more people are

traveling to Hawaii and golfing again. We haven't had this much growth since 2008.

How did the weather treat you this season?

This was the third year in a row that we had over 20 inches of rain — two to three times more than usual. However, this year we've had less washouts, less trees down and less weather closures than we had the last couple years.

In 2016 and 2017 we had severe storms, leading to a loss of dozens of trees, so golfers were often unable to play. In 2018 we have been able to clean up the damage, though. None of the storms have been as severe as they were the last couple years.

How would you describe the disease pressure this year, and what diseases were most prevalent?

We have had disease pressure from fairy rings on greens, which can be very difficult to control. Fairy rings have mood swings because of dry weather and heat, so each superintendent has to learn about his or her own environment to control it.

What was the biggest challenge your area had to deal with this year?

For our courses, it's the hard-to-

control sedges, as most of them have a net system underground that can't be reached with chemicals. Instead of killing the weed, you're pruning it.

Little by little, the chemical companies are adjusting their mixtures. It's very expensive to control — I've spent over \$10,000 a year without positive results. We are being more diligent with what we use now, though, as well as our timing.

Are there any success stories from your chapter that stand out in your mind?

Deep solid tining between normal hollow tining operations has improved greens' health and reduced disease pressure. Tining is more of a physical relationship than a chemical relationship. The major problem with greens is the production of thatch and organic matter, which plug up the pore spaces.

My greens are 30 years old, so the green exchange and water exchange aren't quite like they would be if they were new. The more aerating you do, the better results you'll have. Tining is definitely catching on — a lot of superintendents are investing in machines that can tine deeply.

— Interviewed by Chris Lewis

Daniel P. Dingman

PRESIDENT, Michigan Golf Course Superintendents Association

SUPERINTENDENT, Birmingham Country Club, Birmingham, Mich.

Generally speaking, how was the golf season this year?

From what I have heard around the state, golf rounds were up, and some facilities had record years. While speaking with Kate Moore from the Michigan Golf Association, she agreed and said her board members (golf course owners) all had more "thumbsups" than "thumbs-downs."

How did the weather treat you this season?

The 2018 golf season was extremely challenging for all turf managers across the state of Michigan. The weather was certainly the biggest factor. The season got off to a slow start with late winter snowfall in April and a very wet, short spring season, followed by the arrival of summer in early June. The biggest challenge for me during the summer months was the high nighttime temperatures and the lack of occasional rain showers to reset moisture levels.

How would you describe the disease pressure this year, and what diseases were most prevalent?

Disease pressure was very high for the entire season. Humidity percentages were consistently high, and combined with both day and night temperatures, made every day a challenge. Under these conditions, dis-



Daniel P. Dingman

ease pressure will always be a concern for turf managers. Thankfully, the products available to combat the disease pressure con-

tinue to improve each year and help us throughout the season.

What was the biggest challenge your area had to deal with this year?

Along with the weather, the biggest challenge for me and others this year was finding good employees. Each year it becomes more and more difficult to find employees who are willing to get up every morning at 4 a.m. and work a physical job all day. An increase

Continued on page SOI8

Traction

IMPROVE YOUR PROGRAM WITH TRACTION™ FUNGICIDE



JASON FAUSEY

T&O Technical Services Director, Nufarm Americas

Q: HOW CAN TRACTION™ HELP ME MANAGE DISEASE RESISTANCE ON MY COURSE?

A: Because of Traction's unique formulation containing two different mode of action groups and two different plant location strategies, Traction is very effective for use in fungicide resistance management programs. Regular use in a rotational program with other modes of action or as a tank-mix partner will prevent or delay the development of disease resistant populations at your location.

Q: HOW IS TRACTION GOING TO OFFER A BENEFIT OVER SECURE® WITH THE SAME ACTIVE INGREDIENT?

A: Traction offers several benefits over fluazinam alone. Fluazinam is a broad-spectrum highly active multiple site contact fungicide, yet the addition of the DMI fungicide tebuconazole brings another broad-spectrum systemic active ingredient with a second mode of action for resistance management.

Q: CAN I BE COMFORTABLE APPLYING TRACTION IN THE SUMMER SINCE THE TEBUCONAZOLE IS A DMI?

A: Yes. In our university evaluations, Traction has displayed excellent results and turf tolerance. We feel confident when used in a rotation program that Traction can be applied in all seasons.

Q: WHY DOES TRACTION HAVE ONLY ONE LABEL RATE?

A: The single use rate for Traction is based upon the EPA mandated fluazinam rate per acre. The application rate for Traction maximizes the amount of fluazinam allowed per application and provides a proven rate of tebuconazole.

Q: WHERE IS THE BEST PLACE TO FIT TRACTION INTO MY ROTATIONAL SPRAY SCHEDULE?

A: Traction has the flexibility and spectrum of activity to be placed throughout the spray season. It makes a great product to use and ensures a broad range of foliar diseases are controlled prior to utilizing a more targeted fungicide with a different mode of action such as Pinpoint®.



NEW Traction™ Fungicide combines two unique modes of action into one convenient premix. This new powerhouse stops diseases such as anthracnose, dollar spot, brown patch and snow mold in their tracks, plus it promotes healthy turf growth – even in the summer.

GAIN MORE WITH TRACTION.



STATE OF INDUSTRY

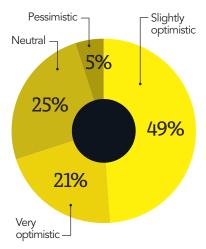
Continued from page SOI6 in the starting wage has helped, but the struggle still continues.

Are there any success stories from your chapter that stand out in your mind?

We started a match play championship event that was open to 32 two-person teams this year, which has really been a hit. The four people playing set the matches on their own timeframe and picked a course they would normally not play. I am looking forward to our conference this winter to see who is chatting with whom, as I think new relationships have been fostered by this season-long statewide event.

We've also started hosting some non-superintendent education that targets assistants, equipment managers and crew members — a way for our members to learn a little more about what they are doing and why. I think this may be the wave of the future for our chapter, as our superintendent members' time and responsibilities have become so tight. We are planning to do more and see where it goes.

LOOKING FORWARD, HOW WOULD YOU DESCRIBE YOUR EXPECTATIONS FOR 2019?



Overall, it has been another great year, and we could not do it without the support of our valuable industry partners.

- Interviewed by Chris Lewis

Eric O'Neill

PRESIDENT, Long Island Golf Course Superintendents Association

DIRECTOR OF GROUNDS, North Shore Towers Country Club, Floral Park, N.Y.

Generally speaking, how was the golf season this year?

At my club, golf rounds were down considerably for the season. In fact, we had nearly 1,000 fewer rounds played



Eric O'Neill

this year than last — and, this August, we recorded the lowest amount of golf rounds of any other August in the history of our club.

How did the weather treat you this season?

The wet weather was a primary reason golf rounds were down. Also, the wet weather (5 inches in July and 4 inches in August) made it difficult to maintain the course's condition. Aside from the rain, temperatures were also higher than usual, which also contributed to the decline in golfers' participation.

How would you describe the disease pressure this year, and what diseases were most prevalent?

The disease pressure — from three primary diseases: root *Pythium*, brown patch and early fall gray leaf spot — was very high this season. I believe these diseases were highly prevalent for two reasons. First, the humidity levels and nighttime tem-

peratures in Floral Park were higher than normal. The total number of days with dew points above 70 was the highest ever recorded — it was hot and wet. Not to mention, there were also 100 days in which the high temperatures were at least 80 degrees, much more than usual.

What was the biggest challenge your area had to deal with this year?

Staffing has been the biggest challenge for our area the last few years. This season we were definitely understaffed because of the weather. Our primary issue was ensuring we didn't do more harm than good when we mowed, groomed or rolled wet turf. So, we usually had staff come back to mow during the evenings much more often than we have in the past.

- Interviewed by Chris Lewis

Jimmy Rodriguez

PRESIDENT, New Mexico Golf Course Superintendents Association

SUPERINTENDENT, Towa Golf Course, Santa Fe, N.M.

Generally speaking, how was the golf season this year?

The golf season in New Mexico, basically last September we didn't get much moisture from September 30th on. At my course we got about a half-



Jimmy Rodriguez

inch of any type of moisture, snow or rain. And that was pretty much the case for the entire state. It was extremely dry. A lot of guys

had turf issues. A lot of guys had to repressure, like myself. I re-pressured after four weeks blown out and had to try to water what I could safely on the course with frozen ground. You heard

that from everyone in the state. They were watering and trying to save turf as much as they could, and it carried over to the early spring and into the summer when moisture was lacking... so guys struggled all year without any type of moisture.

How did the weather treat you this season?

Getting better. We've gotten a lot more moisture the last few months, the monsoons were OK, but the last couple years we've seen that the monsoonal rains normally will be heavy in July and now they're shifting into August. The last two months have been pretty good around the state. Everybody seems to be getting more moisture than they were this time last year, which was zero.

How would you describe the disease pressure this year, and what diseases were most prevalent?

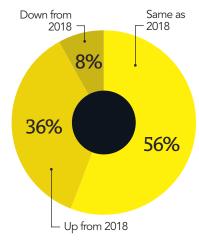
Disease pressure in New Mexico is not very great due to the dryness. So, for where we are in Santa Fe and north, most of the courses do snow mold protection. Most of the courses south of us, even 25 miles south, they can water throughout the season... so I don't know that they do any snow mold protection. Disease pressure isn't like what they have on the East Coast or in the South — snow mold and that's it.

What was the biggest challenge your area had to deal with this year?

Going back to the lack of moisture we're getting and water depletion of reserves in the ground. That's the biggest thing going forward.

Labor is a continuing problem all over the U.S., and luckily for me I've kept the same staff, but generally speaking it's getting more difficult to

HOW DOES YOUR MAINTENANCE BUDGET LOOK FOR 2019?



find and retain employees. Santa Fe has what they call a living wage base, in that aspect they have a minimum wage that is one of the top three in the nation. That's hard to compete with. In certain counties they have been adopting this. Guys come to your facility and you're offering a certain amount and they can go to McDonald's and make a dollar more, it's really tough.

— Interviewed by Seth Jones

Craig Cahalane

PRESIDENT, Rocky Mountain Golf Course Superintendents Association

SUPERINTENDENT, Pole Creek Golf Club, Winter Park, Colo.

Generally speaking, how was the golf season this year?

Personally, it was very good, we did about 25,000 rounds in four months at 8,600 feet. Very good. We started off a little slow, with 13 damaged greens from the winter. We had ice damage, freeze/thaw cycles. Thirteen out of 30 greens were really damaged, but we were 100 percent back by July.

How did the weather treat you this season?

It was extremely dry. Also, at our elevation, we don't see many days in

the 80s, but we had over 30 days in the 80s. It was a hot, dry season. Moisture-wise, we only had 4 inches for the months we irrigate — not much at all.

How would you describe the disease pressure this year, and what diseases were most prevalent?

We don't see much disease pressure. We get a little anthracnose, but as dry and arid as we are, there's not much pressure.

What was the biggest challenge your area had to deal with this year?

The weather, the hot/dry. And there were a lot of forest fires — that keeps everyone on edge. We had a for-



Craig Cahalane

est fire within 10 miles of us, and when we were in Grand Lake for one of our meetings, there was one right next to them.

I'm lucky because we can draw (labor) from the ski area. Our issue is housing for our laborers, there isn't enough housing to go around.

Are there any success stories from your chapter that stand out in your mind?

It's our conference, we just held the second annual Rocky Mountain GCSA Annual Meeting. The first one was good, a lot of attendees, but in only its second year we are up to 215 attendees. The number of people coming out for it has been great, we've had great speakers and I think it'll keep growing every year.

— Interviewed by Seth Jones

Continued on page SOI10

STATE OF INDUSTRY

Continued from page SOI9

Rob Daniel

PRESIDENT, Carolinas Golf Course Superintendents Association

CGCS, RiverTowne Country Club, Mount Pleasant, S.C.

Generally speaking, how was the golf season this year?

The golf season has been challenging, as always. The year began with the area receiving a blanket of snow that lingered for many days — from



Rob Daniel

Hilton Head up the coast to North Carolina. Many bermudagrass courses suffered winterkill as a result of these cold conditions.

Courses inland suffered as well. If courses didn't use covers for their bermudagrass greens in the past, they've probably purchased them this year as a result of the cold winter.

The summer was hot, though, and provided very good weather for recovery — until hurricane season came. Hurricane Florence was a massive blow, and the flooding associated with all the rain was devastating for many areas in South Carolina. Golf courses continue to recover from that storm as we prepare for other storms.

How did the weather treat you this season?

We were very lucky at RiverTowne Country Club. The weather has had no major impact on our operation, as there wasn't any major turf or course damage from weather-related events. The only closures were due to snow and rain.

How would you describe the disease pressure this year, and what diseases were most prevalent?

Here on bermudagrass, there was not anything to get excited about disease-wise. It was a pretty normal year.

What was the biggest challenge your area had to deal with this year?

The biggest challenge for us here at our course was the snow in January. Many roads were covered with ice and snow for almost a week, leading to a very slow start for the golf season.

Are there any success stories from your chapter that stand out in your mind?

The people within the Carolinas chapter have success stories all of the time — there are just too many to mention. I'd say I'm most proud of how well our members work together to solve problems. Natural disasters, turf-related issues and beyond, our people are the highlight of our association.

- Interviewed by Chris Lewis

Kenny Dierschke

PRESIDENT, West Texas Chapter Golf Course Superintendents Association SUPERINTENDENT, Yoakum County Golf Course, Denver City, Texas

Generally speaking, how was the golf season this year?

We had an average golf season this year as far as play is concerned. Our revenue is generally based on how well the oil industry is doing.

How did the weather treat you this season?

We had a very unique growing season this year. We are located in the southern plains of West Texas, so our weather is anything but normal. With winter starting in November 2017

and continuing until June 2018, we only had 0.8 inches of rain. But since that time, we have been blessed with an abundant amount of rainfall, totaling over 17 inches.

How would you describe the disease pressure this year, and what diseases were most prevalent?

Normally, our region is not heavily pressured from disease. However, this year there have been issues associated with the abnormally high humidity and rainfall. I have been on a preventative fungicide program for the last several years, so even though we are not usually under a great amount of disease pressure, scheduled applications have improved the health of our greens.

What was the biggest challenge your area had to deal with this year?

We began this year dealing with sodium buildup on greens due to the dry



Kenny Dierschke

months of winter and spring. Then we moved on to dealing with something growing in our irrigation lines. I'm not quite sure what it is,

but I've narrowed it down to something similar to Bryozoa. Whatever it is, it clogs up our sprinkler heads and valves and requires us to flush heads daily, which takes a lot of our time.

Are there any success stories from your chapter that stand out in your mind?

I have been a member of this association for over 25 years. Our superintendents and vendors are all friends. I think I can speak for almost every

member about this — I feel as though anyone can call anyone in the association about anything.

Over the last several years, we have focused on growing a scholarship and research fund. We also started a golf tournament to raise money for these funds. Thanks to the help of our vendors, it has been very successful.

— Interviewed by Chris Lewis

Brian Smoot

PRESIDENT, Golf Course Superintendents Association of Cape Cod

SUPERINTENDENT, Crosswinds Golf Club, Plymouth, Mass.

Generally speaking, how was the golf season this year?

We're typically a busy course, and as the season went on, we had a fair amount of play. The fall has been a little wet.

How did the weather treat you this season?

The strangest weather year in the 13 years I've been in the Cape Cod area.

In March and April, the course was blasted with rain. I think we had

three or four Nor'easters in a row, that's how it started. Then it seemed like we went from that to really, really, really hot weather...



Brian Smoot

we had some of the hottest days I've ever seen in my life. Then it went to rain event after rain event after rain event in September and October.

How would you describe the disease pressure this year, and what diseases were most prevalent?

With very, very hot nights — low



Crosswinds Golf Club's Brian Smoot says that Cape Cod experienced a very hot summer and a lot of *Pythium* pressure this year.

temperatures at night often were 75 degrees — a lot of people had *Pythium* blight... wet wilt from trying to water in those conditions, being so hot and scorched. But a lot of *Pythium* pressure.

What was the biggest challenge your area had to deal with this year?

The weather.

Any success stories from your chapter stand out in your mind?

Something that the chapter did... it completed an economic impact study of golf on Cape Cod... it's been at least two or three years in the making.

- Interviewed by Ed Hiscock

Mark Woodward

TREASURER, Cactus & Pine GCSA
DIRECTOR OF AGRONOMY, CGCS,
Whisper Rock Golf Club, Scottsdale,
Ariz.

Generally speaking, how was the golf season this year?

Lately, golf in Arizona has been

good. Rounds are up at a lot of golf courses. Revenues are holding their own. The contributions that golf makes in Arizona are tremendous because we're a destination area.

How did the weather treat you this season?

The weather has been decent up until this fall. We've had our wet-

test October in history. We had 6 inches in the month of October, so we had about our average annual rainfall in one month. In Oc-



Mark Woodward

tober, it's usually less than an inch.

How would you describe the disease pressure this year, and what diseases were most prevalent?

We're pretty dry and don't have a lot of humidity, so we don't have too

Continued on page SOI12

STATE OF INDUSTRY

Continued from page SOI11

much disease pressure in my area. Some of the courses in northern Arizona deal with snow mold. We might've had anthracnose on our greens and minor things like that.

What was the biggest challenge your area had to deal with this year?

Water is our No. 1 issue. The Cactus and Pine partnered with the Department of Agriculture and Resource Economics and the Cooperative Extension Service with the University of Arizona to conduct an economic impact study a couple years ago... it found golf courses only use about 1.9 percent of Arizona's freshwater withdrawals. Superintendents here are good stewards of the environment.

Any success stories from your chapter stand out in your mind?

We're working with GCSAA on putting together some best management practices that are specific to Arizona. That's something we're really proud of.

— Interviewed by Sarah Webb

Brandon Schindele

PRESIDENT, Minnesota Golf Course Superintendents Association

SUPERINTENDENT, Edina Country Club, Edina, Minn.

Generally speaking, how was the golf season this year?

Golf season was out of the ordinary, if you can even describe an ordinary season. It's just been a period of some extremes that we've had at some inopportune times.

How did the weather treat you this season?

We had a snowstorm that dropped about a foot and a half of snow around



Brandon Schindele

Day weekend, we were already up in the '90s. We've had some pretty significant periods of rain... and some

April 20. Then

by Memorial

heat and humidity that we haven't experienced for a few years. We had

snow on the golf course last weekend (mid-September).

How would you describe the disease pressure this year, and what diseases were most prevalent?

In the state, there was a lot of dollar spot pressure, and for the first time in a while, we saw some brown patch, summer patch and *Pythium* in the area starting to break through because of the heat, humidity and periodic rain.

What was the biggest challenge your area had to deal with this year?

Staffing is always a big issue, and trying to get people out here in the Twin Cities for our shoulder seasons — spring and fall.

Any success stories from your chapter stand out in your mind?

Our executive director, Jack Mackenzie, was awarded through GCSA an environmental leadership type of award. We got a grant from PBI-Gor-

Continued on page SOI14

Brandon Schindele, superintendent at Edina (Minn.) Country Club, says his club has experienced a variety of weather extremes in 2018, including a mid-April blizzard, high heat and humidity in the summer and mid-September snow.

PHOTO COURTESY OF EDINA COUNTRY CLUB



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RICK FLETCHER

Technical Services Manager, Nufarm Americas

Q: WHAT'S THE BEST WAY TO MANAGE DIFFERENCES IN PGR RESPONSE?

A: There can be differences in PGR response from spring to summer and across different course areas, including greens, collars and fairways. If you're too late, the plant can rebound and grow faster than normal. If you're early, you can over-suppress and lose turf quality. When applying a PGR, instead of just applying "every 14 days," for example, use a PGR with a Growing Degree Day (GDD) model, such as Anuew™. This is a more accurate way to make application timing decisions based on temperature and plant metabolism. The hotter it gets, the faster turfgrass metabolizes PGRs. This varies by the height of turfgrass areas as well. Greens will need reapplication before fairways. Use the GreenKeeper APP (or similar) that will calculate GDD for you.

Q: HOW DO I MANAGE COLLAR DECLINE WHEN USING A PGR?

A: There's been a lot of research about how to best manage collar decline. General findings are to observe specified application rates for each course area and understand the GDD difference between short- and tall-cut grasses. With this in mind, avoid spraying greens, collars and fairways at the same intervals. Because of the collar proximity to the green and fairway, it may be best to spray the collar every other application period.

Q: CAN POA IN MIXED STANDS BE MORE EVENLY REGULATED?

A: Anuew PGR works differently to support more even regulation of Poa in mixed stands. For example, Poa and bentgrass release at about 260 to 280 GDD with Anuew so superintendents can experience more balanced regulation. Additionally, because Anuew is more active on Poa and provides the benefit of fast regulation it can be used as a companion in warm-season turf regulation programs.



STATE OF INDUSTRY

Continued from page SOI12

don for the number of people we had attend GIS. We're funding the Great Lakes Turfgrass School — an online 10-week program that starts in January, and we're going to fund up to five individuals.

— Interviewed by Sarah Webb

Scott Sutton

PRESIDENT, Southern Nevada Golf Course Superintendents Association

DIRECTOR OF AGRONOMY, The Club at Sunrise, Las Vegas

Generally speaking, how was the golf season this year?

This golf season was pretty good around the whole valley. It was a bit above average. The economy is doing better, and people are spending more money. Our tourism was up.

How did the weather treat you this season?

We had a little bit above-average warm temperatures this summer. In the summertime we'll get up to 100 and the teens, 115, 116. We're just a hair over 3 inches (of rain) this year.

How would you describe the disease pressure this year, and what diseases were most prevalent?

Because we don't have the rain and humidity, we don't get a whole lot of



Scott Sutton

here in the desert. We might get a little bit during monsoon season. Some of the guys fight some brown patch in

diseases out

the summertime. A little bit of summer patch.

What was the biggest challenge your area had to deal with this year?

Lack of water and quality of water. Lake Mead, where we pull our water from, is dropping quite a bit every year. By 2021 there's a chance we might hit another drought emergency if we don't get some snowfall and rain up in the Rockies.

Any success stories from your chapter stand out in your mind?

The course I'm at is the only allpaspalum golf course in the state of Nevada. You can take poor quality water and get a really quality golf course out of it.

— Interviewed by Sarah Webb

Paul Derry

PRESIDENT, Northwest Ohio Chapter Golf Course Superintendents Association

SUPERINTENDENT, Catawba Island Club, Port Clinton, Ohio

Generally speaking, how was the golf season this year?

It was a slow start in the spring because it was cool and wet. Later in the season, the golf conditions got much better and most clubs got back up to their average amount of rounds for the year.

The beginning of July was a tough spot for us because of when the 4th of July fell; it was basically a whole week of a 4th of July holiday — and it was finally nice out. We had over 1,000 rounds in 10 days, so wear really beat us up.

How did the weather treat you this season?

The weather was extremely challenging from a maintenance perspective. We saw a lot of extremes. The spring was very cool and very wet, followed by a very hot and dry July —

it was the 14th warmest summer on record, something like that. August wasn't bad. It's been a pretty average fall for us, other than it seems late, with the leaves hanging on the trees.

How would you describe the disease pressure this year, and what diseases were most prevalent?

September, we got gray leaf spot. This far north it caught a lot of us off guard, a lot of people mistook it for *Pythium*, and those treatments weren't effective. By the time we figured out what it was, we lost some grass. Aside from gray leaf spot, dollar spot was most prevalent. There were a couple periods where it was pretty high, significantly more than usual.

What was the biggest challenge your area had to deal with this year?

Definitely weather. I think everyone is probably in the same boat with labor, that challenge continues to stay at the top. We do try to take opportunities to go to career fairs and try to promote what's going on in the industry and let high school students know there are jobs available.

Any success stories from your chapter stand out in your mind?

(Laughs) If you didn't lose a lot of turf and you kept your job, it was a successful year.

— Interviewed by Abby Hart

Michael Mays

PRESIDENT, Golf Course Superintendents Association of Alabama

SUPERINTENDENT, Cider Ridge Golf Club, Oxford, Ala.

Generally speaking, how was the golf season this year?

It was about normal, maybe a lit-



Cider Ridge Golf Club Superintendent Michael Mays says that rounds at his club are up by a few hundred over last year.

tle bit up from where it was in 2010, 2008. We have more (rounds) this year than last year, by a few hundred. Everyone's on a slight increase with the amount of play, nothing crazy, but at least it's a plus.

How did the weather treat you this season?

Our area had several snowfall events in the winter, with each dropping 1 to 3 inches of snow. Cold



Michael Mays

weather hung around a little longer than usual, and we had very little spring and moderate temps. It went from cold to hot in a matter of three weeks. It was a wet early summer, then it turned dry in August and most of September. For me (on bentgrass), I don't like wet summers, but the bermudagrass guys are loving life.

How would you describe the disease pressure this year, and what diseases were most prevalent?

Disease pressure was high, with the heat and the rain in early summer. I would say anthracnose, as well as some brown patch, were the biggest diseases.

What was the biggest challenge your area had to deal with this year?

From the association perspective,

participation. Trying to stimulate participation from new members and getting more participation from tenured members. As far as the golf course in general: labor. Lack of interested people, most people you hire are just here to get a paycheck and don't take pride in what they do.

Any success stories from your chapter stand out in your mind?

We set a record for the amount we generated for Rounds 4 Research this year, and we're working with local businesses and businesses like Top-Golf to find new ways to bring our industry together. **©**

— Interviewed by Abby Hart

For additional state reports, visit Golfdom.com.

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THE TALKING GREENKEEPER



2018,

Golfdom
columnist
Joe Gulotti dials
up Golfdom
Editor-In-Chief
Seth Jones
and fellow
columnist
Matt Neff to
discuss the
biggest stories
of the year





the Year in Review

BY JOE GULOTTI

hile I love writing my column, "The Walking Greenkeeper," for Golfdom, I wanted a forum where I could go more in depth. So, I recently entered the world of podcasting.

I call it "The Talking Greenkeeper," and on the show I have long-form discussions with interesting people in golf. My guests so far have been guys like Micah Woods of the Asian Turfgrass Center, Edwin Roald, a golf course architect based in Iceland and Rich Buckley, director of the Plant Diagnostic Lab at Rutgers University.

I invite you to check it out. It's available wherever you get your podcasts. Just search for "The Talking Greenkeeper" and it'll pop up.

For my eighth episode, I wrangled Golfdom Editor-In-Chief Seth Jones together with fellow Golfdom columnist Matt Neff for a conversation on the brutal year that was 2018. We talked weather, labor, robotic mowing, the majors and golfer expectations. The full episode is more than two hours long, but for the magazine, I've boiled it down to a few of the

Without further ado, here's Seth and Matt. JOE: Gentlemen, thanks for being on episode eight of my podcast. To get started, I used to play this game where we would go around, and you would have to name an athlete who wore a certain number... this is episode eight, so who is an athlete that wore No. 8? Seth, go!

SETH: Kobe, the Mamba! I'm a Kobe fan, sorry.

MATT: Cal Ripken Jr.

JOE: Oh, that's a great one.

SETH: Can I brag? I had lunch with Cal Rip-

ken Jr. once.

MATT: Tom Watson and Cal Ripken Jr.? Jeez...

SETH: It was at Quail Hollow, he was super

JOE: I've heard he's played golf 3,456 days in a row now.

SETH: Just another reason to like Iron Man. Continued on page 34



Photographic evidence that Seth Jones has spent time with baseball legend Cal Ripken Jr. ...and that he hasn't always had gray hair.

Continued from page 33

Loss of a friend

JOE: Seth, Steve Wright just passed away... I didn't know Steve but I followed him on Twitter, and he was a columnist for *Golfdom...* you had a pretty good relationship with Steve, I'm sorry for your loss.

SETH: Thanks, Joe. It was a real shock. Definitely a loss for the *Golfdom* family. He was a guy who just looked out for me, we became friends and he always invited me to Palm Beach GCSA meetings. He was a guy who knew everybody, and he wanted to make sure everybody else also knew everybody. I was able to get down to his service, and the gut-punch moment for me was when one of his daughters read one of his *Golfdom* columns during the service.

JOE: I didn't know Steve personally, but it seemed that people genuinely liked him. Matt, did you know Steve?

MATT: I never had the fortune to meet him personally, but I enjoyed following him on Twitter. He shot me an email once about a column I had written, which was really cool of him. The No. 1 thing I took from his Twitter presence, he seemed to have a good grasp on the work/life balance. That's something that can get lost

in this business. He took time to do stuff with his wife and kids, I was always impressed by that.

SETH: Cheers to Steve.

JOE: Cheers.

Loss of labor

JOE: Guys, let's talk about labor, and how dire the labor situation is in golf right now. Matt, what is the situation at Wedgewood G&CC?

MATT: It's like everybody else, it's pretty rough. This year was especially challenging. The last few years we've had decent success with hiring seasonal staff, we've had some good guys. But this year was really rough, I had a hard time finding guys to begin with. In all the years I've been doing this, I've never had so many people just up and quit with no notice. I had two guys leave for lunch and never come back this year. It was brutal. You'd set up interviews and they wouldn't show up, or you'd hire someone, and they wouldn't show up for their first day. I'll never understand that.

JOE: I had a guy show up in a Budweiser T-shirt, he had golf course experience, and I was going to give him a shot until he started dropping F-bombs and complain-*Continued on page 36*









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Continued from page 34

ing about his previous employer. But I can only offer about \$12 an hour tops. Are you similar to that, Matt?

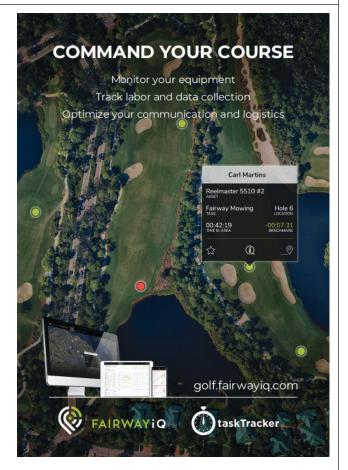
MATT: Yes, we're right around there. You can't compete with what landscaping companies can offer; you can't compete financially or with their schedule. It reinforces building the core group and keeping your good guys around. We wouldn't have gotten through this year without our core guys.

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MATT: There's X amount of work that has to get done, regardless of who is there. Sometimes it turned into more hours for everybody else. And we had to make sure we were prioritizing and efficiently using what we had available to us on a given day.

JOE: Seth, you're out there traveling around the country, what are you seeing?

SETH: I see it everywhere, I think it's universal. I think it's cultural now. You guys were golf nuts and you were honored to be out (on the golf course). Not to pick on a generation, but a generation that is so stuck on their cell phone and got shipped to any baseball game they wanted to play in, they're just different. In Golfdom, we're asking people, what are your ideas to survive? The cool methods, the products... we're focused on saying, "Hey, the labor drama is around for the foreseeable future... what are you doing?" Is it letting areas go native? PGRs? Would you consider a robotic mower?

JOE: Given the labor shortage, do you think there will be a shift in expectations?

MATT: There's going to have to be. People talk about brown is beautiful... it's got nothing to do with water restrictions, or pesticide regulations... if there aren't people to do the job, it's going to look different. It's that simple. People can work harder to try to make up for the lack of staff. At the end of the day, things just aren't going to get done with the frequency that it used to get done. People are going to have to live with it.

SETH: Members know that the days of throwing people at a problem are gone. Hopefully, they realize that it doesn't do any good to complain. If you don't have people, what are you supposed to do? The 75-year-old guy can complain with his group of good old boys, but he's not going to be around much longer anyway.



Woeful weather

JOE: So, the story of the year had to be the weather, right? She crushed everyone all year, wouldn't you say?

MATT: Without a doubt.

SETH: Brutal. I'm glad I have a desk job, fellas. I would not want to deal with what you guys dealt with this year. Just not a fun season here.

MATT: We started off with the coldest April on record, and we also had the most measurable snows of .10 inches or more in April. From that to the second-hottest May on record... and then we were off to the races from there, basically a five-month summer. Hot, humid, wet, everything you don't want. We had 80-some straight days when the temperature never dropped below 65 degrees, with humidity on top of it all the time.

JOE: It was the same in Delaware. Cold in April, hot in May. A dry spell, then the rains came in the middle of July and it did not stop.

MATT: You saw where you needed drainage this year.

SETH: I think a lot of guys are going to be happy to see 2018 in the rearview. Hopefully, 2019 gives us something to work with. A lot of superintendents deserve a break.

JOE: We had 3 inches of snow today. I hate snow.

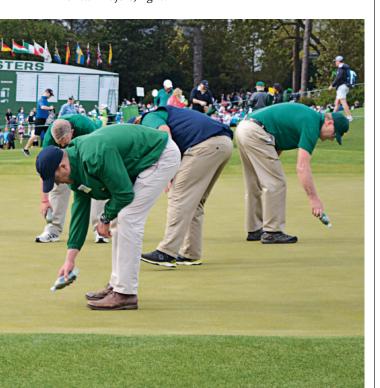
SETH: I remember grilling in the snow on Easter Sunday. And just two weeks ago in early November, I found myself grilling in the snow again.

JOE: Mother Nature, you won. You are undefeated.

SETH: And still, heavyweight champion.

The 2018 Majors

JOE: Let's talk about the majors... Seth, you went to all three American majors, right?



SETH: It was a good year, yeah!

JOE: How was the Masters?

SETH: It's always great. But Patrick Reed was not real popular with the Augusta patrons. What did you guys think?

MATT: He doesn't seem like the nicest guy in the world. I would have liked to have seen someone else put on the green jacket.

JOE: It was all cool until I heard he gets pumped up listening to *Continued on page 38*





Continued from page 37

Imagine Dragons, then I decided he's a kook. Do you guys think the "Augusta effect" is real?

MATT: The only thing I think is real up north is that it fires up golfers to get going when they see the course.

JOE: But what about conditions-wise?

MATT: No, I don't believe in it. I think members realize we don't have the budget of an Augusta National, they're smart enough to understand.

JOE: Let's talk about the U.S. Open at Shinnecock this year. That was the controversial tournament.

SETH: Before play starts, course conditions steal headlines. I've gotten to the point that I enjoy it... I like seeing what mainstream media says, and watch the knee-jerk reactions ensue. They were talking conditions on Saturday, it got windy... someone still won,



but it got a little salty on Saturday. You want the course to get a good champion and (Brooks) Koepka proved it, he was great all vear.

JOE: Matt, do you get caught up in the course conditions of the U.S. Open?

MATT: I tune out the U.S. Open conditions. To an extent I get it, but everybody has to play the same course. Why does it matter?

SETH: I think it's cool because everyone — newspapers, sports talk radio, mainstream magazines — are talking about golf course conditions. I like it that, for a week, the mainstream media plays in my sandbox.

MATT: It would be nice if they put a superintendent in the booth so the Johnny Millers and Brandel Chamblees of the world can't give misinformation to everyone.

JOE: I would love that job. I would be perfect for that job.

SETH: Remember me when you get that job. I just want you to namedrop *Golfdom* on network TV. It's coming guys. I'll kick myself when it happens. They do mess it up every year. Eventually they'll get an eloquent superintendent to sit on the broadcast team.

JOE: They'll get Latshaw or Zimmers or one of those dudes.

SETH: Someone mentioned it to Rich Lerner when we had him at the *Golfdom* Summit. And Rich was like, "In! Give me a call." I should be nagging him about it.

JOE: How was the PGA Championship?

SETH: It was hot, but it was great. That was another one of those tournaments where there were some crazy headlines in the beginning of the week... about the greens being burnt out. I was stunned, the course looked so good. There was one green with a perimeter area that was a little thin... for a mainstream golf publication to throw them under the bus with a clickbait headline was a shock. By the time people saw it on TV, they knew the course was phenomenal.

JOE: It was dialed in and that headline was all over Twitter. I kept looking, it looked fine to me, it looked good!

SETH: "The truth will set you free!" And it did.





The future of greenkeeping

JOE: Seth, are there a lot of robotic equipment companies looking into getting into *Golfdom?*

SETH: Yeah, we've got some robotic equipment companies. We were in Orlando yesterday, and on the highway, we saw a guy operating a Spider, mowing a steep hill. At the 2018 *Golfdom* Summit, Cub Cadet is going to bring a robotic greens mower, and it sounds like they've got something cool for us. As the technology gets better and better, I can see it being a big deal. It's fun for us, we want to be the guys who can pass along this information to you.

JOE: Matt, have you guys discussed bringing in robotic mowers or these GPS technology sprayers?

MATT: My boss mentioned it in passing, but it's never been seriously pursued. We still work the old-fashioned way.

JOE: What would you think, would you go for it, or balk at it? **MATT:** I think there's definitely a lot of promise and possibility. I saw on social media where the guy sets up the mower, and while the mower is mowing, he's raking the bunkers, cutting the cup. The productivity could be amazing with that kind of technology.

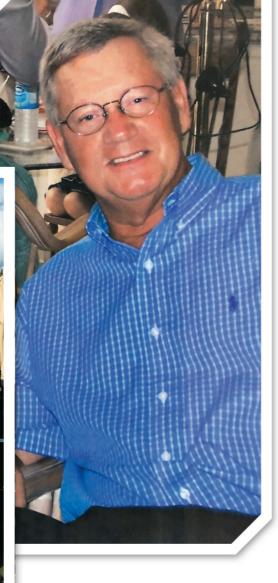
JOE: I have a vision of golf courses in the future, and it's utopian in a sense. A drone goes out, scouts the course. A fleet of robotic mowers goes out. There are sensors in the soil telling the irrigation system if it needs to put out water. It's in the next 10 years, is my prediction. It's a world where robots are doing all the jobs, and I just get to play golf.

MATT: The future superintendent goes from the outdoorsy, athletic, active guy to the pasty dude who lives in his mom's basement, just sitting at the keyboard all day watching his robots. **©**



Jimmy Ellison's distinguished career led him from superintendent at Bay Hill Golf Club to golf executive to golf course design and agronomy consultant.





Steve Wright (left) was a friend to many in the golf industry. Here he is with Eric Swenson, Floridian National GC, at a Palm Beach GCSA chapter meeting at Rees Jones' Breakers West Course.

PHOTOS BY: SETH JONES (LEFT),

40 // **Golfdom** December 2018

The industry loses two celebrity superintendents

BY SETH JONES AND JOHN TORSIELLO

It was a sad time for two families and the golf maintenance industry recently as news spread of the passing of two celebrity superintendents.

Both men were based in Florida at the time of their deaths, but their impact was felt beyond the borders of any single state. Jimmy Ellison, 68, was well known around the world for his work alongside Arnold Palmer, and also as the longtime superintendent at Bay Hill Club. And Steven Wright, 61, was well known in the industry as an integral part of the Florida GCSA, a columnist for *Golfdom* and a mentor to many.

We pay tribute here to both men by profiling Jimmy and Steve and the impact they had on the industry and the people in it.

★ Jimmy Ellison, 1950-2018

When the life of Jimmy Ellison was memorialized at the Bay Hill Golf Club in Orlando, Fla. in mid-November, there were tears and hugs between those who knew and worked for Ellison over his many years in the golf industry.

But rather than maudlin, the event was a celebration of Ellison's life and the often enormous impact he had. Jimmy Ellison certainly touched the lives of many people in the golf industry and beyond during his 68 years of life.

"It reminded me of a reunion," said Danny Aylwin, superintendent at Oceanside G&CC in Ormond Beach, Fla. "There were lots of people from the golf business that have been in it for their whole lives. There were good stories and memories of how Jimmy had crossed and affected all of our lives. Bay Hill was a perfect setting for Jimmy's last hurrah."

It would have been fitting if the fragrance of freshly mown grass had filled the air; it was like nectar to Ellison's innate and keen superintendent's senses.

Ellison passed away Oct. 16 after a long illness. He had a distinguished career in multiple phases of the golf industry, starting out as a part-time employee of the maintenance staff at the Brentwood Golf Course in Jacksonville, Fla. (working for his dad, Gary, who was the course superintendent), to golf course superintendent, to golf industry executive, to golf course design and agronomy consultant.

Continued on page 44

Golfdom has received requests for back issues of the magazine that contain a favorite column of Steve's. If you would like to have one of Steve's columns as a keepsake, email Senior Editor Abby Hart at ahart@northcoastmedia.net which column you'd like and she will email you a high-resolution PDF of the page suitable for printing and framing.

I'm Just Saying

"TO YOUR HEALTH, HOME AND FAMILY"



"You can make a huge difference by taking 15 minutes per day pulling weeds with a sharp knife. Taking the time to do this also removes the weed seed that creates more weeds."

STEVEN WRIGHT, CGCS, Pine Tree Golf Club, Boynton Beach, Fla.

15 minutes a day

e've all heard the term "15 minutes of fame," and for well or ill, a lot of people are out doing their damnedest to achieve it. ¶ My idea of "15 minutes a day" won't make you famous, but maybe it'll make you a little more efficient and satisfied. There are hundreds of tasks you can accomplish in 15-minute increments. It just takes getting started.

Personal

Call someone important to

you. Better yet, call three people and talk to each one for 5 minutes. It's easy, uplifting for both of you, and might make a real difference in someone's day.

Send a letter to someone.

Remember the last time you received a personal letter? That's what I thought — it's been a while. Everyone relies on social media or email instead of the written word. It's still great to put something in the mail, especially not the junk mail!

OK, for crying out loud, if you have to, send an e-mail. It's better than nothing. Not all electronic communication is bad. I enjoy the email I get

after sending a thank you

Spend time with a family member. I don't need to mention how important this is, but do we do it often enough? Turn off the TV and put down the phone or other distractions for 15 minutes. Guys, I'm talking about some major bonus points here.

Take a walk by yourself, with your wife (refer to bonus points above), child or dog. Fifteen minutes a day of walking might not be enough for great health, but you'll still

feel better that you did it. Pray. Any amount will do

Relax, decompress. Take a few minutes to do nothing. As they say, just "chill."

Professional

Walk a hole instead of riding

it. This will seem weird at first, but you'll get used to it and like it. At least that's what superintendents say who do it regularly.

Pull some weeds. You can make a huge difference by taking 15 minutes per day with a sharp knife. Taking the time to do this also removes the weed seed that creates more weeds. Also, buy knives for key staff members. Divide up the task and spend a few minutes each day. I insist on it with my assistants. Try to set a good example and pull a full bucket.

Your staff also could use some increment of those 15 minutes. Five minutes here and there each day makes for

some good rapport with your most important assets. When it comes to your mechanic, spend all 15 minutes with him.

Don't forget the boss.

Whomever the boss is at your club, communication with them is a key element to your success and to his or her

Raise an irrigation head.

Start around greens, then move to tees. Maybe you do this, or maybe you assign it to be done. Either way, you'll improve your irrigation efficiency tremendously. Do one or two a day, and in a month you'll have made a big difference.

Putt or hit some chips.

You say you never have time to practice or play. Yes you do, you work on a golf course.

Politicking is one of the hardest things to do. You have to put yourself out there with the members. They might ask questions or make comments. You've got this, you can handle it. Listening is the key. Look them in the eye. Practice with your peers at meetings. Brush up on technical terms if you need to. Lay it on thick (accurate and truthful), and they might get that

I know that to complete this number of tips you'll need a couple of extra hours in a day. Get started by picking a couple. Mix it up, because some days will be better than others.

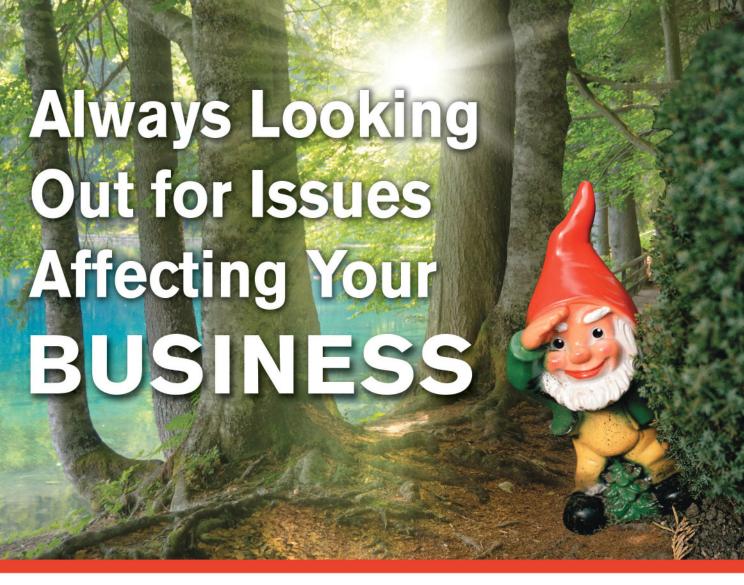
deer-in-the headlights look.

Steven Wright is CGCS at Pine Tree GC in Boynton Beach, Fla. He can be reached at steven_wrightcgcs@ pinetreegolfclub.net or followed at @wrightsteve19.

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RISE Grassroots Network

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services and the products you use. Keep up-to-date on policy and regulations running the gamut from private and public pesticide property bans to specific restrictions on sales, use and display of fertilizers and pesticides. RISE is a national trade association of pesticide and fertilizer suppliers serving as a resource to help you keep these products in your toolbox and you out of the woods.

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DTO COURTESY OF THE ELLISON FAN

Continued from page 41

A great listener and teacher

Ellison took over as superintendent at Bay Hill Golf Club in 1972 after Arnold Palmer purchased the course, and served in that post for 20 years. When Palmer and IMG renamed and reorganized as The Arnold Palmer Golf Management Co., Ellison was promoted to vice president of agronomy, overseeing the company's properties throughout the world. At the same time, he also was involved in the Palmer Golf Course Design Co. He left the Palmer group in 2010 to start his own consulting firm, but one of his clients (the Country Club of Orlando) enticed him into becoming its superintendent. He retired a few years later because of his illness. He had been a scratch golfer most of his life.

Humorist Will Rogers once said he never met a man he didn't like. And apparently, no one who ever met Jimmy Ellison didn't like him.

"We met at a Central Florida Golf Course Superintendents Chapter meeting," remembered Joel Jackson, a retired golf course superintendent and former executive director of communications for the Florida Golf Course Superintendents Association. "I learned all about major tournament preparations, which served me well when Disney began hosting a fall PGA Tour event several years later. I saw his organizational skills in action and learned the best way to prioritize the various operations to best use the available manpower."

Jackson said Ellison "was a good buddy to shoot the breeze with" about work, family and life issues. "Professionally, he helped me get to a life/career-changing level in golf."

During a visit to Augusta, Ga., during the Masters, Ellison introduced Jackson to Arnold Palmer. "In 1991, Mr. Palmer and his company were partners with a real estate venture developing a new private country club and real estate development called Isleworth in nearby Windermere, Fla. After the course was built and had begun operations, Jimmy called me and asked if I'd be interested in assuming the superinten-

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Not only was Ellison a master of turf, he also was a scratch golfer.

dent's position. I had 14 years with Disney at that point, but the opportunity to work with Mr. Palmer was just too big of an incentive to turn down."

When the developers bailed out and began terminating higher-salaried staff, Jackson was on the list. "Several Disney execs had moved into Isleworth. When they heard I was going to be available, they offered me the opportunity to return to Disney. But every time I saw Mr. Palmer at the Bay Hill event, he always had a kind word and a handshake for me. That relationship was made possible by my good friend Jimmy Ellison."

Peter McDonough also says he forever owes a debt of gratitude to Ellison for recommending him for the superintendent's position at Keswick Hall and GC in Charlottesville, Va. He had worked for Ellison at Turtle Creek GC in Rockledge, Fla. "He recommended me for this job 27 years ago, and I'm still here. I worked for Jimmy for a few years when I was in my early 20s, and I was able to learn a lot of things about how to properly care for a golf course from his perspective."

McDonough said that Ellison's advice always "guided you to the best solution of any issue," adding, "he was a great listener and ultimately a great teacher. He always had a clear and calm approach, which brought out the best of your abilities."

Seen in magazines

Tommy Alex, recently retired superintendent of Grand Cypress GC, about four miles from where Jimmy Ellison held court with The King for years at Bay Hill, remembered Ellison as a friend and a man who impressed him from the get-go.

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"Back in the 1980s, Jimmy was doing advertisements for Palmer ryegrass seed, and he was one of the first superintendents to do that. When I met him, I was so impressed because I had seen him in magazines," Alex says. "Jimmy knew his stuff. I don't think I have ever been around a man who was so humble and down to earth. He had a high-profile job working for Arnold Palmer but he never displayed any arrogance. And he traveled all over the world. I would call him quite a bit and ask his advice on matters and he always helped out, even though we were competing to some degree because our courses are so close to one another."

Alex played golf with Ellison "15 or 20 times," and he recalled him as a talented player. "I could beat him from tee to green, but he had a great short game," Alex recalls. "I always paid him at the end of the round."

Being generous and giving in all ways, it's likely the money didn't stay in Jimmy Ellison's pocket for long.

— J.T.

★ Steve Wright, 1957-2018

Not only was the Advent Lutheran Church in Boca Raton, Fla., beyond capacity, its parking lot was equally overwhelmed.

A full parking lot wasn't going to deter any of longtime superintendent Steve Wright's colleagues. The ditch alongside the church was packed with pickups, a makeshift parking lot for the many superintendents in attendance.

Justin Jeffery, who worked with Wright early in his career, flew in on the redeye from Salt Lake City to pay his respects to his friend and former boss. He called Wright a passionate leader who pushed people to achieve their best.

"Any time I had an issue or was looking at a move, I would consult Steve. He was always willing to share his knowledge and experience," Jeffery says. "He drove us to become detail oriented and

not miss all the little things. I tried to give him credit as a mentor for my success at building Victory Ranch (Kamas, Utah), but he did not want credit and said to me, 'That's all you, man!' Steve wanted more to be known as a friend and not my old boss... that's how he would introduce me — 'my friend.' I'll miss my friend."

Good at everything

Joel Jackson remembers meeting Wright years ago at a Central Florida GCSA chapter meeting when Wright was an assistant superintendent at Sugar Mill G&CC, New Smyrna Beach. After he was promoted to superintendent, Jackson says Wright became an active member of the Florida GCSA.

"To me. Steve was the embodiment of the ideal young superintendent that we'd all like to see become involved in the whole picture of what being a superintendent entails," Jackson says. "That means getting involved in stewardship, outreach, chapter functions and projects. Steve did those things in a responsible manner and his stature in the industry grew along with him. I can't recall his entire résumé of courses, but I do know after establishing a solid reputation, he took a successful job at Hilton Head, and after a tour of duties in the Carolinas he returned to Florida with stops in Boca Raton, and lastly at the historic Pine Tree CC. You don't land those jobs unless you are a true professional with great turf management knowledge, a good communicator and a good manager of resources and people."

Brian Birney, superintendent of the East Course at the Club at Admiral's Cove, worked for Wright as an assistant at Boca West. "Steve was good at everything he did — growing grass, playing golf, having fun with his family," Birney says. "He knew when to put his foot on the gas and when to take it off. After a long week of aerification, he'd have us

Continued on page 46



In a touching ceremony, Wright's daughter Casey read his Arnold Palmer tribute column during his funeral.



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out on his boat. The first week of March Madness he'd let everyone out early. He just got it, and I definitely learned a tremendous amount from him in the time I worked for him."

Birney says, "(Wright) was tough to work for if you didn't have the work ethic. He was very demanding, but also rewarding. But as good of a boss as he was, he was a better friend."

'Refuse to fail'

Wright hired Wesley Dinsmoor when he was fresh out of Colorado State University. Dinsmoor started as an intern under Wright and worked his way up at Boca West for 11 years, up until Wright took the superintendent position at Pine Tree, Boynton Beach, Fla. That's when Dinsmoor was promoted to superintendent at Boca West.

"I owe a whole lot to Steve Wright, I wouldn't be where I am today without him," Dinsmoor says. "Just look at the number of guys from this area who were there at his service. There were a lot of guys who came up from under him and have gotten great jobs. He pulled a lot of guys forward and helped them get placed. I really believe he is one of the guys who has helped take our profession from a blue-collar job and elevated it to a true profession."

"Our time working together was too short," Golfdom EIC Seth Jones says of Wright, "but I'm thankful that our paths crossed."

Dinsmoor, like Birney, says Wright was demanding of his leadership team and the crew.

"I won't say that he wasn't tough and demanding. He was huge on details. He told me that it was the details that put an average course above the rest. He used to say, 'There is the wrong way to do things, there is the right way to do things, and there is the *Wright* way to do things," Dinsmoor laughs. "It was clear that he took his job seriously and it was clear that he loved what he did."

A memorable moment Dinsmoor recalls was on Wright's last day at Boca West. Wright and Dinsmoor drove the four golf courses at Boca West all day, so Wright could bid farewell to as many employees and members as possible.

"Steve told me that day, 'Refuse to fail. Remember, there are good days and bad days, but you must always refuse to fail."

Birney says he'll always remember Wright's "Steveisms" and his hilarious one-liners. Trips to the Masters and concerts like Sublime and Florida Georgia Line were always filled with laughter and classic Steve moments. But his most memorable one-liner was when Wright was offended by the conditions of a course the two were about to play.

"Goosegrass is a prevalent weed here in Florida, and you really have to stay on

top of it," Birney says. "Well, there was some goosegrass right there on the way to the first tee. He looked at me and said, 'Nothing says I don't give a (flip) like when you have goosegrass on the walk up to the first tee!"

A caring father

Wright leaves behind a rich and colorful golf legacy. Among his many accomplishments, he served as president of the Carolinas, the Low Country and the Palm Beach GCSAs. He was the vice president of the Florida GCSA at the time of his unexpected death. He worked as a superintendent in both South Carolina and Florida, overseeing numerous course constructions and renovations. He was a voice of the industry, both with his *Golfdom* column, "I'm Just Saying," and his active Twitter feed.

But growing grass wasn't his only skill. Justin Jeffery says his greatest accomplishment was as a family man.

"Steve always looked at career changes and career moves with his family in mind first. He did what he and Sheree thought would better provide for them. I admire his ability to navigate that," Jeffery recalls. "Steve's love for his wife and kids was so apparent. He was very proud of Casey, Pierce and Bayley. At some point in every conversation we had, he would always ask how my dad was, knowing our relationship and being a caring father himself."

KC Henderson, superintendent at Adios GC, Coconut Creek, Fla., says he tries to emulate Wright as an example of a great superintendent, and also as a great family man.

"We lost someone important in the golf business, but he was even more impressive as a family man," Henderson says. "He and (wife) Sheree were attached at the hip. His relationship with his wife and family, that's what to model your own family relationships after." •

— S.J.



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Robert E. Decker, Jr. Berkshire Hill Country Club



Make it simple

Communication with customers and co-workers breeds success

By NICHOLAS STRAIN Business Director for Quali-Pro Products

call Wisconsin home, and as the saying goes, there's no place like home. But with cold weather up north, it's nice to get to Florida a few times in the winter.

This winter I'm making two trips to Orlando to visit with customers and co-workers at Reunion Resort. My first time visiting Reunion was five years ago for the *Golfdom* Summit. I've been back every year since.

The thing that makes Reunion Resort stand out is the team's attention to detail. Ron Sharps and Robert Guerra, the superintendents at this 54-hole facility, do an amazing job. Nothing is ever out of place, and to keep such a large property consistently great takes a tremendous effort. We're happy to call Ron and Robert and the team at Reunion Resort partners. The success they've had here with Paul Fox, Florida Area Manager, and Nimitz is something all of us at Control Solutions Inc. are proud of — we have made a positive impact on their course conditions.

While I'm here in Florida, I get to talk to superintendents face-to-face and learn what their concerns are. It doesn't matter if the superintendent is a person I'm just meeting or an old friend, the same topic comes up: tariffs. The potential for tariffs raising the prices on chemicals has the

entire industry uneasy.

At Quali-Pro we're making every effort to stay in communication with our customers. Internally we're also working hard to keep the team informed with the most current information we're hearing from our parent companies, Adama and ChemChina. We have weekly conference calls with our eight area managers and one key account manager. Any of us are happy to talk to you about what we know and what we're expecting in 2019 and how that will impact prices industry-wide.

One thing we stress company-wide is an effort to keep things simple. Superintendents are dealing with enough challenges, and we don't want to add to their challenges. We want to be a solution — you could say it's our middle name. Quali-Pro is based in Pasadena, Texas, and operated by the founder of Control Solutions Inc., Mark Boyd, and Executive Vice President Curtis Clark. They remind us to "make it simple" when helping our customers face their challenges. We want to understand what those challenges are, and present straightforward products and programs to meet those challenges.

When our Quali-Pro team convenes here at Reunion Resort, we look around the table and realize we have over 100



Strain is based out of McFarland, Wis., where he lives with his wife Lära and their two children, Ellie and Breck. He can be reached at nstrain@controlsolutionsinc.com or (608) 301-6407.

years of experience in the industry. We're also supported by Marie Knox, who has a masters in nematology and turf.

Whether it's in-person meetings here in Florida, or a conference call from Wisconsin, we're remaining loyal to our basic belief that if we keep things simple, our customers will succeed. We hope that you agree, and we hope that you will also make it simple, and make it Quali-Pro.



REUNION RESORT'S BEST MEN

CARING FOR 54 HOLES OF GOLF IS A BATTLE WHEN THE COMPETITION FOR LABOR IS FIERCE, BUT ORLANDO'S REUNION RESORT SUCCEEDS WITH A STRONG MANAGEMENT TEAM.

By **LEON GORDON**

ocated just outside of Orlando, Fla., is the 54-hole Reunion Resort. The facility proudly boasts to be the only place in the world where golfers can play an Arnold Palmer design, a Jack Nicklaus design and a Tom Watson design all without ever leaving the resort's gates.

Such legendary names are certainly something to be proud of, but maintaining

the sprawling complex creates challenges as unique as the combination of the three courses.

"These golf courses are relatively new," says Kevin Baker, PGA, general manager of Reunion Resort. "But even when you have a shiny penny, that thing called the economy rears its head and every expense has to be looked at."



Kevin Baker

Reunion, the men in charge of making sure the penny still shines are Robert Guerra and Ron Sharps. The two spent a combined 17 years as assistant superintendents at Reunion until four years ago when they were promoted to co-superintendents of the property. Guerra oversees the Palmer and Watson courses, while Sharps is in charge of the Nicklaus course, the practice areas and the common areas. Baker says the co-superintendent

For Baker and

Baker says the co-superintendent arrangement has worked to Reunion's advantage. Guerra and Sharps bring different skill sets to the job, and Baker has the peace of mind to know that one of the two is always on-site.

"Robert connects well with the crew. He speaks fluent Spanish and English. And he's not afraid to get his hands dirty — he'll jump on a sand pro to help the crew at any time," Baker says. "Ron is more on the turf geek side. He's the guv who looked at the facility on Google Earth and started making calculations. He's always working on monthly reports and keeping track of our water permits. He switched out the daily work board from the quintessential white board to a computer work board, so he can quickly produce reports and track labor."

New kids on the block

Guerra comes to Orlando via McAllen, Texas. He spent his formative years in Florida and excelled at competitive baseball. His love of baseball led him to the turf industry, first in golf, then sports fields. He latched on



Robert Guerra



Ron Sharps

with multiple Spring
Training locations,
eventually working for
the Cleveland Indians,
the Detroit Tigers and
the New York Yankees.
When talking about the
Yankees, he still refers to
former Yankees owner
George Steinbrenner as
"Mr. Steinbrenner."

Guerra decided to get back into golf when he took a job as a spray tech with Reunion Resort in 2005. After six weeks on the job he was promoted to assistant superintendent and moved from the Palmer

Course to the Nicklaus Course to experience a grow-in.

Sharps, a Florida native, was working in a factory when he decided he needed to get outside. His first gig in golf maintenance was a job on the crew at Orange Lake Resort in Kissimmee, Fla. He says he knew nothing about greenskeeping but worked his way up, going from spray tech to second assistant. In 2006 he took a job at Reunion Resort, where he met Guerra.

"Me and Ron have a really close relationship — we feed

off each other," says Guerra of Sharps, who he describes as like a brother to him. "In order to take care of three courses you have to have a good relationship."

"Robert and I have been working together for 12 years now. We were the new kids on the block on the Nicklaus Course," Sharps recalls. "We've been a great team this whole time. We've seen ups and downs. We know how each other think. We stay in constant communication and we understand what we're trying to accomplish. I think that together, we're not afraid of any challenges."

The nematode challenge Challenges are aplenty for Sharps and Guerra. Reunion battles the

and Guerra. Reunion battles the typical diseases for a Florida golf course.

"Knock on wood we keep everything under control — fairy ring, dollar spot. I'm not going to say we don't get it," Guerra says, "but we stay pretty tight with our fungicide applications."

One problem that was reoccurring was nematode damage. Several greens were consistently weak. Two years ago, Paul Fox, Florida area manager for Quali-Pro, offered to do some test plots at Reunion for Guerra



and Sharps using their new nematicide, Nimitz Pro G.

The weak greens have come back stronger than ever.

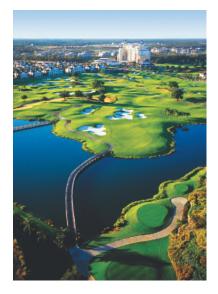
"Paul did soil samples for us, he took photos and then he did some trials with Nimitz," Sharps says. "We had one course in particular, the greens were struggling every year coming out of winter. They aren't struggling anymore."

Wasting away to Margaritaville

Beyond struggles with nematodes, both Sharps and Guerra say their biggest challenge is the size of the property.

"It's just huge, man!" Guerra says of Reunion's three courses. "Sometimes you don't sleep because you're just thinking about the courses. The biggest challenge is travel time."

Sharps, the king of Google Earth maps, knows exactly the



distance from the shop to the furthest hole.

"From the shop to No. 12 on Nicklaus is two-and-a-half miles," Sharps sighs. "The amount of property we have is the biggest challenge. A facility of this size is intended to have an 'all hands on deck' size crew, but we've spent a lot of time working on ways to simplify, to reduce labor. We focus on the areas that matter most."

Baker says it doesn't matter that they've upped what they pay members of the crew, he has a monster of a competitor right next door that eats into his potential labor pool — a place currently under construction called Margaritaville.

"It's within five miles of us and 500 to 700 people are going into that facility everyday to build it," Baker says. "People will leave us over an extra 50 cents or a dollar an hour. It feels like we're always four to six people short, no matter the time of year."

Guerra says he is constantly reminding the crew to be diligent to complete the most basic tasks—putting rakes back where they belong, making sure stakes are protecting the right areas, reminding the set-up guy to cut cups in preferred areas.

"They only hear what they want to hear so you have to constantly remind them and bring them back to the common sense stuff," Guerra says.

Employee morale is important to Guerra and Sharps, so they strive to remind the crew of their value to the facility. They have an employee of the month program to reward outstanding crew members regularly, and also hand out gift cards to Publix when they see someone going out of their way to do the job right.

"My dad told me a saying a long time ago about a donkey," Guerra recalls. "He would ask me, 'What happens when you beat down a donkey? The donkey isn't going to want to move any more.' You can't beat these guys down. You have to work side-by-side with them. We're their managers, but we have to show them that we're willing to jump in that ditch with them."

While Fox hasn't heard Guerra's donkey adage before, the sentiment behind it — that everyone is critical to the team's success — is something he exemplifies every day, say Sharps and Guerra.

"Paul comes out here and he looks at greens with us, and I think he worries about our greens as much as we do," Guerra says of Fox. "He's one of us, he's on our team."

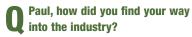
Since the Nimitz trials, it's not uncommon to find Fox at the course monitoring greens. The three typically grab lunch afterwards at the Resort clubhouse and discuss everything from golf to life.

The topic these days has been wedding plans. Guerra is getting married in a few months. Sharps is current on all the details. Why? Because he's the best man.

Q&A

GET TO KNOW: Paul Fox, Quali-Pro

Quali-Pro's Florida Area Manager on helping customers and the most common problems he sees.



I went to the University of Florida and got my degree in turfgrass... my plan was to grow grass for a living and be a superintendent. I worked as an assistant for a little while, and then I had the opportunity to get into sales earlier than I anticipated. I've had various roles and worked in various markets over the last 20 years. At one point, I managed turf, ornamental, agriculture, aquatics and pest control sales reps.

What products does it seem like you've been talking with your clients the most about lately?

Over the last couple of years it's been Nimitz and Todal, a lot of talk about nematodes here in Florida. But I'll talk with people about any product. With my background in distribution, I'm familiar with most products and I know what options superintendents have. Sure, I'm talking Quali-Pro products, but realistically it's nice if I can just help (customers) solve a problem. I'm really just trying to help superintendents solve everyday issues.

What are the common problems your customers are concerned about?

We're always talking about the expectations of golfers. With the resources that are available to superintendents, the labor issues, the amount of golf we have versus how rarely the courses are closed... there are a lot of challenges. This is an area where Quali-Pro can help. We provide quality, efficacious products that can be cost effective.

Tell me about Quali-Pro Academy.

This last year was our first year for the program. We've partnered with GCSAA and created a concise training program — it takes about an hour — and you learn about who Quali-Pro is, as well as learning about some of our products. Each session takes only three to five minutes and you can take it at your own pace — you can do two today, then two next week if you want. We give end users a reward for taking the training then passing a simple quiz at the end. We're targeting end users as well as distributors for Quali-Pro Academy.



Fox is based out of Largo, Fla., and has worked closely with Reunion Resort since 2016. He can be reached at paul.fox@controlsolutionsinc.com or (727) 423-9280.

What's something that people typically don't know about Quali-Pro?

One of the things is the size and scope of Quali-Pro/Control Solutions Inc. ("CSI," parent company of Quali-Pro). The other thing is the quality of the products that we put out. Our company is a part of Adama, which is the sixth largest provider of crop protection products in the world. With that big of a parent company, we have access to 270 active ingredients — that's the largest selection of anyone in the marketplace. We can find unique products that add value and are useful to our customers. CSI is a very large company and Quali-Pro is the turf and ornamental arm of the company.

What is the best part of your job?

Talking with the end users on a daily basis. I go to such a variety of places with a variety of issues. I meet great people and I provide them with a service to solve whatever their issues are.



What Quali-Pro supers are saying about...

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Enclave® is a very affordable "one & done" fungicide! My favorite Quali-Pro product? Hands down T/I 2.5 G! Nimitz® Pro G is my go-to product. I'm now a believer. Our tees have never looked much cleaner cut thanks to T-NEX!

Mark Moriarty Berry Hill Golf Course **Paul Hurst** GreensPro Anthony Baur St. John's Golf Club **Brandon Razzo** Cross Creek Golf Club

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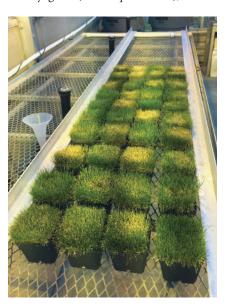
// REPELLENTS AND RYEGRASS DON'T MIX

RYEGRASS INJURY AND RECOVERY FROM HUMAN INSECT REPELLENT

By Jared A. Hoyle, Ph.D., Ross C. Braun, Ph.D., and Peyton E. South

uperintendents commonly observe turfgrass injury from human insect repellent (bug spray) overspray on human skin and clothing. The injury most commonly occurs as an outline shape of unaffected footprints with damaged surrounding turf. This injury results in unacceptable turf quality.

Our project was to evaluate various human insect repellents on perennial ryegrass (Lolium perenne L.), and to determine injury and recovery. Research



Visible differences in turf injury at seven days after application.

was initiated in 2016 and 2017 in greenhouses in Manhattan, Kan., on Paragon GLR perennial ryegrass. We applied nine aerosol insect repellents to perennial ryegrass to simulate a human standing on turf and applying insect repellent to the legs and feet.

In both years, all treatments except the nontreated control resulted in at least 6-percent turfgrass injury one day after treatment. We saw the most turfgrass injury from products that contained the active ingredient DEET. Products that contained DEET resulted in more turfgrass injury up to 28 days after treatment than picardian, IR3535 and geraniol plus soybean oil.

In 2017, at seven days after treatment, DEET products averaged 43-percent injury compared with 21-percent injury from non-DEET products. In 2017,

turfgrass injury of 9 percent to 46 percent from all nine products was higher than the nontreated control at seven days after treatment, but perennial ryegrass recovered from all treatments thereafter.

Results indicated that insect repellent products differ in their injury to turf, and more information is needed on nontarget turf injury caused by human insect repellent overspray. Avoid overspray of aerosol insect repellents on perennial ryegrass turf because of their potential to cause turfgrass foliar injury.

Jared Hoyle, Ph.D., and Peyton South are at Kansas State University, and Ross Braun, Ph.D., is at Purdue University. You may reach Jared at jahoyle@ksu.edu for more information.

NEWS UPDATES

DIVANEM NEMATICIDE REGISTERED IN CALIFORNIA

Syngenta's Divanem nematicide is now registered in California.

With the nematicide active ingredient abamectin, Divanem helps improve root growth through broad-spectrum control of nematodes on golf course tees, greens and fairways.

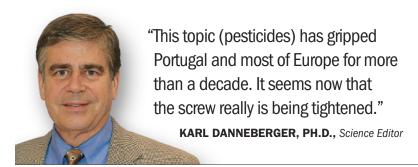
"By offering Divanem to superintendents in California, we are meeting their needs for reliable nematode control and improved aesthetics and playability for their courses," said Stephanie Schwenke, turf market manager at Syngenta.

"Damaged and stressed turf is more susceptible to infection, so using Divanem with Heritage Action provides nematode control against species like root-knot while boosting turf's defenses against disease pathogens," said Dean Mosdell, Ph.D., technical services manager for turf at Syngenta. "Heritage Action fungicide delivers control of soil-borne disease with a boost of acibenzolar-S-methyl (ASM) for enhanced biotic and abiotic stress management."

Divanem is available in a package containing two half-gallon jugs. It is also available as part of a Multipak with one half-gallon of Divanem and five one-pound bottles of Heritage Action in a combination to treat five acres.

ALTHOUGH MUCH RESEARCH HAS FOCUSED ON BERMUDAGRASS SEEDING RATES... LITTLE INFORMATION IS AVAILABLE CONCERNING OPTIMUM SPRIGGING RATES FOR BERMUDAGRASSES."

Gregg C. Munshaw, Ph.D. (see story on page 57)



Portugal and pesticides

have traveled to Portugal numerous times to attend and speak at conferences and to play golf. Portugal is one of my favorite countries. It's a relatively small country, with a population similar to that of Ohio. It has a long, colorful history that includes the period of Portuguese explorers like Cabral, who discovered Brazil in 1500, and Ferdinand Magellan, who led the first trip around the world in 1519. More recently, it's home to, arguably, the best soccer player in the world, Cristiano Ronaldo.

The Atlantic Ocean borders Portugal's west coast, while the Mediterranean Sea is on its southern border. For surfers, the largest surfable waves occur off the coast of Nazarre. These bodies of water, which border almost half the country, help contribute to its Mediterranean climate, especially along the southern border, known as the Algarve. The climate reminds me of southern California, specifically San Diego, but without the traffic congestion, noise or potential pollution.

The Algarve has been a vacation destination for Europeans because of the climate, views and golf. Development recently has increased in the area as Europeans purchase and build vacation homes and permanent residences. Although Portugal's economy suffered during the Great Recession — like many other countries — golf course closures never really materialized to a great extent because most golf course building wasn't associated with hous-

ing development.

I spoke last month at the Portuguese Greenskeepers Association at Quinta da Marinha Resort. The major topic of the conference was managing golf courses without pesticides. This topic has gripped Portugal and most of Europe for more than a decade. It seems now that the screw really is being tightened.

The discussion of managing with no pesticides often begs the question, "Exactly what do you mean by a pesticide?" I took this to mean synthetic pesticides. The good news — and here I'm looking only at pest control — is that there are options for weed and insect control. There may be issues with timing, number of applications, quality control of the product and cost, but options do exist. Disease control, especially on greens, tees and fairways, presents a more challenging scenario.

In the quest for a no-pesticide golf course, I see similarities and a signifi-

cant difference in the challenges that faced agriculture when the debate between conventional farming and organic farming occurred more than 20 years ago. Similar to pesticides, defining what organic farming meant or what constitutes a natural product was hotly debated. Another question: Is natural food better?

Out of this organic versus conventional debate, university research and extension activities focused on developing agronomic programs that enhance organic and conventional food production and everything in between. Consumers demanded and were given the choice of what type of food they desired, based on their tastes and economic concerns. We see those choices each time we go into a grocery store or dine out. Consumers drive the diversity we see in farming.

In golf, the golfer is not driving whether a course is or is not pesticide free. Community and government mandates are — or will be — forcing golf course superintendents in Europe to maintain courses that probably won't meet player expectations. I'm told that golfers are going to have to lower their expectations. Why should they? Based on an English study, 80 percent of golfers believe golf courses are environmentally friendly. Those who do not play golf — in almost the same percentage — believe golf courses are not environmentally friendly.

As we develop alternative ways of managing turf with no or reduced pesticides and golfers lower their expectations for course conditions, we will reach a middle ground. But until then, I can think of no better way to ponder golf's options than dining on a Mediterranean meal with a port wine and a view of Portugal's coastline.

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

//BRINGING UP BERMUDAGRASS

Nitrogen and sprigging rate effects on Latitude 36 bermudagrass establishment

By Gregg C. Munshaw, Ph.D., Jeffrey S. Beasley, Ph.D., Christian M. Baldwin, Ph.D., Justin Q. Moss, Ph.D., Kenneth L. Cropper, Ph.D., H. Wayne Philley, Chrissie A. Segars, Ph.D., and Barry R. Stewart, Ph.D.

ermudagrass (Cynodon sp.) is widely grown throughout the southern United States for recreational and aesthetic purposes. Bermudagrass provides a heat-and drought-tolerant turfgrass that exhibits vigorous growth and good wear tolerance. Bermudagrass also is popular on golf courses because of the speed at which it establishes and recuperates. Superintendents often need to establish turfgrass rapidly in order to keep tees, fairways and rough in play.

Establishing bermudagrass from sprigs on golf courses provides an economical propagation method compared to sodding. Although much research has focused on bermudagrass seeding rates for establishment, little information is available concerning optimum sprigging rates for bermudagrasses. A recommendation of a minimum rate of 100 bushels/acre reported excellent cover in three weeks. Others have recommended sprigging rates of 218 to 653 bushels/acre to reach full cover within 10 to 12 weeks after sprigging. For quicker establishment, sprigging rates up to 1,089 bushels/acre are recommended. The common logic is that higher sprigging rates result in faster establishment than lower rates.

NITROGEN EFFECTS ON ESTABLISHMENT

The effect of nitrogen on bermudagrass establishment from seed has been well documented, however, there appear to be large discrepancies in recommended nitrogen rates for establishing vegetative cultivars.

Recommended nitrogen rates from previous establishment studies on

Tifway bermudagrass range from 44 lbs./acre per month. However, a study looking at establishment of Tifway and Latitude 36 bermudagrasses showed that high N rates (175 lbs./acre nitrogen per month) were beneficial only shortly after planting, and lower nitrogen rates were equally effective for establishment as the study progressed. Although discrepancies in nitrogen recommendations during bermudagrass establishment exist, most agree that at least some nitrogen is required to improve establishment.

The soil at the Burden Center (Louisiana State University) was an Oliver silt loam (fine-silty, mixed, thermic, Typic Fragiudalf; pH: 7.3; 88 lbs./acre phosphorus (P); 473 lbs./acre potassium (K)). The soil at the R. R. Foil Research Center (Mississippi State University) was a Marietta fine sandy loam (fine-loamy, siliceous, Fluvaquentic Eutrochrept; pH: 5.7; 329 lbs./acre P; 341 lbs./acre K). The soil at the OSU Turfgrass Research Center (Oklahoma State University) was a Norge loam (fine-silty, mixed, active, thermic Udic Paleustolls; pH:

There appear to be large discrepancies in recommended nitrogen rates for establishing vegetative cultivars.

Because little science-based information exists on newer cultivars regarding optimum sprigging and nitrogen rates during bermudagrass establishment, a study was conducted to examine these factors across four locations in the United States for the newer cultivar Latitude 36. The objective of this study was to characterize the effect of sprigging and nitrogen rates to bermudagrass establishment from sprigs in areas throughout the southern and transition zones of the United States.

SITES AND DATA COLLECTED

The experiment was conducted in summer 2015 at university research facilities in Baton Rouge, La., Starkville, Miss., Stillwater, Okla., and Lexington, Ky. (USDA hardiness zones 9A, 8A, 7A, and 6B, respectively).

7.2: 144 lbs./acre P: 263 lbs./acre K). The site was modified in 2009 and USGAspecification sand was added and mixed to the top 8 inches of the soil profile. A soil sample was collected on July 15, 2015 and the soil texture was classified as a sandy loam according to the USDA soil textural triangle (USDA, 2016) and consisted of 72.5 percent sand, 13.8 percent silt, and 13.8 percent clay. The soil at the A.J. Powell, Jr. Turfgrass Research Center (University of Kentucky) was a Maury silt loam (fine, mixed, mesic, typic Paleudalf; pH: 5.2; 448 lbs./acre P; 318 lbs./acre K). Winstead Turf Farms, Arlington, Tenn. donated Latitude 36 bermudagrass sprigs for all locations.

Plots were established the second week of July at all locations with the exception of Louisiana, where the study was established the third week Continued on page 58

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FIGURE 1

the photos, the nitrogen rates are 0, 11, 22 and 44 lbs. nitrogen/acre/week from left to right, and the boundaries of individual nitrogen rate plots are indicted by orange dots on the soil.

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of July. Whole plots measured 12 feet by 10 feet. We applied granular fertilizer at planting at rates of 0, 11, 22 and 44 lbs./acre nitrogen with 13.0N-5.7P-10.8K, and then weekly at the same rates using urea (46N-0P-0K) until plots were established (approximately 90-percent groundcover measured by digital image analysis).

We hand-sprigged bermudagrass at rates of 200, 400, 600 and 800 U.S. bushels/acre to cover the spectrum between low, high and commonly recommended sprigging rates. We rolled plots following sprigging to increase sprig-to-soil contact and oxadiazon. We applied Ronstar G (Bayer Environmental Science) over the sprigs at a rate of 150 lbs./acre. We chose Latitude 36 for this study because it's a new, yet highly used cultivar that exhibits excellent turf quality characteristics, as well as its suitability for all locations of this study.

We took photos weekly with a light box and digitally analyzed them with SigmaScan Pro (Systat Software, Inc.) and objectively measured plot cover. We mowed plots twice a week with a rotary mower set at 2 inches and returned clippings. We irrigated as needed to prevent wilt. We applied no pesticides during the experimental period.

STATISTICAL ANALYSIS

The experimental design was a split-plot with four replications nested at each location. We recorded the dependent variable bermudagrass coverage weekly.

Rather than looking for differences across locations, we selected statistical design to find general trends in bermudagrass establishment requirements across the southern region of the United States during suitable environmental conditions for establishing bermudagrass. We performed statistical analysis of bermudagrass coverage data using the mixed procedure in SAS (version 9.4, SAS Institute), with weekly bermudagrass coverage analyzed over time using repeated measures analysis. Means for the dependent variable bermudagrass coverage was separated according to Fisher's least significant difference (LSD) ($P \le 0.05$) when the

TABLE 1

Effect of nitrogen rate on turfgrass cover across all sprigging rates over a six-week observation period at four locations during summer of 2015.

	Weeks after planting							
	1	2	3	4	5	6		
N rate (lbs. nitrogen/acre/week)								
0	31.7F†a†	54.1Ec	71.3Dc	86.9Cc	93.1Bc	97.0ABb		
11	31.6Fa	57.0Ebc	77.6Db	90.7Cb	98.7Bb	100ABa		
22	30.3Ea	58.1Dab	79.5Cab	91.8Bb	99.6Aab	100Aa		
44	30.3Ea	60.7Da	81.6Ca	94.0Bab	100Aa	100Aa		

[†] Values followed by an uppercase letter within a row are not significantly different (P<0.05).

TABLE 2

Effect of sprigging rate on turfgrass cover across all nitrogen rates over a six-week period at four locations during summer of 2015.

	Weeks after planting							
	1	2	3	4	5	6		
Sprig rate (bushels/acre)								
200	19.9F†d†	40.1Ed	63.6Dd	82.6Cd	94.1Bc	100Aa		
400	27.8Ec	56.5Dc	77.1Cc	91.3Bc	98.7Aabc	100Aa		
600	34.4Eb	63.4Db	82.2Cb	94.1Bbc	99.5Aab	100Aa		
800	41.8Ea	69.9Da	86.9Ca	95.4Bab	100Aa	100Aa		

[†] Values followed by an uppercase letter within a row are not significantly different (P<0.05).

fixed effects of sprig rate, N rate or weeks after planting were significant ($P \le 0.05$).

NITROGEN INFLUENCE ON ESTABLISHMENT RATE

In general, as weekly nitrogen rate increased from 0 to 44 lbs./acre, bermudagrass coverage increased concurrently over the establishment period (Table 1). Interestingly, all nitrogen rates resulted in approximately 90-percent coverage within four weeks after planting (Figure 1), indicating the aggressiveness of Latitude 36 compared to Tifsport and Tifway bermudagrasses, which typically take five to seven weeks to achieve full coverage.

Although nitrogen rate was statistically significant at almost every observation date, differences were slight (i.e. <4 percent difference in plot cover between high and low nitrogen rates at four weeks after planting) and likely not relevant for superintendents. In similar work examining the effect of nitrogen and sprigging rates, other researchers have reported that increasing nitrogen rates up to 33 lbs./acre/week improved establishment of TifEagle bermudagrass.

In the current study, the results align with nitrogen rates of 44 lbs. nitrogen/acre/month rather than 271 lbs. nitrogen/acre/month when evaluating bermudagrass establishment by sprigs. Because all but the lowest nitrogen rate (0 lbs. nitrogen/acre/week) reached ≥90 percent coverage within four weeks after planting, the use of additional nitrogen may not be warranted, especially if mitigation of

potential offsite nitrogen pollution is a concern.

Reduction in nitrogen rates from 44 to 11 or 22 lbs./acre/week is supported from an economical and environmental standpoint, but also when considering that unfertilized plots exhibited improvements in coverage at each observation date, with ≥90 percent coverage five weeks after planting, the benefits of high nitrogen rates are questionable.

SPRIG RATE AFFECTS ESTABLISHMENT RATE

The more important factor to accelerate bermudagrass establishment appears to be sprig rate (Table 2). The effect of sprig rate on turfgrass cover showed that increasing rates not only

Continued on page 60

[‡] Values followed by a lowercase letter within a column are not significantly different (P<0.05)

[‡] Values followed by a lowercase letter within a column are not significantly different (*P*<0.05).

Continued from page 59

resulted in higher initial coverages but maintained higher coverages until all sprig rates resulted in full coverage six weeks after planting (Figure 1).

For example, sprigs planted at the lowest rate of 200 bushels/acre had 19.9-percent cover one week after planting and achieved >90-percent cover five weeks after planting, compared to the highest sprig rate of 800 bushels/acre, which had 41.8-percent coverage one week after planting and 95.4-percent cover within four weeks after planting.

However, as is the case with nitrogen, excessive sprigging rates do not necessarily provide proportional benefits. For example, sprigging rates of 400 and 600 bushels/acre resulted in coverages of 91.3 percent and 94.1 percent, respectively, at four weeks after planting, compared to the highest sprig rate of 800 bushels/acre at 95.4-percent cover. The influence of sprig rate on bermudagrass establishment may be more pronounced for slower-growing bermudagrass cultivars.

Superintendents commonly are under pressure to establish turf-grass surfaces as quickly as possible. Decreasing the duration of establishment not only shortens the period turfed areas cannot be used but can potentially reduce offsite sediment loading and P losses.

So, if the goal is to accelerate bermudagrass coverage on finely textured soils, we recommend a sprig rate of 400 to 600 bushels/acre and applying 11 to 22 lbs. nitrogen/acre/week until established. However, increasing sprigging rate at more than 600 bushels/acre results only in slight increases in cover during the establishment period and does not reduce time to full cover.

As long as temperatures are suitable for bermudagrass growth and superintendents use finer-textured soils, results should be similar to those found in this study, regardless of location.

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Acknowledgements

The authors thank David Blouin, Ph.D., Louisiana State University, for assistance with experimental design and statistical analysis.

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My turfgrass wish list

n the spirit of Christmas, I am sharing my research wish list. There are great turfgrass scientists hard at work on many of the items on my list. Despite their efforts, some of my wishes remain unfulfilled. That just goes to show how difficult some of these problems are to solve. I recognize the items on my list are not new, but we need to stay focused on the problems faced by the golf industry.

- A consistent and effective control method for bermudagrass. This is a tall order and perhaps not achievable. One hundred percent bermudagrass control is ideal during renovations and re-grassing. This is one instance where 100 percent control is needed, and 95 percent control is not enough. All it takes is a few surviving bermudagrass rhizomes or stolons and a few years of growth, and the new stand is contaminated.
- A less expensive alternative to pine straw areas beneath trees on bermudagrass golf courses. While pine straw mulch looks great, it's expensive to install and maintain. A shade-tolerant, playable and inexpensive-to-maintain groundcover under trees where bermudagrass won't survive would be a long-term budget-friendly solution.
- Additional tools to manage nematodes. The turf industry currently is fortunate to have three effective products to control nematodes. So why do I wish for more nematode control products? The industry not too many years ago was reliant on a single nematode control product, and suddenly that product was no longer available. There needs to be a sustained effort to continue to bring new nematode control products to the market.

- Additional annual bluegrass control products. For many golf courses, annual bluegrass remains a serious challenge. While there are effective products and strategies to manage/control annual bluegrass, these products and strategies are not as consistent as we would like from golf course to golf course or year to year. I'm not wishing for a universal annual bluegrass control product—that's too unrealistic even for me—but it would be great to have a few more annual bluegrass control products and strategies available.
- "There needs to be a sustained effort to continue to bring new nematode control products to the market."
- Better strategies for renovating/ re-grassing cool-season turfgrass stands. Turfgrass breeders have developed new cultivars of cool-season species that are much better than the older cultivars now found on many golf courses. The leadership at some golf courses will not consider renovation/re-grassing cool-season grass stands because of the need to

close the golf course to complete the renovation/re-grassing. Missing a portion of the golf season and loss of revenue are reasons commonly cited for not being willing to undertake renovation/re-grassing. All renovation/re-grassing procedures need to be challenged and explored. In addition, we need to undertake a study of the long- and short-term benefits and costs involved in renovation/regrassing and associated golf course closure by those with business expertise in conjunction with turfgrass scientists and superintendents.

- Optimize water use. Managed turfgrass on golf courses needs water. There is a large body of research that provides guidance on how to optimize water applied to turf. Implementation of this research on the irrigation of golf courses has not been embraced to the extent it could be. I'm not sure of the reasons for this, but it would be great for the golf industry to make a major effort to put the available research into practice.
- Fewer trees. The turfgrass scientist and average golfer in me wants fewer trees on golf courses. As a turfgrass scientist, I always consider the needs of the turf first. In any competition between trees and turf, over the long term, the trees win. Hence, fewer trees and better turf in many instances. As an average golfer, too many trees take away any chance of recovery, and recovery shots are one of the really fun and challenging aspects of golf.

What is on your Christmas research wish list? Identifying research needs always is the first place to start when trying to solve a problem.

①



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

The Shop Must-have New Equipment



1 | Cushman Hauler 4×4 utility vehicle series

TEXTRON's Cushman Hauler 4×4 utility vehicle series features a 2,000-pound towing capacity, 1,500-pound payload and 1,000-pound cargo box. The dash includes a multifunction display that communicates vehicle performance and diagnostics. The Hauler 4×4 is available as a three-person vehicle; the Hauler 4×4 Crew accommodates up to six people. Both models are available with either a 50-hp gas engine or a 25-hp diesel engine. Standard features include seat belts, a rollover protection system, high/low-beam headlights, LED brake lights and taillights and a locking rear differential.

Cushman.txtsv.com

2 Outcross 9060

The Outcross 9060 from **TORO** features a weight-balanced chassis and fourwheel steering, coupled with full-time four-wheel drive. All four wheels turn individually at a rate determined by the machine's ground speed and turning angle, ultimately minimizing the possibility of turf damage and allowing the machine to traverse various terrain with ease. To enhance efficiency and productivity, intuitive one-action controls, a utility bed and cruise control come standard on the Outcross 9060.

Toro.com

3 | Multi-tool sharpener

The **ANYSHARP** multi-tool sharpener is a two-in-one sharpener that rejuvenates almost any knife or tool. The first sharpener rejuvenates knives while the second sharpener cleans up, hones and sharpens. AnySharp uses tungsten carbide technology to extend the life of almost any knife and features a full-length guard to protect against accidents. It also comes with a No-Quibble performance guarantee for the operational lifetime of the product. *Anysharpusa.com*

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4 Trillium Intelligent Lithium batteries

With a life expectancy of more than 5,000 cycles, **TROJAN BATTERY CO.**'s Trillium line of Trojan Intelligent Lithium batteries are engineered in the United States and are available in three sizes that can be used in a variety of applications. They were designed to be replacements for existing lead-acid batteries. The built-in battery protection system guards the battery from the extreme demands of various motive and stationary applications.

Trojanbattery.com

5 | Smart Guided GPS | spray system

SiteOne Landscape Supply released the new **LESCO** Smart Guided precision spray system, a GPS-guided system. The LESCO system offers TerraStar GPS satellite technology that allows the system to spray within a 2-inch level of accuracy. It also provides precise control of each separate nozzle to reduce overspray and tracking of when and where certain products are sprayed to simplify documentation and record keeping. The Smart Guided System can connect with most common sprayers and is available now at SiteOne locations.

Siteone.com

6 450DX tractor

STEINER's newest tractor model, the 450DX, includes a 25-hp, air-cooled engine and a single-speed transmission. It provides control on slopes of up to 30 degrees (when equipped with dual tires on front and rear axles). The 450DX features the same oscillating frame, articulated steering, four-wheel drive and Quick Hitch attachment system available on all Steiner 450 tractors. It's capable of handling a wide variety of attachments to help users mow, blow, plow or dig.

Steinertractor.com

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19th Hole with

Jim VanHerwynen

CGCS // South Hills G&CC, Fond du Lac, Wis.





Jim, what can I get you? Budweiser. I call it "The Diesel."

No unleaded for me.

Tell me about your family. I met my wife (Kimm) in the seventh grade. I asked her to every dance in middle school and high school and she said no every time. We were out of high school, and she finally said yes. That was in 1985, and we've been married since 1992.

Mitchell is 20 and going to turf school at UW-Madison, Madelyn is 18 and

So, you and Kimm are empty nesters now! How did that go? It was a tough, emotional weekend... but I have adjusted very quickly.

going to UW-La Crosse for biomedical.

Tell me about South Hills. It's the only private country club in the city. The first nine was built in the 1920s by a couple farmers. It was called Takodah Country Club until the second nine was built in the late 1940s, then it became South Hills Golf and Country Club in 1951.

What teams do you root for? The Green Bay Packers and the Kimberly (Wis.) Papermakers. I went to Kimberly, in the Fox Valley. Back

in the day, we were known for the paper industry. The football team won like 70 games in a row before losing to Fond du Lac this season by a field goal. Their mascot is a paper wasp.

Do you have any hobbies? I'm a train fanatic. I have a model railroad in my basement and I take photos and videos of real trains. It's called "railfanning." Every family vacation we go on, every GIS I go to, I take one day and go look at trains. My dad had a model train set, and I got my first set at age 10. I've been into it ever since.

I've never heard the name VanHerwynen before. Where is it from? My family is 100-percent Dutch,



and 80 percent of my relations live in the Netherlands. Dad moved here as a 32 year old. My mother and her

family got here on a boat through Ellis Island. Back in their homeland there's a town, Herwijnen. The *van* means, "from there." I've visited there twice.

Do you have any fun maintenance tricks you can tell me about? We've devised a drag hose made out of a 5/8ths hydraulic line with no oil in it. We hooked up mountain climbing clamps on both ends. It's 120 feet long, hook it to two carts and it's great for dragging dew or moving clippings. It's not cheap — we just purchased our second one — but the first one lasted 15 to 18 years.

Tell me about your crew. I've got a great crew. We don't have any trouble finding people to work here, I think it's because we are lenient with our schedules. We tell people to take a vacation! That has worked tremendously for us. As interviewed by Seth Jones, Nov. 20, 2018.



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