

FEBRUARY 2019 | [golfcourseindustry.com](http://golfcourseindustry.com)

# GOLF COURSE<sup>®</sup> INDUSTRY

## WHAT HAPPENS AT THE END?

Recently retired superintendents reveal the emotions of leaving the golf course and beginning the next phases of their respective lives.





## A successful season starts with a deeper respect.

Beneath your turf is the most complex biological system on the planet—evolved over millions of years to support the plants. Early this season as your soil warms, microbes within it will spring into action, turning complex carbons and trace elements into bioavailable superfood for your turf.

Most liquid fertilizers contain a few nutrients for feeding your grass. But our Foliars+ sprays are formulated with 30 active ingredients. You get a rich mineral mix to



boost your plant growth. And you get much more: Advanced bioactive humic acids that stimulate the microbial activity within your soil and fortify the ecosystem that supports your turf. Altogether, it gives your turf the legs to start strong and stay strong all season long.

We can offer you a Foliars+ program for your specific soil conditions and goals, so call us at 800-732-8873 for a consultation. Because our products are made with a deeper respect for the work you do.

# Foliars+



Ask us about the EarthWorks Foliars+ 555 Program

## EarthWorks<sup>TM</sup>

A Deeper Respect



## WHAT HAPPENS AT THE END?

Recently retired superintendents reveal the emotions of leaving the golf course and beginning the next phases of their respective lives.

### COLUMNS

- 12 AMERICA'S GREENKEEPER**  
Matthew Wharton: Conference season
- 26 OUTSIDE THE ROPES**  
Tim Moraghan: Practice protocol
- 38 GAME PLAN**  
Henry DeLozier: Protecting against project mythology
- 58 PARTING SHOTS**  
Pat Jones: Beware

### DEPARTMENTS

- 4 TEEING OFF:** Mixing with the masses
- 6 NOTEBOOK:** The times call for change
- 52 TRAVELS WITH TERRY:** Equipment ideas
- 56 CLASSIFIEDS**
- 56 AD INDEX**



### FEATURES

#### Cover Story

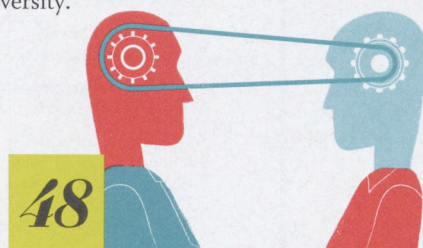
#### 14 WHAT HAPPENS AT THE END?

Recently retired superintendents reveal the emotions of leaving the golf course and beginning the next phases of their respective lives.

#### Industry

#### 28 SMALL SCHOOL, BIG EXPERIENCE

A hands-on turf management program is helping continue the agricultural legacy at a suburban Philadelphia university.



#### Making the Cut

#### 39 MAKING THE CUT PART I: TPC SCOTTSDALE

Big crowds, famous holes and acres of prized turf. An inside look at a trio of unique tournament venues.

#### Management

#### 48 PROJECT MANAGEMENT: MAXIMIZING YOUR TIME AND RESOURCES

Can't decide whether a task requires a contractor or in-house labor? Anthony Williams, CGCS, explains why incorporating both might be a wise decision for your course.





# MIXING WITH THE MASSES

**P**roducing a magazine for turf enthusiasts means benefits can be reaped by interacting with civilian golfers.

So, when I travel for assignments, especially to warm-weather spots in the winter, the sticks often come along. The beginning of our "Making the Cut" series (page 39) required visits to Scottsdale and Jacksonville last month. The series explores unique tournament venues, including TPC Scottsdale and TPC Sawgrass, and the assignment calls for spending entire agronomic workdays at each facility.

Understanding there's much more to this industry than televised golf, I always try to visit a few facilities beyond the courses serving as the primary purpose for a trip. In Scottsdale, for example, I played Mountain Shadows, an 18-hole, par-3 course with architect Forrest Richardson. Following the round and subsequent interviews with Richardson and superintendent Ron Proch, I booked a last-minute tee time and rushed over to Papago Golf Course, a city of Phoenix-owned course opened in 1963, to squeeze in as many holes as possible before dark. I walked to the first tee and an affable retired Chicagoan named Scott asked if I wanted to join him.

We made it through 10 holes. Neither of us kept score. Double bogey or eagle, northerners visiting Arizona are overjoyed to be walking on turf and swinging golf clubs in January. We discussed the courses Scott plays back home and the ones he's experienced while visiting his parents in Phoenix. Walking off the first green, Scott asked me what I do when I'm not playing golf. Cover blown!

As the nine progressed, he asked me agronomic-related questions. I answered them to the best of my ability, thankful nobody with an actual turfgrass management degree was around to overhear the conversation. Playing a wonderful Arizona course with overseeded tees, fairways and greens, and dormant rough, catering to golfers of all levels with a stranger who relishes his time on a course helps somebody immersed in the golf industry see the game through a consumer's eyes. I handed Scott a business card after we completed the 10th hole and explained how anybody – even a regular golfer from Chicago – can access agronomy content for free via our website. I hope he makes the digital journey.

I also hope others immersed in the golf business meet up with a stranger while making a solo trek to the first tee. Sometimes we're so engrossed in the business we forget millions of people experience no greater joy than playing nine or 18 holes. Most golf consumers will never play a tournament-caliber course such as TPC Scottsdale or TPC Sawgrass. They want to hit a few shots, walk a few miles and escape the pressures of their regular lives. They are why thousands of us live comfortable lives and their perspective can help us further enhance the game.

Less than three weeks after visiting Arizona, I headed to Florida, hoping for a similar experience at Jax Beach Golf Club. Heavy rain greeted my arrival, yet I remained steadfast in my desire to play the recently renovated municipal course. I pulled into the empty parking lot and walked toward the pro shop. Rain pelted the paspalum greens; wind whipped the palm trees. I slipped on rain gear and approached the first tee. Nobody else was around.

A rumble originated from above. The World Golf Hall of Fame lurked 30 miles from the tee, according to the GPS. No civilian golfers were spotted inside its walls. **GCI**



*Guy Cipriano*

**Guy Cipriano**  
Senior Editor  
gcipriano@gie.net

## GOLF COURSE INDUSTRY

Vol. 51 No. 2

GIE Media, Inc.  
5811 Canal Road  
Valley View, Ohio 44125  
Phone: 800-456-0707  
Fax: 216-525-0515

**PUBLISHER**  
**Dave Szy**  
dszy@gie.net

**EDITORIAL**  
**Pat Jones**

Editorial Director pjones@gie.net

**Guy Cipriano**  
Senior Editor gcipriano@gie.net

**Terry Buchen**  
Technical Editor at-large

**Bruce Williams**  
Senior Contributing Editor

### GRAPHICS / PRODUCTION

**Jim Blayne**  
Creative Director

**Caitlin McCoy**  
Advertising Production Coordinator

### SALES

**Russell Warner**  
National Account Manager  
rwarner@gie.net • 216-393-0293

**Lucas Coleman**  
Account Manager  
lcoleman@gie.net • 216-393-0223

**Bonnie Velikonya**  
Classified Sales  
bvelikonya@gie.net • 216-393-0291

### CORPORATE

**Richard Foster**  
Chairman

**Chris Foster**  
President and CEO

**Dan Moreland**  
Executive Vice President

**James R. Keefe**  
Executive Vice President

**Christina Warner**  
Audience Development Director

**Michelle Wisniewski**  
Production Manager

**Maria Miller**  
Director, Conferences and Events

**Kelly Antal**  
Accounting Director

**Irene Sweeney**  
Marketing Director

**Kevin Gilbride**  
Business Manager, GIE Ventures

Golf Course Industry is a member of:

Golf Course Superintendents  
Association of America  
National Golf Foundation

Golf Course Builders Association of America  
The Irrigation Association  
Responsible Industry for a Sound Environment







**...with PondHawk®**  
The solar-powered aeration system

Nearly all ponds need management to help keep the habitat, water quality and clarity in a healthy balance. Far too often though, water assets are neglected or treated with chemicals and dyes, which can easily damage the delicate pond ecosystem.

PondHawk is the patented solar-powered aeration system that works without batteries. It is designed for use 365 days a year and requires minimal maintenance.

And because PondHawk is not connected to the electric grid, its operating costs are very low. The innovative design installs quickly, doesn't require a special license and can be situated away from the pond and easily secluded if necessary.

PondHawk is quiet, doesn't require a lot of space and needs no batteries, making it the most ecologically-friendly solution on the market.

**Find out about the new PondHawk  
Lease Program – call 888-755-1950  
or visit [www.LINNEindustries.com](http://www.LINNEindustries.com)**





## THE TIMES CALL FOR CHANGE

The USGA Green Section's director of education identifies innovative trends to consider.

By Pat Jones

One of the highlights of a terrific visit to the Ontario GSA annual conference was spending time with USGA Green Section director of education Adam Moeller and hearing his marvelous presentation on agronomic and course management trends he sees around the country. I won't steal his entire presentation, but here are a few of his key observations:

**Irrigation:** Manage water for playability, not color. He suggests ET-based management vs moisture meters or just "feel."

**Clip Volume:** Moeller says his friend Jared Nemitz of Peninsula Club in Cornelius, N.C., has been weighing clippings from his 10th green to compare weight with factors like green speed, nitrogen use and other nutrient factors. "You should start slowly and look for trends," Moeller says. "If you see big spikes, you've got a problem."

**Data Management:** He's high on the Greenkeeper App, Dr. Bill Kreuser's free "crowd-sourced" tool that uses growing degree days to refine chemical spray programs. It allows superintendents to track products and spending and incorporates the Smith/Kerns disease

forecasting model that many are using.

**MLSN:** The much-discussed philosophy advocated by Dr. Micah Woods and the PACE Turf team is intriguing, Moeller says. "PACE found lots of healthy turf with very low nutrient levels and perhaps we should look at a program that's not designed to maximize turf growth, but to support turf growth," he says. That said, when Moeller asked if any Ontario superintendents in the audience were using MLSN, there were no hands raised.

**Drones:** Valuable tools, but the new rules on their use are strict. "I talked to a number of supers who admitted they failed the new drone regulation test the first time," Moeller says. "It's not easy."

**One last trend:** Regrassing fairways with improved turf types. "It pays for itself," he says. Superintendents can find a regrassing calculator to show the ROI of better fairway turf at the USGA website in the Course Care section.

Final thought from Moeller: "A lot of you are being asked to do more with less. That's just not possible. We can only do less with less."

Pat Jones is GCI's editorial director.

USGA Green Section director of education Adam Moeller.





# INDUSTRY **buzz**

**John Deere** has announced an exclusive agreement to develop autonomous mowing solutions for the golf and sports turf industry with **Precision Makers**, a Netherlands-based company specializing in autonomous technology for various equipment forms. Precision Makers is an affiliate of Dutch Power Company, which has an ongoing supplier relationship with John Deere.

**SeeGrow** and **AQUA-AID Solutions** announced a partnership offering North American golf markets patented LED growing systems. The SeeGrow Lighting Systems utilize LED technology along with a CO<sub>2</sub> process to create a healthy microclimate for turfgrass. The covered lighting systems are a combination of light, heat, CO<sub>2</sub>, H<sub>2</sub>O and acoustic booster enabling all day growth to quickly repair and restore shaded areas.

**PBI-Gordon** announced the **EPA approved federal registration for Vexis Herbicide Granular**. It will be available for sale in mid-2019. Based on a new proprietary active ingredient, Pyrimisulfan, Vexis is **the result of an exclusive partnership** between PBI-Gordon, Kumiai Chemical Industry Co., Ltd. and their US subsidiary **K-I Chemical U.S.A Inc.** Vexis is formulated for use on tees, fairways and rough.

**UPL** has changed the name of its North American operation from United Phosphorus, Inc., to **UPL NA Inc.** effective Jan. 1, 2019. "The new UPL brand name for the North America business **more accurately reflects the global corporate identity**" says Manish Sirohi, director, strategy and innovation. "The change aligns our business with our corporate parent and their subsidiaries around the world."



## ***Vietnamese Course Develops Innovative Training Program***

In preparation for its opening in 2019, Hoiana Shores Golf Club has secured a long-term pipeline of trained staff through its investment in the Quang Nam-based Golf Operations and Maintenance Vocational College, the first such golf-specific enterprise in Asia.

The first graduating class of maintenance staffers joined the grounds crew at Hoiana Shores last month. All students are guaranteed employment at the course.

Hoiana Shores, designed by Robert Trent Jones II, will "soft open" this summer with a grand opening

## **Tartan Talks No. 31**

Mike Gogel isn't afraid to work in the dirt – or on turf.



Hailing from a Midwest golf family, Gogel has successfully transitioned from golf course construction to architecture, an accomplishment he proudly discusses on a Tartan Talks podcast. Gogel worked alongside Tripp Davis and John Fought before moving forward with his own firm, Mike Gogel Golf Design, in 2012. "I'm a one-man band," Gogel says. "Every project is meaningful and that allows me to be more hands-on."

A pair of projects with deep personal meaning for Gogel will enter the spotlight this year. The Jayhawk Club, a collaborative effort with this brother, Matt Gogel, a former PGA Tour player and Golf Channel commentator, will reopen this spring after an extensive renovation. Formerly called Almavara Country Club, The Jayhawk Club is the home course for the University of Kansas, men's and women's golf teams. Matt is a former Kansas golf standout and Gogel's parents play the bulk of their golf in Lawrence, Kan.

Then, in September, the Sanderson Farms Championship at Country Club of Jackson (Miss.), a course Gogel helped renovate, moves to a more favorable date on the PGA Tour schedule. Volunteering on superintendent Stanley Reedy's tournament agronomy team represents one of Gogel's annual highlights. "It's a great opportunity to be involved in the event," Gogel says.

Enter <https://goo.gl/qTyvGX> into your web browser to hear the podcast.





scheduled for late 2019. Since his 2007 arrival in Vietnam, Hoiana Shores vice president of golf & residential development Ben Styles has witnessed the country's golf development boom. Labor, staff and training have been persistent issues throughout his tenure.

"This problem isn't particular to Vietnam. We've all seen how golf courses across Southeast Asia open in a certain condition, with certain agronomic and hospitality standards, only to abandon those standards over time," Styles says. "That's a result of staff not being trained up properly by the time the original superintendent, director of golf or the original general manager moves on."

The Golf Operations and Maintenance Vocational College is part of HOIANA-Quang Nam Vocational Training Centre, located in Duy Phuoc district. According to Styles, Hoiana



Shores has so far spent more than \$300,000 rehabbing and outfitting the college.

The first class of 24 students arrived in October 2018, in the course maintenance curriculum. They will transition directly to their work at the golf property, where the grassing is underway.

Hoiana Shores superintendent Rob Weiks is the turf expert who supplied an international-standard syllabus for the course maintenance curriculum at GOMVC. His HSGC colleague, director of golf Kelly Nguyen, did likewise on the caddie and operations front.

Each graduate will receive the first accredited degrees for golf operations and maintenance in Vietnam.

"Without those degrees accredited by the Vietnamese government, golf course workers in Vietnam are not recognized as professionals with legitimate wage-earning positions," Styles says. "That may sound like a bureaucratic fine point, but it's not. Right now, golf course workers are not so recognized, by the government, and so they cannot do things like go and get a bank loan, for example. This accreditation is a huge development for VN nationals who work in the golf business."

# Course Clean-Up Just Got Easier!

**From parking lots to cart paths, areas around the clubhouse and course clean-up, Billy Goat® has your complete solution!**



**NEW!**

**HURRICANE**



X3000: 6500 CFM;  
627cc Vanguard® V-Twin

Z3000: 8500 CFM;  
993cc Vanguard® V-Twin

For more information contact your Billy Goat representative or call

**1-800-776-7690**

or visit [www.billygoat.com](http://www.billygoat.com)

POWERED BY  
**VANGUARD**

**Take the chore out of the chore with Billy Goat!**

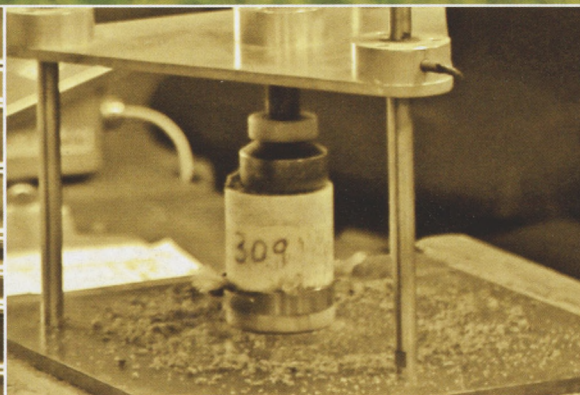
**[www.billygoat.com](http://www.billygoat.com)**



# SUPPORTING SUPERINTENDENTS, BUILDERS AND ARCHITECTS WITH TIMELY TESTING AND HELPFUL DATA FOR OVER 20 YEARS.

Testing programs for maintenance,  
renovation and construction.  
Our services provide insight and  
guidance for:

- Bunkers
- Greens
- Rootzone Mixes
- Topdress Sands
- Fairway Capping
- and much more



Turf & Soil Diagnostics

Contact us at 855-769-4231 or  
Visit our website at [www.turfdiag.com](http://www.turfdiag.com)



# USGA HONORS HUCK

**T**he USGA named Mike Huck, a turfgrass and irrigation specialist from Orange County, Calif., as the recipient of its 2019 Green Section Award.

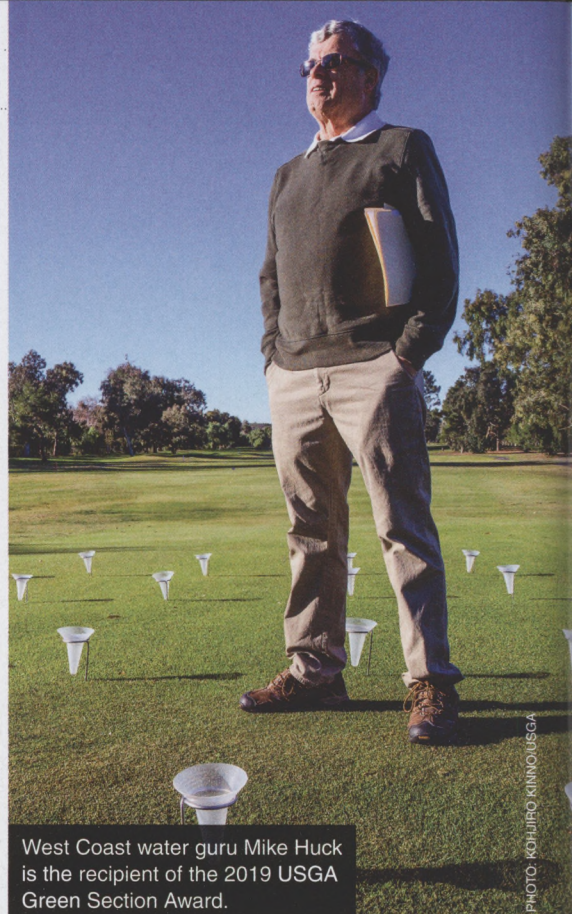
Currently a principal at Irrigation and Turfgrass Services in Southern California, Huck is widely recognized as a visionary in water conservation and water use efficiency. He has authored nearly 50 articles and continues to share news and insights on water regulations, supply issues, and the future of golf course

irrigation to a worldwide audience. He also regularly works with regulators, golf facilities and allied associations on developing best practices and policies.

"Mike's continued dedication to elevating the topic of water conservation in golf and advocating for education and dialogue has benefited courses across North America and the world," says Dr. Kimberly Erusha, USGA Green Section managing director. "His innovative approach, matched with his

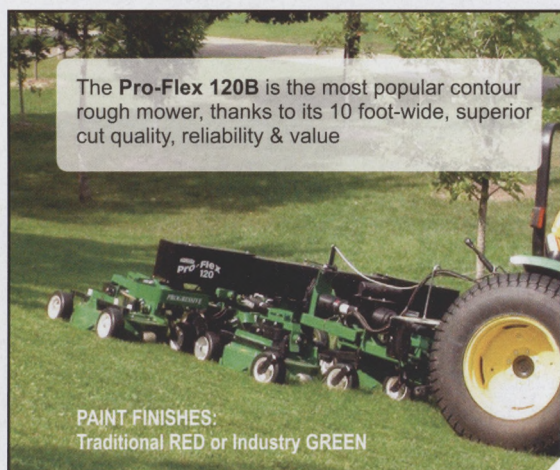
ability to communicate very complex science in a relatable way, has provided game-changing leadership that helps golf courses and communities."

Huck has more than 40 years of experience in the golf industry, including 12 years as a golf course superintendent and six years as a regional agronomist for the USGA. His expertise lies in irrigation water quality assessment, saline and recycled water management, irrigation system auditing, and sprinkler uniformity.



West Coast water guru Mike Huck is the recipient of the 2019 USGA Green Section Award.

PHOTO: KOJIRO KINNO/USGA



The **Pro-Flex 120B** is the most popular contour rough mower, thanks to its 10 foot-wide, superior cut quality, reliability & value

PAINT FINISHES:  
Traditional RED or Industry GREEN



**NEW!** The **Pro-Roll 10** and **15** are wide area contour rollers featuring easily removed solid ballast on each roller. This permits consistent compaction, between 5.8 and 11.6psi per roller assembly, regardless of the terrain

## The Progressive Turf Equipment **ADVANTAGE** We Can Handle Your Contours!

It is all about getting the job done, on flat or contoured turf, quickly and efficiently with a finish that you'll be proud of.

The simplicity and low operating cost of a utility tractor and a **Pro-Flex 120B** or a **Pro-Roll** is a key advantage.

- **Pro-Flex 120B** has 5 independent 27" mower decks
- **Pro-Roll 10** has 5 independent rollers across 10'8" width
- **Pro-Roll 15** has 7 independent rollers spanning 15 feet

**PROGRESSIVE**  
TURF EQUIPMENT INC.

*The Better Built Choice.™*

(800) 668-8873

(519) 527-1080

fax: (519) 527-2275

[www.progressiveturfequip.com](http://www.progressiveturfequip.com)

[info@progressiveturfequip.com](mailto:info@progressiveturfequip.com)

For over 30 years, professionals worldwide have relied on Progressive mowers. Find out why a Progressive mower is... The Better Built Choice.™

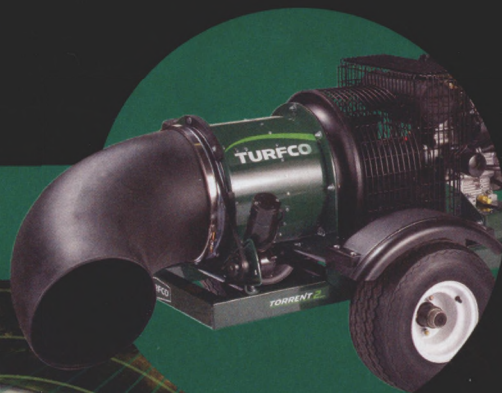


# Time. Our greatest invention.

Creating a perfectly breathtaking course requires your passion and knowledge. It also takes something you don't always have: Time. At Turfco, we're always looking for ways to free-up your time. Ways like saving up to two hours per day with the Torrent 2 Debris Blower. Reducing up to 720 passes on your greens per year with the WideSpin Topdresser. And seeding more quickly to achieve better results with the TriWave Overseeder. We bring innovative technologies that improve performance, while giving you back what matters most. Your day.

It's worth your time to see the difference. Schedule your demo today at [www.turfco.com](http://www.turfco.com) or call 800.679.8201

## Torrent<sup>™</sup>2 DEBRIS BLOWER



## WideSpin<sup>™</sup> 1550 BROADCAST TOPDRESSER



## TriWave<sup>™</sup> 45 45-INCH OVERSEEDER



Schedule your demo today at [www.turfco.com](http://www.turfco.com) or call 800.679.8201



THE LEADER.





## Conference Season

Growing up I was a fan of “Looney Tunes.” Bugs Bunny, Daffy Duck, Porky Pig, Elmer Fudd and Yosemite Sam just to name a few. There was one skit where Elmer Fudd would be rabbit hunting and Bugs would try to convince him it was duck season and it was unlawful to shoot a rabbit out of season. Bugs and Daffy would always square off with their classic back-and-forth, “rabbit season, duck season, rabbit season, duck season, duck season, rabbit season ...” Sorry, I digress. What I really want to discuss is conference season.

I believe one of the greatest aspects to the golf course superintendent profession is the ever-present yearning for knowledge and improvement. My late grandfather once told me, “Matt, there is no such thing as too much education.” He was right, and when the golf season finally ends for those of us not working in Florida, we can turn our attention to continuing education and turfgrass conferences. Have you ever bothered to look in the back of industry publications during the winter months at the list of events available to us conducted by state and regional chapters, turfgrass associations and others?

Each conference or expo contains a plethora of opportunities to broaden our horizons, sharpen our minds and accrue valuable pesticide recertification points. It's also a great chance to step away, and share experiences and swap ideas with our peers, expand our networks and just catch our collective breath. For me, things start a little earlier than most as the Carolinas GCSA Conference and

“  
I encourage you to attend and make the most of the entire experience. Attend seminars, free sessions and talk to people.”

Show is always the third week of November. But we're not alone as the Rocky Mountain and Inland Empire GCSAs also conducted events in November last year.

This conference season I'm attending three events. I just returned from my second journey across the pond to attend the BIGGA Turf Management Exposition (BTME) in Harrogate, England. If you get the chance, I would highly recommend going. The educational offerings presented by BIGGA, which they call “Continue to Learn,” in conjunction with the trade show component of the expo is fabulous. Harrogate is a wonderful, old town that has reinvented itself as a convention destination. Wonderful food, drink and shops all within an easy, short walk of the convention center. And you can't beat the friendly and welcoming atmosphere displayed by all.

But like every good sports season, we need a special event to wrap things up. The Super Bowl of industry events is GCSAA's Golf Industry Show

and this year it just happened to be in sunny San Diego, Calif. I first attended the GCSAA Conference and Show (forerunner to GIS) while a graduate student at Virginia Tech in 1999. I was

overwhelmed by the sheer size and scope of it all. I became a golf course superintendent in the spring of 2002 when I was hired by Swan Point Yacht & Country Club in Issue, Md.,

and I couldn't wait to attend the Conference and Show again. I made the 2003 event in Atlanta, the first of what is now 17 straight events, including this month's show in California.

Over those past 17 years, I've traveled alone, with my wife, and sometimes the kids joined us in Orlando. I look forward to GIS for many reasons, obviously the continuing education but also reuniting with friends and colleagues. Each destination has something different to offer and we always try to make time to experience the culture in some fashion.

And if you weren't fortunate enough to make it to GIS this year, don't fret. There are more opportunities available this month and next. Several chapters, including our good friends and neighbors to the north (the Canadian Golf Superintendents Association) are having conferences and events. My advice to you is the same for GIS. I encourage you to attend and make the most of the entire experience. Attend seminars, free sessions and talk to people. Sometimes the best lessons are the ones that happen during casual conversations whether it be during a seminar break, over a cold beverage or even in the airport on the way home. And keep your eyes open on the trade show floors for something different. Enjoy yourself, because after a year like 2018, you deserve it. But also remember to be professional and courteous. It's OK to have fun, but be respectful of others and, most importantly, yourself.

That's all folks! **GCI**



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



A man wearing a checkered cap and a quilted vest is seen from the back, looking out over a golf course. The sky is filled with dramatic, golden clouds from a setting or rising sun. In the distance, a golf flag is visible on a green, highlighted by a yellow rectangular box.

**Champion performance  
in every season.**

[www.barusa.com](http://www.barusa.com)

 **BARENBRUG**







# WHAT HAPPENS AT THE END?

Recently retired superintendents reveal the emotions of leaving the golf course and beginning the next phases of their respective lives.

By **Trent Bouts**

**T**oward the end, Ken Mangum ever-so-politely let one member have it. Turns out there is only so much even the best-of-the-best can take and one more complaint becomes that one too many. “Mr. (name omitted),” Mangum smiled, “I’m not sure I am capable of providing the kind of conditions required in order to make you a good golfer.”

Maybe it was Mangum’s benign tone or that soft smile as he spoke, but the member needed a few seconds before realizing his golf course superintendent was taking a verbal swing. “My patience was wearing thin the closer I got to finishing up,” says Mangum who, in 2015, left Atlanta Athletic Club after 27 years decorated with two PGA Championships, a U.S. Women’s Open and a U.S. Amateur.

“I was ready to go,” he says of what was then billed as his retirement, at age 62. “I got tired, and I got tired of the rat race. Things started bothering me that didn’t bother me before. My tolerance of imperfection just got smaller and smaller. And I could tell, that wasn’t good for my health.”

Others, indeed, quite a few of them, are expected to follow soon as a generation of baby boomers, who rode the crest of golf’s greatest wave, reach retirement age. Other recent notable departures include the likes of Matt Shaffer from Merion Golf Club in Pennsylvania and David Stone from The Honors Course in Tennessee. Dean Graves from Chevy Chase Club and Mark Kuhns from Baltusrol Golf Club announced they will retire later this year.

Some expect the exodus over the next few years to be significant, leading to the first real flush of opportunity for a younger generation, largely stonewalled since the Great Recession. With veteran superintendents signing off, there’s a sense the upward shuffle will be audible from munis to major venues.

As to be expected of one who nurtured many nascent careers, Mangum wishes the best for that rising talent. But he also offers a word of caution. “I use the analogy to a ladder,” he says. “It’s easier on the way up than it is on the way down. You have to be more careful, because there’s so many things involved.” Planning for that descent



can never start too early.

Like skydiving, the key is less in making the jump than it is in packing your chute properly before take-off. "I don't think people think about that a lot," Mangum says of superintendents in general. "When do you end your career? When do you take Social Security? Do you continue to work part time? What's next?"

And, as far too many superintendents learn, you don't always get to choose when you jump. Sometimes, you're pushed, ready or not.

### SEEING THE STIMPMETER ON THE WALL

Just four miles from the Athletic Club down Abbotts Bridge Road at The Standard Club in Johns Creek, Mike Brown saw the writing on the social media wall. After nearly 15 years maintaining bentgrass greens in the central Georgia heat, Brown found himself in the firing line over green speeds.

"You do have those five or eight or 10 members who start talking about you, on social media and in emails and there's a snowball effect," he says. "If you're on the wrong side of it, it's inevitable you're either going to get fired ... or you can leave before that happens."

For Brown, the beginning of the

end came when one disgruntled member purchased a stimpmeter and began actively contesting the superintendent's numbers. "One Saturday morning while we were slammed, I had the golf committee chairman and the golf pro go down to a green and stimp it with me," he says, "just so I could have a rebuttal to these crazy emails."

Despite entreaties to stay, from club officials and some members, Brown, a Georgia GCSA past-president, quit in December. He left the profession too, even though he loves it. "I still think it's an awesome way to make a living," he says. "As tough as it is and the stress you put yourself under, there's still a lot of people out there working a lot harder and for less money."

"But I'm getting close to 50 and you wonder, 'What if I lose my job in a few years? Who's going to hire me at 54?' You realize, when there's a qualified guy at 35 – and I was 34 when I started here – then you give the job to the 35-year-old who's eager and ambitious over the guy who's 54. It makes you start thinking, 'What kind of business can I own so that I can retire when I want to retire?'"

Now pursuing a franchise opportunity, Brown is a textbook example of why younger superintendents should listen when Mangum says: "Don't

stay too long. Because one of two things happen, you get tired of them, or they get tired of you. So, I tell people, try to move when you're about 50. Because then you've got a chance of staying until the end."

That's not always an easy move. Invariably, as Mangum says, superintendents around that age are settled at their facility: "Almost to the point where you've got it on auto-pilot." Beyond work, they are also likely to have in place an established social network and a comfortable rhythm to life. They might have adult children in the area too, maybe even grandkids.

They were factors Mangum considered when he started "looking around" after the 2001 PGA Championship. He'd been told by good men he trusted, including GCSAA past-president Randy Nichols, CGCS, and another Georgia GCSA past-president Bill Womac, CGCS, that 50 was the magic number. After long and successful stints at high-end facilities, each was let go unexpectedly. "Both said they stayed too long," Mangum says.

In the end, Mangum stayed at the Athletic Club until, well, the end. There were several opportunities to go elsewhere, but "nothing really clicked" and with a second PGA Championship coming in 2011, there was good reason, not to ignore but rather, not to act upon the advice he'd received, and still recommends, about moving on at 50.

"I was ready to go. I got tired, and I got tired of the rat race. Things started bothering me that didn't bother me before. My tolerance of imperfection just got smaller and smaller. And I could tell, that wasn't good for my health."

— Ken Mangum



Ken Mangum retired from Atlanta Athletic Club in 2015 following a distinguished career.



# ~~SERV~~ Conversation Starter.






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

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

To learn more about Zipline powered by AquaVita Technology visit:  
**[Aquatrols.com/Zipline](http://Aquatrols.com/Zipline)**



**INNOVATE. IMPROVE. INSPIRE.**

[aquatrols.com](http://aquatrols.com) |   



**Remember When  
You Were Just  
Responsible for  
the Quality and  
Playability of the  
Course?**

**... Neither Do We**

**Introducing....**

**Beloukha®**

Safe Alternative for  
Weed and Moss  
Control on Cart Paths,  
Around Trees and  
Landscape Beds

**ReLoad™**  
Fungicide

Effective and  
Preventative Disease  
Control Against  
Pythium Blight and  
Anthracnose

2751 Centerville Road  
Suite 100  
Wilmington, DE 19808  
Phone: 855-445-7990  
www.belchimusa.com  
info.usa@belchim.com



After 15 years of maintaining bentgrass greens in central Georgia, Mike Brown left the industry at the end of last year.

**EXPLORING LIFE OUTSIDE  
OF TURF**

In Florida, Tom Alex invested nearly 34 years at Grand Cypress Golf Club in Orlando, then in 2017 at age 57 he retired, at least from being a superintendent. "Not because I disliked being a superintendent, but because I wanted to see if I could do something else," he says. Alex spent several years up to that point, "haunted" by the question of whether he wanted to be a superintendent his entire working life.

Today, he is everything from part-owner to "gopher" at Alex Custom Building, a new home construction and remodeling business, in partnership with his son. While the business is a start-up in an entirely different field – and Alex's wife accuses him of "working more hours than ever" – this was no jump from an airplane nor a blind step down Mangum's ladder.

"At 22, my mother – God love her – introduced me to this thing called an IRA," Alex says. "I've been putting money in ever since." Grand Cypress also had a retirement program, so Alex's parachute was well-packed. Still, it might seem that golf turf and roof trusses are poles apart, and therefore something of a risk. But Alex says the skills of a superintendent are eminently transferrable, and a bridge to a range of alternative careers.

"Your typical successful superintendent is a classic Type A personality who says give me a job to do, then get out of my way and I'll figure out how to go get it done," he says. "You learn to be resourceful because there's so much you have to figure out as you go. Today, I'm managing people, I'm managing contractors, I'm doing some governmental work with permitting, I'm getting a bid ready, I'm ordering materials... sounds just like what I was doing as a superintendent."

The key to a successful transition, or retirement, Alex says, is more than financial security. "People do need to have a very honest conversation about how much they will need to live on," he says. "But they also need the vision to figure out the what, where, when and how as it relates to what they're going to do with their time. One of the things that scared me was that I had some friends who retired and got a little bored."

That fear hasn't dissipated in his new career. He currently has projects in two different 55-and-older communities. "And I'm looking at some of the people in there and I'm going, 'Ooooh. These people just don't have much to do. A lot of people, once they retire, they sit in a chair and watch TV. That would kill anybody ... especially with what's on TV these days!'"

Alex hasn't given up golf course life completely. He squeezes in some consulting work and makes the effort to attend



# A HALO OF PROTECTION

## RAPID MOBILITY

- Xylem and translaminar movement
- Rainfast in 15 minutes

## DISEASE CONTROL

- Brown patch
- Fairy ring
- Summer patch & more

## PLANT HEALTH

- Root mass
- Root length
- Consistent chlorophyll production

**Discover how Fame<sup>®</sup> brand fungicides deliver complete disease control in and around treated areas at [FMCProSolutions.com](http://FMCProSolutions.com)**



# Tekken™

Broad Spectrum Fungicide



## ANTHRACNOSE DOLLAR SPOT BROWN PATCH

## KNOCK 'EM ALL OUT

With One Punch  
And One Rate.

Central Florida GCSA meetings. Yes, he wants to stay in touch with the work and the people, but also, to some degree, he also wants to stay in touch with the Tom Alex he was for so long.



Alex

about bringing you back down to earth.”

But in his post-superintendent life, Mangum made a deliberate decision to parlay the standing he'd built over the best part of four decades

in the profession, and now works as national sales manager for Brandt, overseeing the company's turf business. He makes no secret of the fact that the opportunity grew out of two enduring friendships in the industry, with Gary Grigg, CGSC, and Bruce Williams, CGCS, both key figures in the company, and past-presidents of GCSAA.

“I thought about that, no question,” he says. “I still have my fingers in it a little bit. Because that was my identity, or half of my identity. I have what I call a golf life and a personal life. Some of it intertwines and some of it doesn't. I didn't want it to be abrupt, you know, ‘Boomp! You're done.’ I wanted to remain relevant a little bit longer, to help in this transition some. And, hopefully, to give back a little bit more too.”

### STAYING IN THE INDUSTRY

Mangum thought about that sense of self, too. “Just like it is for a football player, or anybody really, whenever you stop doing what you did that brought you whatever notoriety you had, there's a void to fill,” he says.

He tells of an elevator encounter at a GCSAA conference years ago with his then very young daughters. Spying name tags, someone asked if they were related to the Ken Mangum. The girls nodded, and the questioner carried on effusively about how much of an icon this Ken Mangum was. “They listened and there was this pause and then they said: ‘Yeah, but he's just our dad,’” Mangum laughs. “Talk

about bringing you back down to earth.”

“It certainly helps if you can develop something within the turf industry where your previous accomplishments will be recognized,” Mangum says. Gold stars on the résumé only go so far, though. People tend to remember how you got them.

“What's the old expression,” Mangum says. “Don't wait until you need someone to be nice to them. All along, I tried to keep good industry contacts. I tried to be helpful to distributors and manufacturers, working with prototype equipment and trying new products. I wasn't able to buy from everybody, but I would give you the time of day, and if you had an appointment, I saw you. I tried to treat people with respect.”

Matt Shaffer, who spent the last 15 years of his career at Merion Golf Club in Ardmore, Pa., hosting a U.S. Amateur and a U.S. Open, is another who changed lanes



rather than come to a dead stop. Afraid of boredom once he stepped away, Shaffer stuck not one toe but a whole foot-full in alternative waters. Today, nearly two years after retiring at age 65, he has involvement with or an ownership stake in OnLink, BioBoost, Anuvia Plant Nutrients and Minimalistic Agronomic Techniques.

"I thought I was going to get bored," he laughs. "It's hard to go from 80 hours a week, six days a week. Some days I'd go to church and then go right back to work. You just don't go from 90 mph to zero."

Shaffer is quick to point out that, despite his slate of new business interests, he is traveling at a significantly slower speed these days. He and his wife paid off all their debt then mapped out a budget, determining what income they needed to bridge the five years between his retirement and tapping into investments. He then negotiated employment arrangements, such as a brand ambassadorship, that also leave enough free time for bass fishing on Lake Okeechobee in Florida.

"The other day, somebody asked me to define retirement and I think I've figured it out," he says. "What I used to do in an hour, I can now justify as my accomplishment for a day. I've gotten really good at sitting in a boat or sitting around the pool and just talking to my wife about nothing. I'm really adept at reading 131 books in one year. The things I never had time for in my life before, I have time for now."

Someone else asked Shaffer if he missed being a golf course superintendent. He

replied: "Holy cats, no! It's funny because it was my cocaine, man. I had to have it every day. But now I'm away from it, I don't miss it. Being a golf course superintendent is such a difficult job, you can't really put it into words, plus there's really no job security. You're vulnerable at all times. You have one failure and you can be gone. You have that anvil hanging over you the whole time. It's a hard job, really hard."

"The superintendents we called on were really struggling. You could see it in their faces," Shaffer says. "We got back in the car at one point and I said, 'Man, did I ever look that bad?' John turned to me and said, 'Brother, you never looked that good!'"



#### IMPORTANCE OF PLAN B

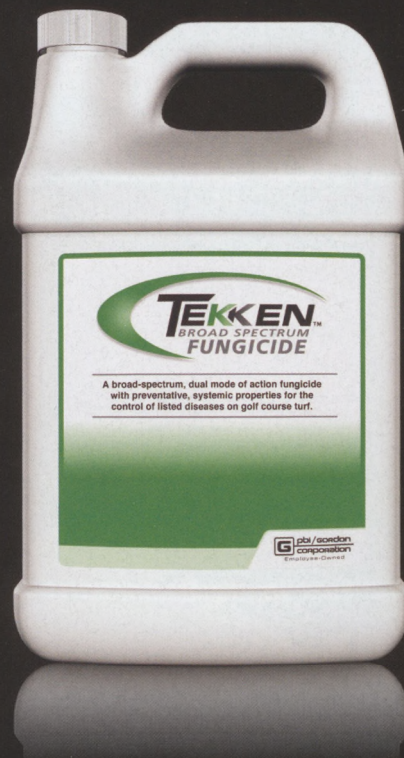
If the golf course was a drug – albeit metaphorically – for Shaffer, it is closer to lifeblood for some. In November 2017, at age 69, Larry Hergott, CGCS, retired from Quail Run Golf Course in Columbus, Nebraska. He'd been there since the course opened in 1991.

Of retirement, he says, "It's tough." And what's toughest about it, he adds, frankly, is: "Retirement! I miss the golf course most. I was on three over my career (of nearly 40 years), and this one here, well, I was here at the beginning. I planted all the trees, everything. That was fun, I enjoyed it. It was really my golf course."

Hergott admits his affinity for tees, fairways and greens may be amplified by the fact he is "not a people person."

# 28 DAYS 21 DISEASES 1 RATE

**Tekken™ Broad Spectrum Fungicide** from PBI-Gordon uses two modes of action to deliver dependable control of 21 diseases, including anthracnose, dollar spot, and brown patch. The patent-pending formulation increases turf quality while reducing the risk of turf damage compared to stand-alone DMI applications, and Tekken controls listed diseases for up to 28 days with the same rate, eliminating the guesswork.



PBIGordonTurf.com

**PBI / GORDON**  
CORPORATION  
Employee-Owned

Always read and follow label directions. Tekken™ is a trademark of PBI-Gordon Corp. 11/18 05536



# WIN — THE — WAR

**Pinpoint®**  **Traction™**  
FUNGICIDE | FUNGICIDE

## DOLLAR SPOT DESTRUCTION

Stay in command of dollar spot, even SDHI resistant, with Nufarm-exclusive Pinpoint and Traction – the must-have MOAs in your fungicide rotation.

[ [NUFARMINSIDER.COM](http://NUFARMINSIDER.COM) ]



**Nufarm**  
Grow a better tomorrow

©2019 Nufarm. Traction™ is a trademark of Nufarm.  
Pinpoint® is a trademark of Valent U.S.A. LLC.

But he is hardly alone in his attachment to the property. Mangum recalls Randy Nichols and Bill Womac telling him how much they truly loved where they worked.

“And that may be the downfall of a lot of us as superintendents,” Mangum says. “When you stop and think about the whole thing, that’s probably a big part of our problem, we do fall in love.” So, breaking up becomes hard to do – at least for the superintendent.

Indeed, Hergott had no intention of retiring if health issues hadn’t intervened. “I really kind of needed to get out,” he says. “There were things I couldn’t do anymore because of memory loss, that kind of thing. It was hard in the meetings when you couldn’t remember what you were going to say. So, that’s the reason I retired. Otherwise I’d still be there.”

What happened to Hergott underlines Brown’s conviction that, “Everybody should have a plan B.” “There are a lot of good people smarter than I am who were forced into retirement or lost their jobs, but not because of any mistake they made,” he says. “It might be because some member or members think they know more than you or think that maybe you’ve been there long enough. It could be a host of things.”

One form of insurance a superintendent can “buy” in a job that rarely comes with guarantees, Brown says, is to “get a feel for the club.” “You really ought to meet with your controller or your general manager if you want to have any sense of security,” he says. “And if the numbers of the

club are going down consistently over a six- or seven-year period, that should be a red flag. If you’re passionate about it, maybe you keep doing it. But you need to keep your eyes open and have a plan B, because you never know what’s going to happen, and in a lot of cases it does happen.”

## THE IDEAL ENDING

Occasionally, though, the stars align.

At Oswego Lake Country Club in Lake Oswego, Oregon, Bob Senseman, CGCS was sitting in his office when a member, who was also a longtime friend and mentor, called by. The club had just completed a major tree removal project, that, with a series of permitting hurdles, dragged out over three years. There was a bunker rebuild along the way as well.

“The older I got, I saw my stress levels getting out of control,” he says. “It had gotten to a point where the enjoyment wasn’t what it used to be. Labor shortages, member expectations, budget limitations, instant criticism on social media, having to educate new green committees and employees over and over and over ... I’d reached a point where I felt ill-equipped to react and adjust to those situations.”

The mentor told Senseman that stress was visible. “He talked about how, with one bad season, all that might be lost,” Senseman says. “I thought about that.” It was a timely conversation. The truth was that Senseman, a past-president of the Oregon GCSA and Hall of Famer, had



# TASK EFFICIENCIES | EQUIPMENT DIAGNOSTICS | LABOR MANAGEMENT

## REAL-TIME, REMOTE DIAGNOSTICS & REPORTING

Jeff Martins

Greensmaster 3120 #4

ASSET

Greens Mowing

TASK

Hole 6

LOCATION

00:02:19

TIME IN AREA

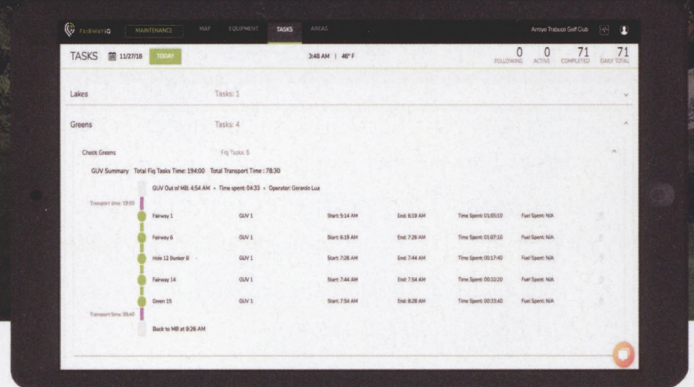
-00:05:31

BENCHMARK

☆

i

📍



Task	Employee Name	Amount	Avg Est Hours	Avg Act. Hours	Avg Hour Diff	Total Est	Total Act	Total Diff
<b>Mow Collars / Approaches</b>								
	Terry Alford	1	4	6.99	2.99	\$ 40.00	\$ 69.90	\$ 29.90
			4	6.99	2.99	\$ 40.00	\$ 69.90	\$ 29.90
<b>Mow Fairways</b>								
	Jason Fischer	1	4	6.95	2.95	\$ 44.00	\$ 76.45	\$ 32.45
	Daryl Odom	1	4	3.14	-0.86	\$ 40.00	\$ 31.40	\$ (8.60)
	Stacy Doherty	1	5.5	2.9	-2.6	\$ 71.78	\$ 37.85	\$ (33.93)
	Leroy Woodward	1	4	3.46	-0.54	\$ 55.12	\$ 47.68	\$ (29.76)
			4.38	4.11	-0.26	\$ 210.90	\$ 193.37	\$ (39.84)
<b>Mow Greens (Triplex)</b>								
	Ty Matthews	1	4	3.71	-0.29	\$ 40.00	\$ 37.10	\$ (2.90)
			4	3.71	-0.29	\$ 40.00	\$ 37.10	\$ (2.90)
<b>Mow Rough (4500)</b>								
	Isaak Hopkins	1	8	7.62	-0.38	\$ 80.00	\$ 76.20	\$ (3.80)
			8	7.62	-0.38	\$ 80.00	\$ 76.20	\$ (3.80)
<b>Mow Tees</b>								
	Michael Ratliff	1	5.5	4.99	-0.51	\$ 60.50	\$ 54.89	\$ (5.61)
	Justine Laing	1	4	3.46	-0.54	\$ 40.00	\$ 34.60	\$ (5.40)
			4.75	4.23	-0.53	\$ 100.50	\$ 89.49	\$ (11.01)
<b>Set Up (Detail)</b>								
	Steve Vasquez	1	4	1.07	-2.93	\$ 40.00	\$ 0.50	\$ (39.50)
	Cillian Davis	1	4	0.05	-3.95	\$ 40.00	\$ 0.50	\$ (39.50)
			4	0.56	-3.44	\$ 40.00	\$ 0.50	\$ (39.50)
<b>Spray</b>								
	Tyler Partridge	1	4	2.33	-1.67	\$ 52.84	\$ 30.78	\$ (22.06)
			4	2.33	-1.67	\$ 52.84	\$ 30.78	\$ (22.06)
<b>Grand Totals</b>						\$ 564.24	\$ 497.34	\$ (89.22)



# EliteiQ.

From Break Room to Board Room

[www.fairwayiq.com/eliteiq](http://www.fairwayiq.com/eliteiq)



been ruminating over retirement for several years.

"I mean I was 64 years old and people were asking, 'Hey Bob, when are you going to retire?'" he says. "It wasn't because I was screwing up the

place. It was just that, at my age, it was a very natural question."

A subsequent meeting between Senseman, the mentor and the club's general manager, "hammered out" a retirement package, exit strategy and re-

placement plan. By the time he did retire, Senseman was almost 66. He'd helped the club in the search for his successor and even spent a month showing the new guy the ropes before signing off. The transition

could hardly have gone smoother for all involved.

But nearly a year later, Senseman opens his eyes some mornings and wonders. "Some days I wish I'd continued on," he says. "But I think it was a smart move. I had an offer to retire and it was right for me. The

members were very helpful, the board was very supportive. I left on very good terms."

Still...

"There are a lot of times when I flat out miss the day-in day-out of being on a golf course," he says. "You miss the day-to-day interaction with coworkers. There's also the identity part you have to adjust to. Being a superintendent was all I ever wanted to do and that was my entire focus for 40 years. Once you stop doing that ... I think that's been an adjustment for sure. But I feel OK with it. It's a young man's game." **GCI**

*Trent Bouts is a Greer, S.C.,-based writer and frequent GCI contributor.*

**H** "The other day, somebody asked me to define retirement and I think I've figured it out. What I used to do in an hour, I can now justify as my accomplishment for a day. I've gotten really good at sitting in a boat or sitting around the pool and just talking to my wife about nothing. I'm really adept at reading 131 books in one year. The things I never had time for in my life before, I have time for now."

— Matt Shaffer

## Time Machine:

WideSpin™ 1550 Broadcast Topdresser

### Giving hours back to your day.

Turfco redefines how maintenance equipment can save time while improving results. With edge-to-edge coverage, the WideSpin Topdresser could save up to 720 greens passes per year. Plus, the savable presets ensure your preferred application every time.

**WideSpin 1550**  
BROADCAST TOPDRESSER



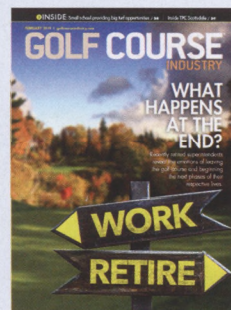
It's worth your time to see the difference.  
Schedule your demo today at  
[www.turfco.com](http://www.turfco.com) or call 800.679.8201



## Were You Featured In This Issue?

Reprints enable you to reuse your article and simply place it into the hands of your target audience. Having been featured in a well-respected publication adds the credibility of a third-party endorsement to your message.

Give yourself a competitive advantage with reprints. Contact us for more information regarding reprints and additional applications designed to meet your challenging market needs.




### Use Reprints As:

- Sales Aids
- Educational Programs
- Recruitment Tools
- Employee Training
- Managed ePrints
- Sales Presentations
- Trade Show Handouts
- Conference Materials
- Media Kit Supplements
- Direct Mail Campaigns

**Call Bonnie Velikonya @  
800-456-0707**





***“It’s all about the quality  
of the products you sell.  
And with Koch, we know we’re  
getting the best fertilizer  
technology available on the  
market today.”***

—  
John Rom , Wilbur-Ellis

## John Rom Sells More Than Fertilizer Blends — He Sells Solutions

*“When it comes to fertilizer, we ask our customers how many applications a year they’d like to make, their end goals and what they’re trying to accomplish.”*

*“Koch’s technologies release nitrogen in a timely manner so plants get maximum nutrient uptake.”*

*“We have superintendents here in Colorado who are able to make just two applications per year with products like UMAXX® and XCU® and still get optimum results.”*

*“With all the different options available, we’re better able to provide the customized product that our customers will truly find valuable.”*

John Rom of Wilbur-Ellis in Denver, CO, practices “solution selling,” by tailoring fertilizer blends to each of his customer’s needs. He recommends Koch Turf & Ornamental enhanced efficiency fertilizers because they help superintendents meet budgets and grow high-quality turf that performs all season.

Find out how John Rom gets unmatched support from Koch so he can better serve his superintendent clients at **KochTurf.com/GolfSolutions.**







## Practice protocol

Hey, golfers. Listen up!

Usually this column is directed at your course superintendent, probably the most underappreciated person at your club. But now I'm talking to you, the golfer, about how to make the most of your club's practice range, because:

1. I don't think you want to get hurt
2. I do think you want to play a little better and have more fun on the course.

There are also some ideas in here for the superintendent, but trust me, they're smart enough to figure out what I'm trying to say.

Driving ranges and short-game practice areas have become much more than just places to hit balls. At many clubs, they're now social centers, where people talk and drink, give advice and give the needle, and hang out. But just because practice areas are more relaxed and more fun, doesn't mean you shouldn't follow a few basic rules. So please, for your sake and your superintendent's, be smart and considerate of others.

Start with the turf. If your club or course has put down plastic practice mats, it's for a reason: To protect the turf. Mats especially help the turf coming in and out of dormancy early and late in the season. If you ignore the mats and insist on hitting off the turf, you're only making it more likely the turf won't be there later.

There's another reason to use mats when they're laid out: To protect yourself. Moving just

a few feet forward makes it more likely that you're going to get hit — and hit hard — by someone else's errant shot. And be real. How many sideways and other wayward shots have you seen from your buddies on the range? Harry's screaming shank might be hilarious when you're playing against him on the course, but when it smacks you in the ankle, chest, head or some other important body part, you won't be laughing.

So, if the mats are there, don't stand in front of them. And if you do, I hope the guys in the pro shop or other staff members have the guts to call you on it. It's dangerous and stupid.

Something else about mats. It's very likely they're actually good for you, taking pressure off your knees, wrists and back as you hit hundreds of balls.

If the club staff is on the ball, they'll move the mats around during the week, turning them, changing their positions and so on, to distribute the foot/club wear and tear.

Speaking of moving around, you shouldn't keep returning to the same spot on the range. Notice how the better players at the club stand at different spots to work on different shots, like

deliberate draws and fades. Also notice — and this is important — that they're actually working on things, not just aimlessly hitting balls.

Another way you can take care of the practice area is by trying to keep

your strikes and divots uniform and close together. Someone else is going to take your spot next and would like to have enough undamaged area to hit from. Trying to keep your scrapes and gouges uniform also might help you concentrate on making better contact. Really.

Working in the practice bunker? Please leave it in better shape than you found it. When you're done, rake footprints — yours, other (less considerate) golfers' and those made by any critters. Raking the practice bunker is also good training for raking bunkers on the course.

Hitting pitch shots and chips? If there's a bucket of balls for your use, collect them when you're done. This is a favor for the next golfer who comes along as well as the grounds staff. And if you're allowed to practice short game shots on the main putting green, repair your ball marks — just as I know you're doing on the course. And don't leave balls scattered all over the practice green. Put them back in the bucket or collected in a spot along the edge. Practicing etiquette and courtesy is as important as practicing your stroke.

When I was a kid going to the course with my dad, he'd look up and down the practice range and say, "All those guys are doing is perfecting their flaws." So, here's one more way to make smart use of practice areas: Use them to take a lesson from your pro. And be sure to ask him the best way to work on what you learned the next time you're at the range. **GCI**

“Harry's screaming shank might be hilarious when you're playing against him on the course, but when it smacks you in the ankle, chest, head or some other important part, you won't be laughing.”



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



# JRM INC

INNOVATIVE TURF TECHNOLOGY

## QUALITY MATTERS



**Worldwide Manufacturer of Turfgrass Maintenance Products:**  
**Bedknives • Tines • INFINITY Reels • Grinding Wheels • Mower Blades**

**Toll Free: 888.576.7007 • International 336.354.1243 • Fax: 336-764-8311**  
**Email: [sales@jrmonline.com](mailto:sales@jrmonline.com) • [www.jrmonline.com](http://www.jrmonline.com)**



Dr. Doug Linde strives to create a hands-on learning atmosphere within the Delaware Valley University turf management program.





# SMALL SCHOOL, BIG EXPERIENCE

A hands-on turf management program is helping continue the agricultural legacy at a suburban Philadelphia university.

By Rick Woelfel

**L**ocated in Doylestown, Pa., roughly an hour's drive north of Philadelphia, Delaware Valley University is one of the smallest institutions in America to offer a degree in turf management. Undergraduate enrollment numbers approximately 1,700.

But the school is leaving a footprint in the industry as, over the past two decades, its graduates have established success in the field.

The university has historically emphasized agriculture. It was founded in 1896 as the National Farm School, subsequently becoming the National Agricultural College (1948) and Delaware Valley College (1960). It officially became Delaware Valley University on April 8, 2015.

Dr. Doug Linde oversees the university's turf-management cur-

riculum. A 1991 Delaware Valley graduate with a bachelor's degree in agronomy and environmental science, Linde is the son of a golf course superintendent. His father tended to the turf at Wedgewood Golf Course, a well-regarded daily-fee facility located just south of Allentown, Pa., that opened for play in 1963 and is still in business today. When Linde arrived on campus as an undergraduate, he was planning to follow in his father's footsteps.

"I came to DelVal to become a superintendent," he says. "And when I was here, some of my professors said 'Why don't you go to graduate school? You did pretty well in school.'"

With his father's encouragement, Linde went on to earn his master's degree and doctorate from Penn State (both in agronomy). When he returned to his alma mater in

1996 to launch the turf management program, he relied heavily on his Penn State experiences and built a curriculum that had its foundation in the sciences.

"Our program here was going to be brand new," Linde says, "and we wanted to keep it more science based; chemistry, biology, and we also had more applied sciences like soil and soil fertility.

"Having an understanding of those concepts really should help (students) in making their decisions, not only taking care of the turf, but also communicating with salespeople, whether they're fighting them off or trying to get an understanding of what they're trying to sell. Hav-

## FACT BOX

Delaware Valley University

Location: Doylestown, Pa.

Enrollment: Approximately 1,700 undergraduate students and 300 graduate students

Established: 1896 as the National Farm School



## TURF student-athletes

In addition to overseeing the turf department at Delaware Valley University, Dr. Doug Linde is also the golf coach. The school competes at the NCAA Division III level and turf management majors are permitted to play on the golf team, an option not always available at larger schools with Division I golf programs.

Four of the nine players on this year's roster are turf management majors, including junior Nathan Frick, who notes his experiences as a student impact his mindset on the golf course.

"It's pretty amazing," he says. "You'll be playing and (his fellow competitors) will be complaining about this and that. They'll be complaining about the golf course and I'll just be like, 'It's a lot of hard work.' No one else really understands it. You really appreciate it when you go to these nice courses and play, what these superintendents are able to do."

Frick adds that Linde will use the occasion of a round of golf to create a teaching moment.

"Doc does a really good job," he says. "If we have down time, if we're waiting on a group ahead, or whatever, Doc will just come over and just start showing us things on the golf course or explain something. It's almost like another learning experience while getting to play some golf."

University president Dr. Maria Gallo says providing learning opportunities like this are at the heart of the school's mission of what today is called experiential education.

"For us, it's in our DNA," she says, "because when Rabbi (Joseph) Krauskopf founded the university, it was 'Science with practice.' That's what he called it. It was actually the hands-on piece and we've been doing it for 122 years. 'We are a leader (in experiential education), but I'd really like to be known as the leader.'"

into the classroom, just by accident in a way, it kind of rubs off on the students and I think that's the ideal situation."

Linde's philosophy fits with the university's philosophy of providing students with an abundance of hands-on experience in their chosen field of study while they're working toward their degree.

The Experience360 Program, as



ing a good, solid background in the sciences gives them that knowledge."

Linde also brought with him a superintendent's mindset.

"I can understand the superintendent culture because I lived it," he says. "It gives you a lot of credibility and comfort. I'd rather be out talking with a superintendent than almost anywhere else. I just feel comfortable in that situation. Just by bringing that

it's now known (E360 for short), has existed in some form or another since the institution was founded. All university students are required to complete two E360 experiences to fulfill requirements for their degree, although they are strongly encouraged to complete more.

Those experiences might take the form of an internship, doing research or what is called career exploration experience. University president Dr. Maria Gallo says Linde has been instrumental in launching his students on their chosen career path.

"He does a fabulous job," she says. "He takes a lot of time connecting the students with the industry, giving them advice on where to go for internships, they've had very prestigious internships over time. And he's very proud of them getting jobs, nearly 100 percent of his students are employed."

The turf program at DelVal features small classes, usually seven to 10 students per class, including students from related majors. The average student-teacher ratio at the university is 15 to 1.

### GETTING OUT IN THE FIELD

Senior Colton Lesh hails from Newport, Pa., 25 miles north of Harrisburg. A turf management major, Lesh chose Delaware Valley in part because of its intimate atmosphere.

"It's more hands-on learning," he says, "and you get more time with Doc Linde in depth than you would from a lecture with 75 people in it."

Lesh notes that feeling of intimacy extends well beyond the walls of the classroom. "You walk down the sidewalk (as a senior) and the teacher you had freshman year is going to know your name," he adds. "I've had that happen to me. I think it's pretty cool."

Lesh completed an internship at Merion Golf Club last summer, assisting with the renovation of the historic East Course. One of his most memorable experiences there was assisting with the rebuilding of a green. He's also interned at Navesink Country Club, a highly regarded private club in Middletown, N.J.

Lesh will leave Delaware Valley with his degree in May. His goal is to move into a superintendent's position within 10 years.

The Delaware Valley campus features a putting green plus an abundance of open space and green grass. But what Linde relishes most of all is providing his students with a learning opportunity off campus.

"I try to take advantage of everything on campus," Linde says. "Any grass, anywhere (on campus) we get the chance to inspect it. But the biggest advantage is taking the students, getting them out of the



Finally, a predictable and  
consistent biochar-based  
soil enhancer.

**coolterra®** 

Scanning Electron Microscopic view of beneficial  
soil microbes inhabiting Cool Terra

**SUPPORT STRONGER ROOT SYSTEMS**

**PROMOTE FASTER ROOTING TIMES**

**HELP REDUCE MORTALITY RATES**

**SEQUESTER CARBON**

**TURF** | Tees, Fairways, Greens, and Sports Turf

**ORNAMENTAL** | Shrubs, Trees, Perennials, and Annual Baskets

Cool Terra®, a specifically engineered, enhanced biochar to  
improve soil performance. **For quality, beauty, and resiliency.**

**[www.coolterra.com](http://www.coolterra.com)**





classroom, the lecture hall, and taking them to a site."

Linde has abundance of destinations to choose from. There are some 70 golf facilities of all descriptions located within a reasonable drive. And because class sizes are limited, the logistics of getting the group to an off-campus site are simplified.

One trip was to Aronimink Golf Club in suburban Philadelphia during last fall's BMW Championship. The students joined the crew on a Friday morning, working to make the golf course playable despite inclement weather.

Linde says his students were impressed by the efforts of Aronimink superintendent John Gosselin and his team. Nathan Frick was one of the students on the Aronimink

trip. A junior from Lancaster, Ohio, Frick enjoyed viewing a PGA Tour operation up close.

"We got there really early," he says. "We got there and we saw the whole process. We were there in the morning so we got to see how they organized all the people there and everything like that."

Frick received hands-on experience on a bunker crew. "I was helping do the faces of bunkers," he says. "We went out and we did that all morning and helped complete that. Then we just went around a little bit and kind of watched some golf before we went back to school."

The experience renewed Frick's appreciation for what turf professionals do on a daily basis. "I've had two internships, Frick adds, "so

I know what goes on behind the scenes at golf courses and it's a lot of work, but organizing that many people and having to get that much done all in a day for four straight days ... It's pretty incredible to actually see it in action rather than just knowing what has to happen."

Linde notes that his students were spread out among different work crews, which provided opportunity to interact with industry professionals.

"Each crew had a leader and they were a professional, sometimes a salesperson or another superintendent," Linde says. "They had plenty of time to talk turf and careers. All superintendents right now are recruiting anybody who has an interest, so they were actively getting recruited as well."

"I think the students felt the attention to detail and the need for people in the industry, because it's a common theme and you could just sense it by everyone I talked, asking the students 'Where do you work?' What's your future like?"

"Which is a great problem to have, not for the superintendents, but for our students. They're going to benefit by all that and they're at a perfect time to get into the industry right now."

#### HELPING PLUG INDUSTRY SHORTAGES

That last point is worth noting because the pool of students seeking to make a career in turf management has been shrinking over the last decade and more.

"I'd say our peak was around 2005," Linde says. "All the turf schools were probably at their peak at that point. And you don't know you're at the peak until you come down from it. 2008 kind of hurt golf overall, and kind of what happened is the upward mobility within golf maintenance slowed down. There were fewer golf courses being built, so there were less assistants moving on to their own places, so quite a



### AE-40E TOW BEHIND AERA-VATOR

The tow behind 40" Aera-vator is the ideal tool for the landscape contractor. You can pull this with any vehicle with a 12 volt power source. It comes with an 11 HP Honda engine. Aerate small properties and yards with no cores to clean up for lush and healthy turf.



1-800-363-8780 • sales@1stproducts.com • 1stproducts.com



few assistant superintendents were, not stuck, but at the same place for five, six, seven years and they said, 'I can't get my own place ... I've tried, I'm going to get out.' So, they got out and at the same time, less students started coming into the turf programs so most turf programs are half of what they were in 2008."

Linde points out that DelVal's turf-management program is larger than those at many land-grant universities. "Mainly because we accept a wider range of students than they do," he says. "We can get them, and Penn State can get them as well. But some other universities are too restrictive on their entrance requirements. They're losing their turf programs as a result."

Linde notes the pool of students who are considering careers in the turf industry has shrunk in recent years. "Young people aren't working on golf courses in high school," he adds. "Either they don't want to do it or the course is maybe not allowed to hire them, so they're not getting exposure to this industry as a possibility for college. Hopefully there will be some changes because there are groups out there like First Green through the GCSAA that are trying to use that program to inspire young people to see this as a potential career option."

It's been more than two decades since Linde chose academia as a career path rather than becoming a superintendent himself. Today, he derives his greatest satisfaction not only from helping his students prepare for a career in turf, but also from seeing them develop as people.

"Most of our students here are coming out of high school," he says. "Watching them mature here, becoming better students, and finishing ... And then I track all my graduates, where they work and keep that up to date. Just to see them advance on and I've got some who are a heck of a lot smarter than me now, and I'm really jealous and impressed. But that's my role, to try to give them opportunities so they can develop into people that can help our industry. Like a proud father, I try to watch these graduates and where they are." **GCI**

in·no·va·tor  
noun

FROM THE ST2000  
TO THE HYBRID CUP,  
CHECK OUT OUR  
LATEST INNOVATION:  
THE 2-PIECE  
TOURNAMENT  
PUTT-SAVER FLAGSTICK.

TO SEE OUR COMPLETE  
LINE OF NEW PRODUCTS  
FOR 2019, VISIT  
[STANDARDGOLF.COM](http://STANDARDGOLF.COM)

**STANDARD  
GOLF** COMPANY  
EMPLOYEE OWNED





The National Golf Club of Kansas City director of golf course maintenance Spencer Roberts enjoys bringing his son, Jack, to the course.







# ANYTHING BUT AVERAGE

How determined people and unwavering commitment to plant health helped The National Golf Club of Kansas City flourish throughout a wild weather year.

By Guy Cipriano

**S**pencer Roberts tries to take Sundays off during the growing season. Extraordinary circumstances altered his schedule last summer, creating a series of memorable father-son moments.

With temperatures in Kansas City escalating and rainfall non-existent, Roberts toted his young son, Jack, and live-at-home course dog, Ellie, to The National Golf Club of Kansas City to monitor lake levels.

Three weeks. Four weeks. Five weeks. Roberts stared at the sky and asked: "When are you going to break?"

The club received less than an inch of rain from June 2 until July 18, a numbing six-week stretch plucked in the middle of a humbling year for Kansas City-area superintendents. The lower the lake levels, the tougher the irrigation decisions. Even as he observed the depletion of a once-plentiful resource, Roberts developed an appreciation for the impromptu work Sundays. Jack seemed to be relishing the strolls around the club's 36 holes. "He enjoys seeing the dog run on the golf course and chase geese," Roberts says. "He enjoys coming to work with dad."

For all the angst 2018 provided in a Transition Zone environment such as Kansas City, the year provided the ultimate case study in life management and agronomics for Roberts, the director of golf course maintenance at The National Golf Club of Kansas City, a 36-hole facility in the city's north suburbs.

Sticking to reliable plans, programs and products despite wicked weather swings, allowed Roberts and his nearly 35-person team to achieve a semblance of balance while offering a growing membership sturdy L93 bentgrass/*Poa annua* putting surfaces throughout the year. The year, in

many ways, separated The National Golf Club of Kansas City from other facilities. The 18-year-old club, which features a pair of high-end private courses, The National and The Deuce at The National Golf Club, established membership and revenue highs in 2018, according to Roberts. The business success coincides with a year that featured the second coldest April on record, followed by the second warmest May on record, followed by extreme drought.

Keeping the greens, well, green represented a major triumph. The triumph becomes more meaningful when combined with human factors such as limiting the toll unforgiving conditions exert on the people in a turf manager's life. In addition to Jack, Roberts' family includes his wife, Courtney, and six-year-old daughter, Emma.

Maintaining normalcy away from the course during a year such as 2018 requires consistency at work. The National and The Deuce operate from a central maintenance facility, but each course possesses a distinct crew led by a pair of determined and talented assistant superintendents: Cesar Villanueva and Graham Edelman at The National and TJ Ridge and Andy Scott at The Deuce. Almost every conversation about a leader experiencing quality time away from a stressed landscape involves the backing of an empowered staff.

"You find time away by putting really good people around you," Roberts says. "I have four great assistants who are great leaders of their teams. Having great people around me means that I was able to step away and be with the family during that time. Those four individuals made it easier for me during one of the toughest summers I have ever experienced to get away."

As the weather deteriorated, Roberts never deviated from personnel decisions he made before the season. Every employee, including the four assistants, received scheduled time off.

"We stuck to that even though we had a lot going on to make sure they stayed fresh," Roberts says. "I knew that it was going to be a year to make tough decisions, with our irrigation lake being low. I wanted to keep all of our guys fresh and make sure they could step away and stay positive. It's not always easy. We didn't want to bring any more stresses upon ourselves. We knew we were all stressed out. We didn't want to bring any more stresses to the guys."

Roberts displayed similar consistency and trust with The National's agronomic programs. Stints at a trio of highly regarded private clubs, Shadow Glen Golf Club in Olathe, Kan., Omaha Country Club in Omaha, Neb., and Blessings Golf Club in Fayetteville, Ark., introduced Roberts to the abiotic and

## From the field

Bayer area sales manager Wes Kleffner, who works with superintendents in Kansas, Missouri and Colorado, explains the benefits of Stressgard on greens during an extraordinary growing season such as 2018:

"It's helped guys get through July and August. When it starts to get a million degrees outside and the Pythium pressure is through the roof, that's one of the first things they always turn to, Stressgard. It comes up in conversation to get through those high-stress, plant health months trying to grow bentgrass in a place that doesn't necessarily constitute very good growing conditions. Stressgard helps quite a bit with getting through the summertime."



# MAKING EXTRAORDINARY YOUR NEW ORDINARY

Sponsored by Bayer



▲ A commitment to plant health allowed the National Golf Club of Kansas City's greens to flourish despite brutal 2018 growing conditions.

biotic stresses eclectic weather places on championship-caliber greens. By the time Roberts arrived at The National in late 2015, he understood how to handle those stresses.

Plant health represents the pillar of The National's agronomics. Every tactical decision revolves around keeping turf robust and making sure seasonal plans are established well before wild weather swings materialize. Roberts is flexible enough to make tweaks – The National mowed and rolled greens less in 2018 – but most of his confidence, even during a trying season, stems from positive signs plants showed entering the previous winter. “One thing that stuck out to me hanging out with

Spencer – and he used this phrase with me quite a bit last year – he felt like 2018 was the year of overall plant health,” says Wes Kleffner, a Bayer area sales manager who works closely with Kansas City-area superintendents.

The spray program Roberts uses to handle Transition Zone stresses on greens includes a rotation of Bayer Stressgard products. Weekly applications begin in early May and extend into the September. Tartan, Interface, Chipco Signature and Mirage are among the staples of The National's program. The National's turf team treats 7 acres of greens between the two cours-

es, with disease concerns ranging from Pythium to snow mold.

“It's about having a strong preventative program and knowing we are ahead of issues,” Roberts says. “The Stressgard products, I believe, give us the ability

to continue to create high-level golf conditions throughout the season.”

Stressgard formulations provide external and internal benefits to plants facing temperature extremes, says Dr. Chenxi Zhang, a Bayer product development manager who focuses on developing solutions for Turf & Ornamental markets.

“By incorporating Stressgard products in a rotation, you have immediate color improvement on the outside,” Zhang adds. “Also, within the plant, you're seeing the chlorophyll content being protected by Stressgard.”

When chlorophyll loss is reduced, the plant is able to better maintain photosynthesis and its production of carbohydrates. And that, in turn, helps maintain key physiological functions and allows plants to better withstand stresses, like temperature extremes.

Introduced in the late 1990s, the Stressgard family has expanded to include Tartan, Interface, Fiata, Mirage, Signature XTRA and Exeris Stressgard. Stressgard is a formulation paired with a variety of fungicides that offers protection against abiotic stresses such as high temperatures, low temperatures, aggressive mowing, golfer and cart wear, excessive sunlight, and reduced sunlight, Zhang says.

The National experienced many of the above stresses during 2018. Most of those stresses, though, remained hidden to members and guests who played more than a combined 35,000 rounds on the courses.

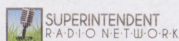
“We never saw large amounts of turf stress on the greens,” Roberts says. “We were very proactive, understanding we did not have a spring and then we went onto a lot of heat stress. Knowing we had a strong plant protectant program, we looked at the controllables. We raised the mowing height, we changed the frequency of mowing. If we had to skip a day of mowing and roll a day, or decrease how much we rolled and mowed, we did that. It was important to communicate to the memberships the conditions on the golf course and why we were backing off and what we were experiencing so they understood what was going on. They were all very supportive.”

Late in the season, Kleffner toured the course with Roberts. He left The National impressed with the turf quality and satisfied with the results he helped Roberts and his team achieve, despite enormous challenges.

“The people we deal with make such huge sacrifices throughout the growing season,” Kleffner says. “It's a huge dedication to spend time away from their family and away from doing so many other things. They are just trying to get through the year. If there's anything I can do to help these guys just sleep a little bit better at night, I'm all for it. Being in this industry, we have all been there at some point. You feel for everybody. You just want to do whatever you can do to help them get through it.”

Seeing his plan work – and seeing his family more often – revitalized Roberts. Jack turned three in January and more visits to the course to watch Ellie chase geese are likely in 2019. There's also optimism the lakes will appear refreshing rather than exhausting.

“There are averages for a reason, but we have to be ready for whatever comes our way,” Roberts says. “It comes down to planning and making sure we have plans in place and we're ready to communicate whatever weather we experience in 2019.” GCI



## In his words

Spencer Roberts joined Superintendent Radio Network to discuss the lessons he learned in 2018. Enter <https://goo.gl/tQRE8s> into your web browser to hear the podcast.





# Extraordinary is Your New Ordinary

**Spencer Roberts**  
Golf Course Superintendent,  
The National Golf Club  
of Kansas City

**Jack Roberts**  
Son



## Stressgard®

*When you can count on your turf to be at its best, others can count on you to be at yours.*

Your golfers want a greener course. You want a little more time in your day. Stressgard goes beyond disease control to deliver both – allowing you to maximize your potential on and off the golf course. So whether that means finding time to be a better Superintendent, or even a super parent – Stressgard delivers. **For turf you and your golfers can count on in conditions you can't, look to Stressgard.**

See the science behind the extraordinary at [environmentalscience.bayer.us/stressgard](http://environmentalscience.bayer.us/stressgard)

ALWAYS READ AND FOLLOW LABEL INSTRUCTIONS

Bayer Environmental Science, a Division of Bayer CropScience LP, 5000 Centre Green Way, Suite 400, Cary, NC 27513. For additional product information, call toll-free 1-800-331-2867, [environmentalscience.bayer.us](http://environmentalscience.bayer.us). Not all products are registered in all states. Bayer, the Bayer Cross and Stressgard are registered trademarks of Bayer. ©2019 Bayer CropScience. ES-1218-SGFT-555-A-R1





## Protecting against project mythology

Anyone taking on projects great or small during 2019 might consider a lesson from Phidias, the Greek sculptor, painter and architect. Phidias is best known for his statue of Zeus, the king of the ancient gods. However, it was his creation of the statues on the frieze of the Parthenon, the temple of the gods in Athens, from which we can draw an important lesson on project planning and management.

Phidias's bill for his work on the heroic-scale statues was initially declined. The bursar of Athens said that the statues should have been created in a front-only perspective, instead of Phidias's 360-degree perspective, because the statues would be placed well above eye level and citizens would see only the front view. Phidias replied, "The gods will know." And his bill was paid.

Every project you plan and execute this year, whether a new swimming pool, the replacement of sand bunkers or a clubhouse remodel, will face 360-degree scrutiny. Many will evaluate the quality of your work. Here are five important steps to help your efforts stand the test of time:

**1. Plan from start to finish.** Lay out the process to be used, the materials required and who will be responsible for a successful outcome. Organize your project team to ensure that each team member understands where he or she will pitch in and be held accountable. See that your action plan is thorough. Comprehensive planning anticipates the end result and establishes standards of expectations. Ensure that the finished quality of your work is excellent. Quality is remembered long after cost is forgotten. Plan

the post-completion "unveiling" of your results as carefully as you plan the first meeting.

### 2. Set realistic schedules.

Avoid over-promising and being unnecessarily conservative. Creating a critical path of the actions required to complete the project is an important key. Scheduling also requires a complete plan. Many projects – and the credibility of those responsible for them – are undermined by incomplete or poor scheduling. Establish a broad understanding of when you will execute in-process measurements and evaluations. The things that are measured get managed. Get to work and finish ahead of schedule.

### 3. Budget thoroughly.

The two greatest points on which to brag about a finished project are "complete" and "under budget." Ensure that the budget is inclusive of all expenses, including labor, materials and post-project clean-up and finishing work. Check and double-check unit count, whether pounds, square acres or individual item costs. Confirm the accuracy of your costs-per-unit measurements. These two checkpoints – unit-count and unit-pricing – protect the downside of important projects.

### 4. Communicate constantly.

See that all stakeholders are kept informed of progress and problems – especially the latter. Because so many people feel invested in key projects, and think their voices should

be heard, create a communications plan that includes video updates as well as written reminders and status reports. Reduce the likelihood that stakeholders are uninformed of progress. Likewise, update those responsible for completing the project by making sure they receive regular and routine project updates. It is nice to know that everyone on the team is keeping up their time-sensitive tasks and sharing in the accountability. Remember that members and regular customers like to be included with project updates.

**5. Celebrate generously.** Pass around the credit and share the successful completion of the project. See that there is plenty of credit to go around. Recognize those who authorized your work on the project. Name those who did the work. Make and distribute photographs of the finished project and those who celebrated with you. Use follow-up storytelling to identify those who are enjoying the results of the project. Be inclusive of all who are affected by the project.

You may think that the work you did to complete a project successfully is sometimes ignored or forgotten. In fact, in these times of tight budgets and 360-degree evaluation, very little is overlooked by management or membership. Remember the lesson of Phidias: the quality of your work will endure and even if some people do not appreciate your contributions, the gods certainly will. **GCI**



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



# MAKING THE CUT

Big crowds,  
famous holes  
and acres of  
prized turf. An  
inside look at a  
trio of unique  
tournament  
venues.

PART 1: TPC SCOTTSDALE

By Guy Cipriano



# MAKING THE CUT

A SPECIAL SERIES PRESENTED BY JOHN DEERE



▲ The Champions Course is one of two courses maintained by the TPC Scottsdale agronomy team.

A January day in the desert begins with layers. A golf shirt. A pullover. A jacket. Some workers wear a long-sleeve layer beneath their golf shirt. Layers are not what you envision in Scottsdale, Ariz. You sweat when somebody mentions Scottsdale. You wipe your brow and take a swig of water. You try to empathize; you truly can't unless you have pulled an aerifier, hauled sand, sharpened reels or pruned a Mesquite tree in a desert, in July.

You also expect to be surrounded by thousands of boisterous fans when arriving at TPC Scottsdale. Television conditions us to the rowdiness. TPC Scottsdale hosts the Waste Management Phoenix Open. Yes, *that* tournament.

There's no rowdiness at 5:20 a.m. on a mid-January day. Employees, wearing layers, walk into an orderly golf course maintenance facility to begin an 11-hour workday. For a place that will host more than 700,000 fans in three weeks, solitude permeates throughout a two-course property divided by a busy suburban street and bordered by one of the West's most important waterways.

A morning meeting begins at 5:30 a.m. A manager from North Carolina, followed by a manager from Illinois, followed by an intern from Australia address a crew preparing to shiver.

## » About this series

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

Part 1 February: TPC Scottsdale; Part 2 March: TPC Sawgrass; Part 3 May: Trinity Forest

© PHOTOS BY GUY CIPRIANO



A translator flips their words, even the funny ones uttered by the young Australian, from English to Spanish.

Jim Day is happy to see people. The 28-year TPC Scottsdale veteran arrives two hours before co-workers – either closing or coyote time depending on perspective – to begin loading green and yellow mowers onto trailers behind green and yellow utility vehicles.

Every morning second matters. Hundreds of customers are playing golf and the first competition round of the 2019 Waste Management Phoenix Open begins in exactly three weeks. TPC Scottsdale operates at a furious pace. The layers are numerous.

## EARLY MORNING ON THE STADIUM COURSE

Let's begin in darkness on the 5th fairway of the Stadium Course. Joaquin Valenzuela Gamez is inspecting an irrigation head. Tools of the irrigation trade, hoses, flags and shovels, fill the back of his Gator, the lone vehicle on the fairway. Gamez wears gloves and a TPC Scottsdale jacket above a pullover as he meticulously slices the overseeded blend of ryegrass and fine fescue surrounding the head.

The Stadium Course's irrigation system includes more than 2,500 irrigation heads. Neither darkness nor 45-degree weather deters Gamez in his quest to ensure each one works properly. "I love what I do here," he says. "I hope I'm here longer."

Gamez arrived at TPC Scottsdale before the Stadium Course's 16th hole became the hippest spot in golf and before anybody imagined something like #greenestshow would attract attention on newfangled wireless devices. Gamez emigrated to the United States from the western Mexican state Sinaloa in the mid-1980s. One of his first jobs here stunk. "I worked in a horse ranch," he says. "I didn't like the smell of it."

His mornings went from pungent

## Inside the cut The 16<sup>th</sup> hole at TPC Scottsdale

The 16th hole on the Stadium Course presents atypical agronomic and management challenges beginning when construction of the three-story coliseum and adjacent grandstands commences in early October.

"Tables, chairs, hospitality, floors," director of golf course maintenance operations Blake Meentemeyer says. "It's just non-stop, contractor after contractor."

Veteran employees often ignore the daily shuffling around them, completing tasks such as mowing, spraying, raking and manicuring amid the work being performed by contractors. Once Waste Management Phoenix Open week begins, the scene becomes chaotic as 20,000 fans transform the hole into a fraternity party. Workers and volunteers access the 5,897-square foot green, 19,640 square feet of teeing space and 16,543 square feet of approach/surrounds via a pair of tunnels.

The trio of overseeded surfaces are maintained using John Deere walk mowers: the 180 E-Cut Hybrid on greens, 220 E-Cut Hybrid on approaches/surrounds and 260SL PrecisionCut on tees. The model numbers represent the width of cut, meaning green passes are 18 inches apart, approach/surround passes 22 inches and tee passes 26 inches. Mowing at three different widths creates stripes on verdant turf that dazzle tournament spectators and television viewers. "The striping we get using those mowers is consistent from hole to hole," equipment manager Randy Waymire says.

Thousands of spectators awaiting the start of the play greet the crew and volunteers before Waste Management Phoenix Open weekend rounds. Later weekend tee times mean a later start for the crew and volunteers, thus the convergence of maintenance and mayhem on No. 16. It might be the most scrutinized mow in professional sports.

"I got to experience some of it last year," says Waymire, who took the lead equipment position at TPC Scottsdale in 2017 after 15 years with Stoltz Equipment, a John Deere dealer serving eight western states. "We are out there mowing and the crowd is already in seats. You have two mowers going, with one mowing one side and one mowing the other side. You just don't take any chances there."

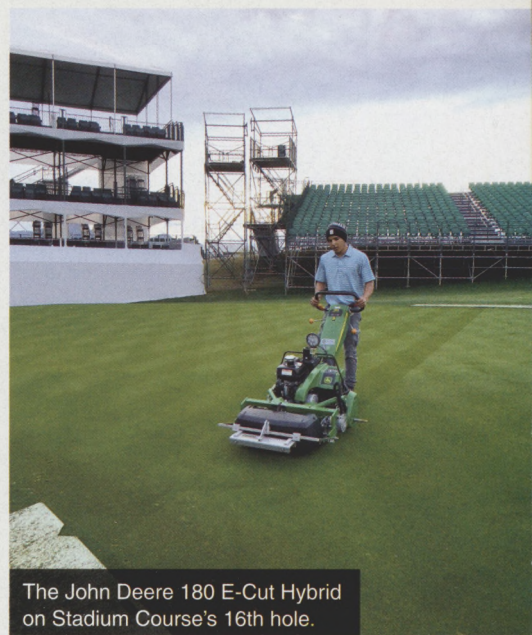
Tournament week glamour is produced through advance grit. The process of burning stripes begins two weeks before the event commences, with workers using string to guide mowers, Meentemeyer says. Cold temperatures yielding frost limited the volume of mowing on the 16th hole as the 2019 Waste Management Phoenix Open approached. Frost is just one winter weather challenge on the hole. The hole plays west to east and the massive grandstand creates significant shade issues on the right side of the tee boxes.

"You love it when everything goes up," assistant superintendent Bryan Pierce says. "But there are challenges. We're in a coliseum. We're not in an ideal environment for growing grass. Air movement is limited. Basically, a quarter of the tee doesn't see one lick of sunlight. It sees indirect sunlight, but no direct sunlight. When we have frost, the whole right side of the tee complex can be frozen all day."

Giant tournament crowds also bring logistical challenges. A police escort transports the crew and volunteers to the course before evening maintenance shifts, so the five-minute ride from the maintenance facility to the 16th hole can take as long as an hour during tournament week. Some workers revel in the scene; others request to work elsewhere on the Stadium Course.

When the tournament ends, heavily traveled spots, including the turf surrounding the 16th hole, resemble the aftermath of a severe weather event, Pierce says. By summer, the hole returns to its normal state: an unassuming par 3 stretching from 98 to 163 yards.

"It's not overly complicated," Meentemeyer says. "There's some extensive bunkering protecting the green, but it's a pretty easy hole if you think about it. The grandstands make this hole. It's funny because our guests in the summer will give us a negative response in surveys saying we didn't inform them that the stands and seating weren't going to be up. They want it up year-round."



The John Deere 180 E-Cut Hybrid on Stadium Course's 16th hole.



# MAKING THE CUT

A SPECIAL SERIES PRESENTED BY JOHN DEERE



▲ Bill Brown mows rough on the TPC Scottsdale Stadium Course.

to pleasant when he joined legendary agronomist Cal Roth's TPC Scottsdale crew on Aug. 16, 1990. A golf course, even in the middle of a desert summer, smells better than a horse ranch.

Gamez's title is irrigation technician. But he's willing to perform any job to satisfy golfers. Gamez relishes encounters with customers. "I hear good comments every single day," he says. "They will come straight to me and say, 'You guys do an awesome job on the golf course. I like what you

guys do.' I tell them, 'Thank you for the good comments. I hope you enjoy your time here and come back.'"

Bill Brown has one job on this morning. The task is performed sitting and it doesn't produce many direct interactions with golfers. He loves it anyway.

Brown is mowing rough alongside the eighth hole as the sun lifts. Nearly every time Brown punches in, he mows rough. Consider it magical monotony.

A Michigan native who worked for General Electric in Indiana, Brown moved to Scottsdale in the mid-1970s. "I feel I'm a damn near native," he says. Compared to those around him, Brown qualifies as an Arizonian. Scottsdale had less than 80,000 residents when Brown escaped the Midwest. The city's population will surpass 250,000 this year. On 2018 Waste Management Phoenix Open Saturday, 216,818 spectators trampled on the rough Brown maintains.

Brown worked for a parks and recreation department and multiple golf courses before joining the TPC

Scottsdale crew in 2011. At 82, he's the oldest member of the 53-worker unit. He doesn't sound like somebody bracing to stop operating machines such as the John Deere 9009A TerrainCut he's operating on this January morning. "I'm not very good at doing nothing," he says. "I like this. I enjoy the outdoors. The people I work with – and the people I work for – are wonderful."

Director of golf course maintenance operations Blake Meentemeyer stops to chat with Brown and inspect what might be the deepest frost pocket on the course. "You can see the stripes," Meentemeyer says. "Bill is always thinking ahead and he's always thinking about where he needs to go, thinking about frost and when we are going to spray. He's got a tough job jumping around all the time."

Cold. Darkness. Heat. Tournament preparation. Overseeding. It doesn't matter to Brown. Few people his age keep this pace. Heck, few people of any age can handle the hustle associated with TPC Scottsdale.

"I feel like I'm in a hurry and in

## TPC Scottsdale tidbits

### WATER ON THE MIND

Water factors into every agronomic decision. The administrative area of the maintenance facility features a room dedicated to irrigation and the agronomy staff has access to six soil moisture meters. Placing a mister on the ground to irrigate hydrophobic spots further aids in producing consistent playing surfaces on both courses. TPC Scottsdale is a member of 22-course cooperative that uses three irrigation sources: the Central Arizona Project, effluent water and reverse osmosis. Scottsdale receives around 10 inches of annual rainfall.

"I always wondered, 'Was it easier to maintain moisture with low rainfall throughout the year

or was it easier with 60 inches?'" senior assistant superintendent Heath Booker says. "It's way tougher out here than on the East Coast. You're battling high ET rates, bad soil conditions, bad water. All three of those combined makes it really, really tough."

### PREPARING FOR A BIG WEEK

The Champions Course remains open and supports 150 daily rounds while the Stadium Course hosts the Waste Management Phoenix Open. TPC Scottsdale consolidates its equipment into one fleet to maintain the Stadium Course during the tournament while loaner equipment provided by John Deere dealer Stotz Equipment is used on the Champions Course. The

equipment typically arrives two weeks before the tournament.

"Once advance week hits, it's really hard to get in here for anything," equipment manager Randy Waymire says. "So, we have to be prepared in many ways. Extra machines have to be on site. Our biggest attendance is going to be that tournament Saturday. Getting into this facility – or out of it – is near impossible. If we have machine break or something goes, we can't get a service truck in here. If fuel tanks are empty, we can't bring a fuel truck in here. It's all about pre-planning, making sure you have checks and balances."

### MORE THAN TURF

Maintaining the desert landscapes

between holes is one of the most labor intense tasks on the Stadium Course before, during and after the Waste Management Phoenix Open. "That was the biggest shock to me when I came here," says assistant superintendent Bryan Pierce, a California native who arrived at TPC Scottsdale in late 2016. "A desert landscape is almost more difficult to maintain than turf."

The bulk of the work is completed by hand, Pierce adds. At least 10 volunteers per nine spend tournament week maintaining the desert areas. The Stadium Course features more than 30 plant and tree varieties. Saguaro (the state cactus), Golden Barrel, Ocotillo and Yucca are among the popular varieties along the course.



motion all the damn time,” Brown says. “I don’t know why. This time of year we are working long hours. I will wake up early in the morning and say, ‘Wow.’ I’ll get up and have a couple of cups of coffee and read the paper. I don’t get up, dress and leave. I get up at 3:30 and sometimes 2:30.”

Has today’s paper arrived by the time Brown leaves the house? “I read yesterday’s,” he quips.

By the time Ali Guessous reaches the 16th green, Scottsdale residents have received today’s paper and the sun partially hovers above the McDowell Mountains. Guessous, an intern from Morocco, where golf is in the developmental phases, mows diagonal passes. He pauses every few minutes to shift turning boards, absorbing a scene unlike any other in golf. Bleachers, seats, floors, tables, awnings, steel and cellphone towers surround Guessous. He’s mowing a 5,897-square foot green on an enclosed hole accommodating 20,000 fans. “You just don’t mess up here,” he says. “You can’t do that.”

Valentin Giles understands the pressure of the 16th hole. A 30-year TPC Scottsdale employee, Giles is mowing the 72-inch cut of intermediate rough on this morning, reaching the 18th hole 35 minutes before a 9 a.m. shotgun start.

He worked his first PGA Tour event here in 1990, raking bunkers during a tournament that ended with Tommy Armour III outdistancing Jim Thorpe (the golfer), Billy Ray Brown and Fred Couples to earn \$162,000. Estimated weekly attendance was 362,000. When Gary Woodland toppled Chez Reavie in a playoff last year, he received \$1,206,000 and 719,719 fans entered the grounds.

Giles performed course presentation duties during the 2017 Waste Management Phoenix Open. When he walked through the 16th tunnel on Saturday, a capacity crowd hollered as he cut the cup and set the pin. “It makes me crazy,” Giles says. “It makes me nervous. I walk from the

tee to the green with a flag, and as soon as I show up at the tee, everybody is already there.”

Quite a journey for somebody who grew up between Acapulco and Mexico City and harvested crops in Idaho fields before arriving in Arizona. Asked how the tournament has grown, Giles points to a three-story structure to the right of the 18th fairway. “It’s getting bigger and bigger,” he says. “That tent was one story last year.”

#### **LATE MORNING AND EARLY AFTERNOON ON THE CHAMPIONS COURSE**

The 16th and 17th holes, along with the 18th tee, run adjacent to North Hayden Road, which separates the Stadium and Champions courses. Advancements across the street startle Giles more than anything on the Stadium Course.

The Arizona Canal borders the south parts of the Champions Course; apartments surround the north holes; Highway 101 looms to the east. Giles worked 16 years on the Champions Course before shifting to the Stadium Course. “When I started, this street wasn’t here,” Giles says. “There were no houses around the course, Highway 101 wasn’t there. Everything was desert.”

Giles represents a rare TPC Scottsdale constant. Development alters the desert landscape. Supervisors, especially at the assistant superintendent level, zip through Scottsdale like jackrabbits in the Sonoran Desert. The bosses work a few tournaments, learn the nuances of warm- and cool-season turf, and hone water management skills before landing their next industry position.

Hector Velazquez has outlasted every coworker and boss, but he’s too busy and humble to mention this fact. Velazquez parks his Gator on the entrance drive to the Champions Course, a dirt road when he arrived in Arizona in the 1980s, to discuss life as TPC Scottsdale’s longest tenured

maintenance employee. Velazquez joined the crew on March 18, 1987, less than two months after TPC Scottsdale hosted PGA Tour players for the first time. Velazquez has performed nearly every job on both courses. “Every part of the year is busy,” he says.

The courses combine to support more than 90,000 annual rounds. They close in July, a punishing, exhausting month because every surface is aerified multiple times. The courses close again in early fall for overseeding, a labor-intensive practice performed annually to ensure winter vitality.

Hard work doesn’t fluster Velazquez. A father of two, Velazquez holds two full-time jobs, also working indoor maintenance at a nearby Marriott. His Marriott shift begins less than two hours after he leaves TPC Scottsdale.

Velazquez has worked both jobs for the past decade. “Maybe I’m still young,” he jokes.

With temperatures approaching 60 degrees and golfers roaming all 18 fairways on both courses, Velazquez scurries between assignments on the Champions Course. Senior assistant Heath Booker stops to chat with him in the parking lot. Later in his inspection of the course, Booker describes what Velazquez means to the crew. “I have worked three jobs at one time, but that’s only 15 to 20 hours at each job,” Booker says. “For him to do 80 hours every week for 10 years ... that’s pretty amazing.”



**PEOPLE SAY THEY WORK AT A GOLF COURSE AND IT'S 365 DAYS. THIS PROPERTY IS 365 DAYS A YEAR. IT NEVER SLOWS DOWN. YOU CAN TALK ABOUT HOW BUSY IT IS, BUT UNTIL YOU EXPERIENCE IT, I DON'T THINK YOU CAN GRASP HOW BUSY IT IS."**

— Heath Booker



# MAKING THE CUT

A SPECIAL SERIES PRESENTED BY JOHN DEERE



Booker, a NC State graduate, is second on the agronomic hierarchy. He moved from North Carolina to Arizona in 2015. He says the people and pace separate TPC Scottsdale from his past stops. The crew includes seven employees with tenures of 28 years or longer, a remarkable feat considering the unforgiving climate, abundance of job opportunities in Scottsdale and grueling pace accompanying an elite daily-fee facility.

"People say they work at a golf course and it's 365 days," Booker says. "This property is 365 days a year. It never slows down. You can talk about how busy it is, but until you experience it, I don't think you can grasp how busy it is."

Julio Riojas relishes the people and pace. An assistant superintendent on the Champions Course, Riojas first visited Arizona while playing college baseball at William Penn University. He became enthralled by the desert landscape. He also became enthralled by golf course maintenance, earning a turfgrass management degree from University of California Riverside. He worked at TPC Deere Run, in his hometown of East Moline, Ill., before becoming an assistant at TPC Scottsdale.

Standing along the Arizona Canal above the fifth hole on the Champions Course, a par four with a split fairway curling around a desert wash area, Riojas describes recent aesthetic and agronomic enhancements. Riojas lives in the apartments on the other side of the course. He moved to Arizona because of TPC Scottsdale and has stayed five years.

Like every young manager with a turf degree, Riojas harbors grand aspirations. People determine a manager's success, making his future as bright as the midday desert sun.

"Some of them sacrifice almost their lives and time with family and doing things they like to do to put in the hours that are required just to get this place the way it is," he says. "This is what they enjoy doing. We

have guys that have been here for more than 30 years. Things are always changing, but I give them credit to be able to adapt the way that they have."

Riojas has adjusted to the people and the scenery. He's still adjusting to the weather. It's 2 p.m., the temperature approaches 65 and he's still wearing three layers.

## INSIDE THE SHOP AND ONE FINAL RIDE

Fewer layers are required inside the equipment management center. Randy Waymire wears a jacket anyway. Waymire leads a four-person team responsible for maintaining more than 200 pieces of equipment. Their indoor and outdoor workspaces brim with activity.

Everything about the maintenance facility is systematic. Inventories and parts are digitized. Each Gator has its own numbered parking space. Riding mowers are parked beneath a covered structure. Walking mowers are parked in straight lines beneath signs. When operators return from assignments, mowers are pointed toward the shop, a sign they must be checked by the equipment staff. Mowers are inspected following every use.

TPC Scottsdale's leased John



1. Longtime crew member Hector Velazquez;
2. Irrigation foreman Ascencion Giles; 3. Equipment operator Valentin Giles; 4. Irrigation technician Joaquin Valenzuela Gamez; 5. Equipment manager Randy Waymire; 6. Senior assistant superintendent Heath Booker and director of golf course maintenance operations Blake Meentemeyer.

Deere equipment is in well-trained hands. Waymire spent 15 years with Stotz Equipment, Jim Day is approaching his three-decade anniversary at TPC Scottsdale, and Miguel Jimenez Hernandez and Luis Munoz are former equipment operators now working inside the shop. "There's a lot of pride that comes with working for this property," Waymire says. "There are unspoken benefits that you don't see. The people here are our best benefit."

Dialogue between operators and technicians stretches into the late





2



3



5



4

afternoon. Unless you arrived at 5 a.m., you wouldn't know the people working inside the shop are nine hours into an 11-hour day. The energy level remains high.

Assistant superintendent Bryan Pierce begins his final inspection of the Stadium Course at 3 p.m., passing dozens of golfers whose tee times started after the shotgun event. The mower stripes on greens overseeded with *Poa trivialis*, velvet bentgrass

and ryegrass resemble images from geometry textbooks. On a dark, cold morning, workers beginning another long day achieved something that can only be observed a few hours later.

"Looking at past notes, we're ahead of the game," Pierce says. "Yes, it's maddening. You want it to be perfect all the time."

That's why Booker hangs over a fairway bunker edge, pulling weeds from white sand when Pierce strolls

past the third hole. That's why when Pierce enters the 16th hole, interns Nikolas McGuinness and Jacobo Cortines, who hail from Australia and Spain, respectively, are spraying a preventative fungicide on the tees and approach. McGuinness is wearing a stocking hat and jacket; Cortines is hatless and in a golf shirt.

It's all maddening. It's all adding a day's layer to a deep, desert golf story. **GCI**



# STAY IN COMMAND OF YOUR COURSE

with All-New **Pilot® Command Center** Software  
and High-Efficiency **TTS-800** Rotors



**PILOT COMMAND CENTER**

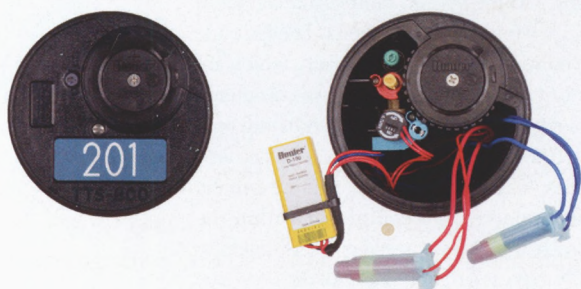
**TAKEN TOGETHER, NEW PILOT COMMAND CENTER SOFTWARE AND TTS-800 ROTORS ARE THE MOST ADVANCED IRRIGATION SOLUTIONS IN THE INDUSTRY.** Pilot lets you manage thousands of individually controlled sprinklers in seconds, right from the central Command Center. From here, you can perform all schedule changes from one easy-to-navigate screen. Simply update your course watering plan — Pilot takes care of the rest.

**GOLF IRRIGATION** | *Built on Innovation®*  
Learn more at [hunterindustries.com/golf](http://hunterindustries.com/golf)





### TTS-800 SERIES ROTORS




**HEAVY-DUTY TTS-800 ROTORS** have an extra-large, fast-access flange compartment that comfortably accommodates wire connections and two-way modules. No-dig Total Top Serviceability means maintenance is a breeze.

# Hunter®



# HYBRID PROJECT MANAGEMENT:

## MAXIMIZING YOUR TIME AND RESOURCES



*Can't decide whether  
a task requires  
a contractor or  
in-house labor?  
**Anthony Williams,**  
CGCS, explains  
why incorporating  
both might be a wise  
decision for your  
course.*

**T**he traditional philosophy of project management within the golf course management industry involves two options. The first one is a contracted project approach, which are historically used for larger tasks completed by a contractor (outside source) using only their resources to complete a specific scope of work that has been contracted by both parties. The second is the in-house project approach where current resources and equipment within the property operation are used to complete special projects that exist in addition to the normally expected maintenance of the property.

However, there is a third more innovative approach to golf course project management: hybrid project management approach. These hybrid projects take the best of the contracted and in-house approaches. By crafting a win-win fusion, the golf course





**IN THE OLD DAYS OF GOLF COURSE MANAGEMENT, WE USED A LOT OF FARM OR AGRONOMIC TACTICS, ESPECIALLY WHEN IT CAME TO PROJECT MANAGEMENT. THE BEST ONE WAS BARTERING.”**

management professional achieves maximum use of time and resources. Hybrid projects require strong negotiation skills and documentation to prove the value of the process. Six key areas lead to success within the hybrid project management philosophy: transparent scope of work, connecting projects, flex labor, bartering, schedules and incentives, and documentation.

### TRANSPARENT SCOPE OF WORK

The first step to a well-managed hybrid project is to create a transparent scope of work agreed upon by all stakeholders (in-house staff, contractors, owners/managers). This is the step where we start with the end results desired and work backward,

identifying responsibilities and quantities of materials, labor, access, critical dates, equipment and other pertinent items. Once established, this document will guide the efforts and establish accountability. If a formal contract is required, this represents the phase it would be generated. And if a less formal handshake is all that is needed, then this is the phase for that as well. The ultimate goal is to generate a scope of work all parties can use as a guide throughout the project from bidding to final punch lists and payment. The motto here is to plan the work and then work the plan.

### CONNECTING PROJECTS

One advantage to a hybrid approach to project management is that you can connect projects to maximize productivity and minimize any business disruption. One example of this would

be realizing that a cart path replacement project, whether small or large, is approved and being scheduled. You evaluate other pending projects and realize your bunkers need new sand. By combining the projects and moving all the heavy materials first (any transport damage would be to existing paths and turf that are already marked for replacement) and completing the cart path project as the final stage of the combined projects, you will protect the integrity of the cart paths and enjoy the leverage to negotiate better pricing as a multi-task project. The key here is to find synergy and logic within the planned projects themselves. In the end, this approach will generate savings in scale and order of work.

### FLEX LABOR

Labor is often the crux of a hybrid project. Strive to work with the contractor to find the best ways to use the outside labor blended with your in-house labor. By doing this, you will achieve more with less. For example, in a difficult labor market, you may consider a flex labor approach. Flex labor is using a mix of contracted and in-house labor tracking individual hours/rates to be paid to the project or to the basic payroll. This is an outside-the-box answer to an old problem and will require excellent documentation skills, but by putting the best available people against the most critical tasks, you will maximize productivity. When flex labor strategies are used, you increase your potential for success exponentially. It is important to communicate the processes within your operation, especially to accounting and senior management so everyone is aware of the details. You may also establish a relationship to use contracted labor for tournament preparation or specific tasks. I have, from time to time, negotiated labor pricing for me to supervise several lo-

cal tree crews to expedite storm cleanup using climbers and saw men from the contractor, and our laborers to pull brush and chip debris. Be creative and see how many ways you can find flex labor solutions.

### BARTERING

In the old days of golf course management, we used a lot of farm or agro-

nomic tactics, especially when it came to project management. The best one was bartering. I will trade you what I have (items or skills) that you need for what you have (items or skills) that I need. This can be simple, things like you have fuel onsite so rather than setting up a temporary fuel depot for contracted equipment you trade XX gallons of fuel for additional grading and shaping work. There may also be opportunities for multi-course bartering where several superintendents go in partnership to maximize resources they can afford collectively, but not individually. I have been part of negotiations that brought discounts on contracted services like aeration or spraying because of the relationships of local superintendents (increased buying power) and vendors thinking outside the box. The laws of supply and demand are always in effect so knowing the value of materials and skills within a given market can make a difference in everyday transactions. I once bartered for a load of topdressing sand that was en route to another club. There is always a way to make a deal if everyone wins!



# GOLF COURSE INDUSTRY

CURATED CONTENT  
FOR YOUR BUSINESS,  
RIGHT TO YOUR INBOX



Eliminate the search for industry tips, news and reports and sign up for Golf Course Industry e-newsletters. Visit [bit.ly/GCInewsletters](http://bit.ly/GCInewsletters) today.

## MANAGEMENT

### SCHEDULES AND INCENTIVES

One of the best ways to ensure hybrid projects are successful is to combine the schedules of the projects with incentives rewarding excellence. This area is clear. Regardless of the job, people work better, smarter and happier when there is a little extra incentive. But that incentive must be connected to clear deadlines and expectations.

This ties back to scope of work, but also is critical to the execution of tasks especially if unexpected circumstances present themselves. The obvious is a completion bonus if all work is completed to standard by a given date. The not so obvious could range from a free lunch for top performers that covered trenches in time for a key inspection or giving a set of new rain gear to staff/contractors that kept moving forward despite inclement weather. My favorite rain gear of all-time was a gift from my boss for grinding a project through heavy rains. The best strategy is to ask upfront, what it will take to reach the deadline, overcome the obstacle, deliver the miracle and then deliver on any promises made.

### DOCUMENTATION

During the first project that I managed as a superintendent, one of my trusted mentors told me something that helped me as a project manager. He said trust but verify and document everything so you can show the value of your decisions, now and in the future. Whether your notes are hand written or on your cell phone is not as important as having the information about your project available

to use as needed. Pictures are great, dates and change orders are amazing. Weather records impacting deadlines are also important. The goal in the documentation within a hybrid project is to capture all the deals and details, and ensure the scope of work was completed and all parties were compensated as agreed within the process. I would also recommend that you store your documentation in more than one place.

A few years ago, our shop literally collapsed and computers and files alike were lost. The documents that were stored in the company cloud or separate hard drives survived, and the rest were lost. When it comes to documentation, the value of your information is in direct proportion to your attention to detail and the ability to access the documents on demand.

Project management is a big part of the success of any superintendent. By using a hybrid project management philosophy, you can create synergy and flexibility to maximize available resources. Of course, there are times where the standard approaches of contracted and in-house project management will be the best method. However, if you evaluate the needs and complexity of your unique situation(s) and employ the value of the six key areas of hybrid project success, you will be able to personalize every project while reaching new levels of achievement. **GCI**

*Anthony Williams, CGCS, is the director of golf course maintenance and landscaping at the Four Seasons Resort Club Dallas at Las Colinas in Irving, Texas.*



# BEST ON THE COURSE



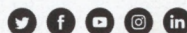
## Introducing the BEST OFF THE COURSE

**UMAX** | **RALLY™ 2+2**



**YAMAHA HAS A VEHICLE FOR ALL YOUR PASSIONS.** On or off the course, we continuously strive to bring you the best. And this time, we've taken the power and performance you trust and fused it with the ultimate in comfort. Introducing the UMAX Rally™ 2+2, our newest utility car featuring a completely redesigned rear-facing seat kit with large bucket seats. Now you can tackle any terrain with complete ease. UMAX Rally 2+2, another reason why Yamaha is The Easy Choice.™ For more details, visit [UMAXrally22.com](http://UMAXrally22.com)

[YamahaGolfCar.com](http://YamahaGolfCar.com) | (866) 747-4027



**YAMAHA**

*Revs your Heart®*



## TRAVELS WITH TERRY

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



### TOOL CART

**T**he mobile tool cart is made from four 8-foot long wood, 2 inches by 4 inches (\$40), two 24-inch by 34-inch pieces of plywood for the upper and lower flooring (\$15), four caster wheels (\$60), miscellaneous tool brackets, and a peg board with tool hangers (\$25). Doug Meir, equipment manager, at the Bonita National Golf & Country Club in Bonita Springs, Fla., built this handy mobile tool cart that easily holds everything he and his assistant mechanic need for routine equipment servicing and repairs. The cart took about two hours to fabricate and assemble. Jesse Metcalf, superintendent, leads this great golf maintenance team.

### AIR HOSE CLEANING

**H**ighlands (N.C.) Country Club equipment technician Paul Dalton re-plumbed the compressed air piping system utilizing six hose reels on the inside of the maintenance building. Dalton created four additional stations on the building's exterior for the greenkeeping staff to hose off debris from their boots/clothes before entering the building. The 2015 Kobalt vertical 80-gallon 4.5-horsepower air compressor (\$500) feeds ¾-inch diameter Rapidair main-line piping throughout the building. A Coilhose Pneumatics air gun, sold by Mac-Tools, fits onto the 6-foot air hose, which has a quick disconnect from the wall. The air gun hangs on a 1-inch galvanized steel hook. The cost was about \$1,200 and it took about two days to complete. Brian Stiehler, CGCS, MG, golf course superintendent, leads the successful golf maintenance team.



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





Research Driven,  
Proven Results™

# USED BY THE WORLD'S MOST CELEBRATED GOLF COURSES AND STADIUMS

Since 1992, GRIGG has been committed to bringing new high quality, science-based nutrition products to the golf and sports turf markets. GRIGG products are backed by university research and field testing, and customers are supported by seasoned GRIGG agronomists and turfgrass professionals. These are a few of the reasons GRIGG products are used and trusted by some of the most notable golf courses and sports stadiums in the world – including The Rose Bowl® Stadium.

For more information, call or visit:  
800 300 6559 or [www.grigg.co](http://www.grigg.co)







# Premium Products for Optimized Turf Performance



A complete line of sophisticated products developed to increase  
the strength and resilience of highly maintained turf.

- Foliar Fertilizers
- Biostimulants
- Granular Fertilizers
- Colorants & Pigments
- Soil Surfactants
- Foliar Adjuvants
- Soil Remediation
- Soil Amendments

**Plant Nutrition | Turf Strength Conditioning | Plant Defense Activation**

**Contact us to learn more.**

TSP OCI AD RL\_07-25-18

target-specialty.com | turffuel.com |







## Case Study of the Target Specialty Products™ CUSTOMER EXPERIENCE



Ron Furlong

**W**ith a playing season that can be as short as four months, and rarely longer than five, having your golf course perk up as soon as possible in the spring, and stay healthy for the entire short season is vitally important, to say the least.

Such is the case for superintendent Dan Nolin at the Fairmont Banff Springs Golf Course in the Canadian Rockies in Alberta.

In 2015, Nolin, coming off his first year as superintendent at Fairmont Banff Springs (although he'd been at the course for 18 years prior to taking over), saw a need to improve early season conditions on the two mountain courses. With such a short season, he realized the need to come out of the harsh Canadian winters as quickly as possible was positively imperative.

Nolin performed a trial in the spring of 2015 on the Tunnel Mountain greens, which is a nine-hole course mainly for the locals and separate from the 18-hole championship resort course.

After consulting with Alberta's Target Specialty Products/Turf Fuel Products Division Manager Mark Jull, Nolin decided to try some of Target Specialty's Turf Fuel products on the smaller course.

"That spring, Mark helped me build a different program for the Tunnel nine," Nolin says. "Almost immediately we saw some amazing results on those Poa/bent greens. And if wasn't just us noticing, it was the members not only just noticing, but also wondering why the Tunnel greens were so much healthier looking coming out of winter."

In that first spring trial, Nolin used multiple Turf Fuel products, including Respo Fuel, Carbon 21, Quick Green 14-20-0 and Base N25, a 25-0-0 slow-release product. With nearly instantly positive results, No-

lin moved the test to the Stanley 18 greens, the main resort course at Banff Springs named for the legendary architect Stanley Thompson, who redesigned the original 18 in the late 1920s.

In the test, Nolin decided to not only begin applying Turf Fuel to the Stanley 18, but to actually stop using their products on the Tunnel 9 and return to his old fertility program. It took almost no time for the Stanley 18 greens to look as good as the Tunnel greens.

"The Tunnel greens that were no longer receiving the Turf Fuel products started to plateau, while with the Stanley 18, everything started ramping right up," Nolin says. "It was fairly amazing."

Later in the summer, Nolin added another Turf Fuel product to the mix, Turf Fuel 0-0-29, while continuing to use the four original products from the spring. In the fall, heading into the cold, wet alpine winter, applications included Respo Fuel, Carbon 21, Minors Fuel and Element 6, which strengthens turf entering winter.

Based on the success of that first season, it was an easy decision for Nolin to make the permanent switch going forward.

"We went 100 percent Turf Fuel after that," he says. "And we didn't just switch our program on the greens. We've switched on tees and fairways as well. We used to incorporate a combination of granular and foliar in the past, but with the success of the Turf Fuel products for us, I've gone almost entirely Turf Fuel liquid with all applications."

With so many Turf Fuel products available, Nolin has found that continuing forward with the program offers enough va-

riety to handle any shortcomings in plant health.

"We've tweaked the program every year," he says. "We've replaced some products as well as changed the rates on others."

"Even though we have a very short season, we still have a lot of traffic for those four or five months we're open," he adds. "We've really noticed the wear tolerance on our greens improve drastically with the use of the Turf Fuel products. It's been a great improvement not only coming out of our harsh winters but getting us through the season as well."

The 2015 experiment turned out to be a permanent change for the course in the Canadian Rockies.



FAIRMONT BANFF SPRINGS GOLF COURSE IN ALBERTA IS CONSIDERED ONE OF CANADA'S ELITE GOLF FACILITIES.



BUSINESS OPPORTUNITY

**BRANCH ENTREPRENEUR**  
- Natural Lawn Care  
Partnership

Interested in partnering with an established Natural Lawn Care Company to provide clients in your city with Natural Lawn and Landscape Care?

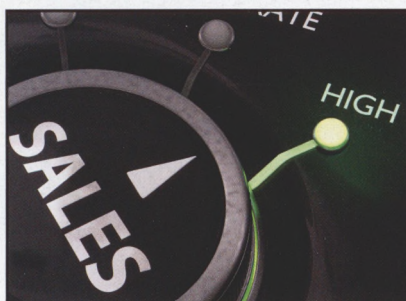
Contact Alec McClennan today to start the conversation  
Alec@whygoodnature.com or  
216-570-5346 (cell).

FOR SALE

**Discount  
Small Engines & Parts**

Small engines & parts from Briggs & Stratton, Kohler, Tecumseh, Robin and more.  
[www.smallenginesuppliers.com](http://www.smallenginesuppliers.com)

Also, look up your own parts and buy online at  
[www.smallenginepartssuppliers.com](http://www.smallenginepartssuppliers.com)



**MAXIMIZE  
YOUR  
ADVERTISING  
DOLLARS**

Place a GCI Classified Ad  
Contact Bonnie Velikonya  
at 800-456-0707  
bvelikonya@gie.net.

**GOLF COURSE**  
INDUSTRY  
[magazine.golfcourseindustry.com](http://magazine.golfcourseindustry.com)

MERGERS & ACQUISITIONS

**BUYING OR SELLING  
A GOLF COURSE OR  
GOLF RESORT?**

We are the Leaders in  
Golf Course/Resort Disposition

NATIONAL  
**GOLF & MARINA**  
PROPERTIES GROUP™

**Eddy A. Dingman**  
Real Estate/Golf Business Broker  
eddy@nationalgolfandmarina.com  
847-987-6626



**MILLER MANAGEMENT  
ASSOCIATES**

We work with buyers and sellers of  
GOLF COURSES IN  
THE SOUTH EAST REGION  
[www.mmagolf.com](http://www.mmagolf.com)  
brett@mmagolf.com  
828-775-7765

SEEDS

**NATIVE SEEDS**

Largest producer of native seeds in the Eastern U.S. Hundreds of species of grass and wildflower seeds for upland to wetland sites. Bioengineering material for riparian areas and erosion control. Contact **ERNST SEEDS** today.  
[www.ernstseed.com](http://www.ernstseed.com) - 800/873-3321

READ THE  
DIGITAL  
EDITION  
OF GCI  
TODAY!



ADVERTISER	WEBSITE	PAGE
Anderson's, The	<a href="http://andersonsplantnutrient.com">andersonsplantnutrient.com</a>	57
Aquatrols	<a href="http://aquatrols.com">aquatrols.com</a>	17
Barenbrug USA, Inc.	<a href="http://barusa.com">barusa.com</a>	13
Bayer	<a href="http://backedbybayer.com">backedbybayer.com</a>	COVER, 37
Belchim Crop Protection	<a href="http://belchim.com">belchim.com</a>	18
Billy Goat Industries	<a href="http://billygoat.com">billygoat.com</a>	8
Cool Planet Engery Systems	<a href="http://coolplanet.com/cool-terra">coolplanet.com/cool-terra</a>	31
Earthworks	<a href="http://earthworksturf.com">earthworksturf.com</a>	2
FAIRWAYIQ	<a href="http://fairwayiq.com">fairwayiq.com</a>	23
First Products, Inc.	<a href="http://1stproducts.com">1stproducts.com</a>	32
FMC	<a href="http://fmc.com">fmc.com</a>	19
Grigg Brothers	<a href="http://brandt.co">brandt.co</a>	53
Hunter Industries	<a href="http://hunterindustries.coim/hpc">hunterindustries.coim/hpc</a>	46-47
Jacobsen	<a href="http://jacobsen.com">jacobsen.com</a>	60
JRM, Inc.	<a href="http://jrmonline.com">jrmonline.com</a>	27
Koch Turf & Ornamental	<a href="http://kochturf.com/green">kochturf.com/green</a>	25
Lebanon Turf Products	<a href="http://lebanonturf.com">lebanonturf.com</a>	59
Pond Hawk	<a href="http://linneindustries.com/pondhawk-overview">linneindustries.com/pondhawk-overview</a>	5
Nufarm	<a href="http://nufarminsider.com">nufarminsider.com</a>	22
PBI-Gordon Corp.	<a href="http://pbigordonturf.com">pbigordonturf.com</a>	20, 21
Progressive Turf Equipment, Inc.	<a href="http://progressiveturfequip.com">progressiveturfequip.com</a>	10
Residex	<a href="http://target-specialty.com">target-specialty.com</a>	54-55
Standard Golf Company	<a href="http://standardgolf.com">standardgolf.com</a>	33
Turf & Soil Diagnostics	<a href="http://turfdiag.com">turfdiag.com</a>	9
Turfco MFG, Inc.	<a href="http://turfco.com">turfco.com</a>	11, 24
Yamaha Golf-Car Company	<a href="http://yamahagolfcar.com">yamahagolfcar.com</a>	51





# HIGH-PERFORMANCE GREENS NUTRITION

The combination of Contec DG® - Gen 3 dispersing granules and Foltec® SG soluble granules provides ideal premium nutrition for greens, tees, and other fine turf.

NEW!

## CONTEC DG - GENERATION 3

Gen 3 represents the latest evolution of the Contec DG product range. Featured on select products, these granules are easy to spread and easy to see, saving turf managers both time and money. Gen 3 granules are completely homogeneous, allowing for a consistent spread pattern. The granules also stand out against turf, making it easy to see where product has been applied, decreasing the possibility of over-application.

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

## FOLTEC SG

Foltec SG is an innovative foliar nutrient technology utilizing a proprietary combination of dry, 100% soluble nutrient granules that quickly solubilize in the spray tank. Each Foltec SG product contains a specific N-P-K ratio along with essential micronutrients, UltraMate SG (humate/carbon) and sea plant extract. Packaged in resealable foil-lined bags with easy-open tear strips to save time and effort, Foltec SG truly allows you to spray smarter.

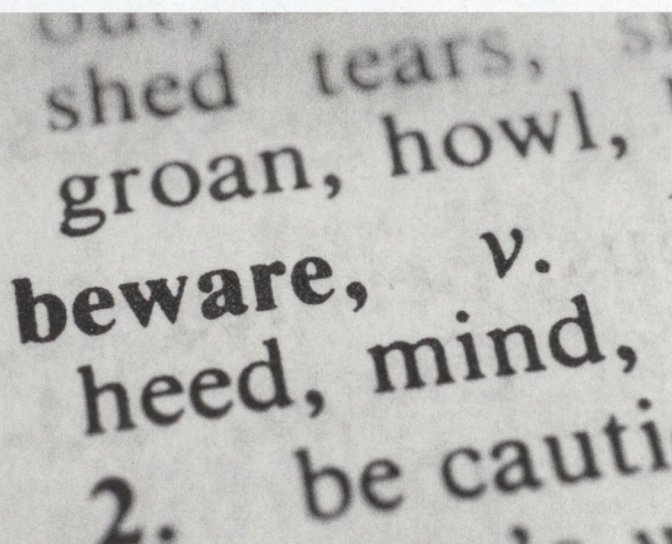
[FoltecSG.com](http://FoltecSG.com)



[AndersonsPlantNutrient.com](http://AndersonsPlantNutrient.com) | [@AndersonsTurf](https://twitter.com/AndersonsTurf)

©2019 The Andersons, Inc. All rights reserved. The Andersons logo, Contec DG, and Foltec are registered trademarks of The Andersons, Inc. A19





## Beware

*"I am a generous man, by nature, and far more trusting than I should be. Indeed. The real world is risky territory for people with generosity of spirit. Beware."*

— Hunter S. Thompson

I love that quote and it reminds me the word "beware" is vastly underappreciated. I guess it seems a little quaint and antiquated today versus "heads up" or "watch out" or "keep your damn head on a swivel." At its heart, the word beware is a warning that things may not be what they seem. It's a flashing yellow light in the highway of life that says, "Watch out ... something bad might be happening here."

In our happy little industry, you would think that there's little to beware of. But you would be wrong. For example ...

**BEWARE OF BIG REMODELING PROJECTS.** My friend Bruce Williams recently reminded me of his longstanding observation about construction projects being job-killers. Why? Because historically a lot of folks lose jobs in the year or two after a renovation. The reason is because things rarely go exactly as planned and it's impossible to manage everyone's expectations after you've built them up.

In the process of selling a renovation, people tend to present a best-case scenario. It's human nature to be optimistic. You say, "Our plan is to complete the greens regrassing on the back nine by June 1, so, weather permitting, we believe the course will reopen then assuming the turf is well-established." Golfers hear, "I guarantee you'll be playing on the new greens by June 1 and they will be rolling like Oakmont."

That's an exaggeration, but it is true that superintendents and architects need to be very thoughtful about how timelines

are presented and how often members need to be told that there are many things that can disrupt a project. Also, be honest and transparent about what could go wrong to manage those expectations. Either way, remember Murphy's Law and never go into a renovation without thinking, "What if this whole thing blows up?"

### BEWARE THE NEW GENERAL MANAGER.

The cliché that "a new broom sweeps clean" is often scarily true when clubs change general managers. New GMs often want to bring their leadership style and management habits from their previous clubs and the change can be jarring. It can be even more jarring if they also want to bring their old superintendent along.

Prior to any GM search at your facility, it's critical to have a discussion with your ownership/leadership about where you stand and how they will view a new GM's attempt to dump you for "their guy." Make sure that you have advocates in your corner should the new person try to make a change. But beware being adversarial about your new GM. Try to be open to the possibility that she or he might be the best boss you've ever had.

### BEWARE LATE MIDDLE-AGE.

One of the scariest things happening these days are clubs deciding they need a change for the sake of change. Too often these are facilities with a highly competent, experienced superintendent who's been in place for 15 years or more. And, oftentimes, these are superin-

tendents in their mid-50s who are comfortable in their role and planning to ride their current job out until retirement.

There are two things to beware here. The first is the perception (or the reality) that you're phoning it in. We all get comfortable in jobs after a while, but the challenge is not getting too comfortable.

The second is understanding that your options for finding a job that pays what you've been making are severely limited when you're a fifty-something. Clubs want to hire a top-notch superintendent and keep that person in place for 15 to 20 years. They also tend to want someone "energetic" and "up to date on today's technology," which, of course, are code words for young.

Follow the advice of the industry's best who never stop learning, never stop introducing new things to the course and never fall into the trap of believing that it's their golf course and the members just play on it.

### FINALLY, BEWARE THE IDES OF APRIL.

That's right, I said April, not March as Julius Caesar was famously warned in Shakespeare's play. Why should you beware mid-April? Because it's Masters time and suddenly everyone else is an expert on what you do. It always reminds me of another favorite quote, this time from George Bernard Shaw:

*"Beware of false knowledge; it is more dangerous than ignorance."*

GCI



**PAT JONES** is editorial director of *Golf Course Industry*. He can be reached at [pjones@gie.net](mailto:pjones@gie.net) or 216-393-0253.



# MOISTURE LEVELS ARE THE KEY

## FOR CREATING



# HIGH QUALITY TURF MANAGEMENT



Emerald Isle Solutions™

### Introducing Emerald Isle Solutions Wetting Agents: Affusion & Triumvirate.

Effectively manage the moisture in your soil profile with products that are purposely designed to help create and maintain season-long, high quality turf. Affusion is designed for fairways, tees and roughs, while Triumvirate is formulated for high sand content putting greens. Together they deliver the necessary water control for the playing conditions you need from tee to green. Two new water management products from the brand you know and trust! Learn more at [LebanonTurf.com](http://LebanonTurf.com) or call 1-800-233-0628.



Best of all Worlds®







# SHIFT YOUR APPROACH.

## Cover more ground with the AR and TR Series.

New AR and TR Series trim mowers bring the legendary Jacobsen® cut to hard-to-reach areas. They're loaded with versatile features like AdaptiShift™\* technology which moves all three cutting units from side to side, offering 12 inches (AR Series) or 18 inches (TR Series) of offset and the option to create varying tire track patterns. Their versatility enables you to deliver contour-hugging precision and unrivaled hill-climbing capabilities, providing a superior quality of cut and heightened productivity.

\*AdaptiShift technology available on AR331 and TR330.

Get more details at [www.jacobsen.com](http://www.jacobsen.com)  
or call 1.888.922.TURF



AR SERIES



TR SERIES

**TEXTRON GOLF**

© 2019 Textron Specialized Vehicles Inc.