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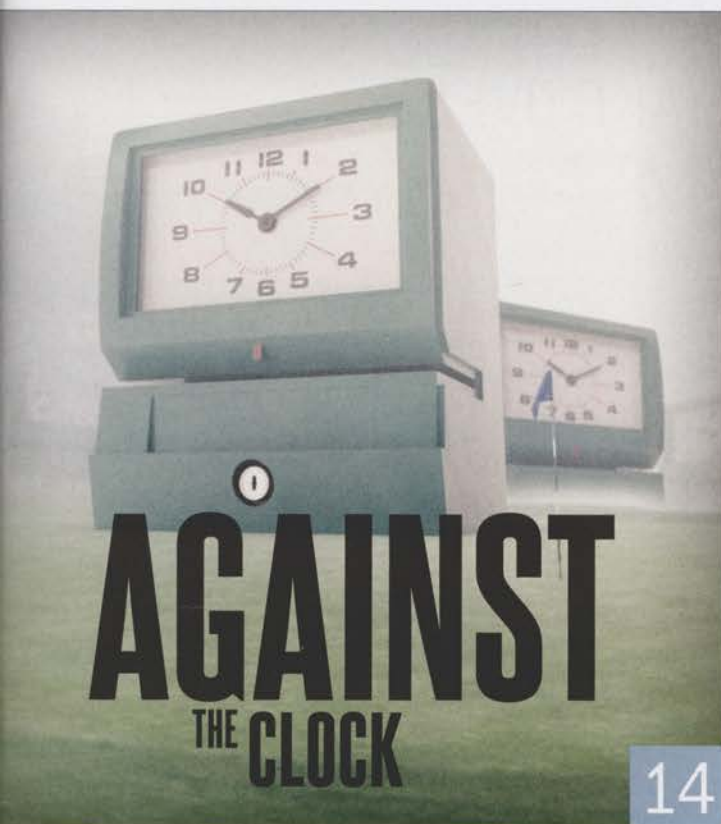
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IN THIS ISSUE



COLUMNS

- 12 JOHNNY TURFNERD**
John Kaminski: Above and beyond
- 22 OUTSIDE THE ROPES**
Tim Moraghan: Post this article!
- 32 DESIGN CONCEPTS**
Jeff Brauer: Playing the angles, kid...
- 38 GAME PLAN**
Henry DeLozier: Future shock
- 46 IRRIGATION ISSUES**
Brian Vinchesi: Pumping 2016
- 52 THE MONROE DOCTRINE**
Monroe Miller: Another check off the bucket list
- 54 NUTS & BOLTS**
Paul F. Grayson: Small stuff
- 58 PARTING SHOTS**
Pat Jones: Symbiosis

DEPARTMENTS

- 4 TEEING OFF:** Turfheads take over
- 8 EDITORS NOTEBOOK:** Get to the point
- 56 TRAVELS WITH TERRY:** Equipment ideas
- 57 AD INDEX**
- 57 CLASSIFIEDS**

FEATURES

Cover story

14 AGAINST THE CLOCK

A Department of Labor rule increasing overtime eligibility could affect significant change upon golf courses and the assistant superintendent position.

Industry

24 THEY GOT NEXT

What is it like entering the industry in 2016? We sit down with four future turf grads and get their views on the industry and their expectations for the future.

Construction

34 BOLD BRINGS BETTER

Superintendent Jason Mahl sparked conversations about improving Moraine Country Club. He's now ready to take the historic course to another level.

Pests

40 MOSQUITO MADNESS

From larvae to adult, mosquitoes complicate golf course operations. As mosquito season picks up throughout the United States, superintendents and pest management professionals increase measures to kill them off.

Research

48 FACTS & FIGURES

Recent research examines how and why superintendents collect course data, and how it benefits their overall agronomic programs.

Industry

50 NEW POSSIBILITIES

Innovative technology enters the golf market and is the first time bio solids are used to create a unique fertilizer product.



40

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TEERING OFF

TURFHEADS TAKE OVER

My career in this crazy business started on the offensive line of the Lawrence High School football team in 1979.

Believe it or not, I was an undersized left guard on a team that dramatically exceeded expectations and won the Kansas state football championship in a massive upset my senior year. The right guard on that team — who was vastly better at all aspects of football than me — was a guy named Chuck. We'll come back to him in a minute.



Pat Jones
Editorial director
and publisher

I graduated from high school, meandered through college at KU and decided to try law school. I quit after two years because I hated the soul-crushing idea of practicing corporate law in some giant glass tower. I putzed around at a local television station in Topeka for a couple of years and did a little bit of PR work. I had a vague idea of becoming a writer but no clue how to get started or where to find a job.

Then I remembered Chuck, my football buddy. I dimly recalled that his dad was involved with some weird group in Lawrence that had something to do with golf. Did they publish a magazine? Without any more information than that, I gave them a call. By sheer dumb luck, they did publish a magazine and they needed a writer. I had zero knowledge of golf, agronomy or turf but my journalism degree and willingness to work dirt cheap qualified me for the position. A week later, I started work at GCSAA as a cub reporter.

(Did I mention that my friend Chuck's last name was Maples? And that his dad's name was Palmer? Yup...I got my start in this business thanks — indirectly — to the legendary Georgia superintendent and Hall of Famer Palmer Maples who ran the education department at the national back then.)

That happy accident took place 29 years ago this month.

Thus, I begin my 30th year of working — if you can call what I do "work" — in this fabulous, amazing, wonderful fraternity known as the golf industry.

I really have no clue how many columns and articles I've written in three decades. More than a thousand probably. I've spewed out a lot of words. I'll sometimes come across something I wrote back in my drinking days and have no recollection of writing it. I've been sober seven years now and I still sometimes catch myself using the same phrase



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or idea I used way back when.

So, as I pondered what I should do for my 30th anniversary, it occurred to me that instead of writing another column (and probably repeating myself), I should take a month off. In fact, the entire GCI staff is going to take the month of December off.

We're going to turn the December issue over to you.

That's right, we're inviting you and our other 25,000 or so readers to become writers for our December "Turfheads Take Over" issue. Got a strong opinion about an industry issue? Make your case. Want to tell a story about your awesome crew? Write it up! Are you optimistic about the future? Tell us why. Did you have a mentor who changed your life? Profile them. Striving for work/life

“Got a strong opinion about an industry issue? Make your case. Want to tell a story about your awesome crew? Write it up! Are you optimistic about the future? Tell us why. Did you have a mentor who changed your life? Profile them. Striving for work/life balance? We want to hear about it.”

balance? We want to hear about it.

The only rules are keep it short (around 750-800 words) and keep it constructive. We'd prefer first-person opinion columns from superintendents or assistant superintendents, but all turfheads matter so we welcome any submission from anyone in the short-grass business. The deadline is Oct. 15 and submissions (with applicable photos) can be emailed to associate editor Guy Cipriano at gcipriano@gie.net.

We'll publish the best of them in our December issue and share what we don't have room for on our website and social media.

I'm looking forward to reading what you think ... and to enjoying my 30th-anniversary break. GCI



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A Deeper Respect



The Ohio State University turfgrass pathologists Todd Hicks and Joe Rimelspach conduct numerous trials on products offering dollar spot control.

Get to THE POINT

Dollar spot beware! There's a new strobi being tested that is proving to be a powerful tool against this sinister, summer blight.

By Guy Cipriano

Developing a fungicide means displaying extreme patience. Test. Wait. Test some more. Wait some more. The process doesn't always mesh with a society tilted toward instant gratification.

For the last 10 years, the Nufarm/Valent fungicide Pinpoint has been tested on university research plots for dollar spot control. The fungicide has received approval for use in Canada

and is still awaiting EPA registration. Pinpoint is the first new fungicide introduced by Nufarm/Valent since the companies announced a collaborative agreement in 2014. "When it takes 10 years for something to come out, there's a huge investment before one package is even sold," The Ohio State University turfgrass pathologist Joe Rimelspach says. "A lot of leg time goes into it."



A dollar-spot free bentgrass plot using Pinpoint at the Ohio Turfgrass Foundation research facility in Columbus. The Valent/Nufarm fungicide has been tested on university plots for the last 10 years.

GCI recently visited the Ohio Turfgrass Foundation Research and Education in Columbus, Ohio, to meet with Nufarm and Valent representatives, discuss the fungicide with Rimelspach and Ohio State colleague Todd Hicks, and observe test plots. Pinpoint targets dollar spot on greens and fairways and its active ingredient mandestrobin represents a newcomer to the golf industry. Mandestrobin belongs to the strobilurin class of fungicides. Pinpoint is the first strobilurin that doesn't have to be used in combination with another fungicide to target dollar spot, according to Hicks.

Pinpoint has been tested under a variety of conditions at Ohio State, along with other universities and multiple golf courses, in the past decade. The Ohio State duo tested Pinpoint at 14-, 21- and 28-day intervals during mild, sticky and hot summers using the product at a rate of two gallons per 1,000 square feet.

"The nice thing about having multiple years is that we have done work from 14 up to 28 days," Nufarm technical director Jason Fausey says. "Fourteen to 21 days for dollar spot is going to be our suggested

program. I know some of those early spring applications were well over 21 days depending on the time and the pressure. Leaning on research and efficacy data, we like a 14- to 21-day interval."

Pinpoint possesses preventative and curative activity, although Fausey says, "its strength is going to be the preventative activity." Hicks sees the fungicide fitting nicely into a summer dollar spot control program.

"Two questions a superintendent asks ... First, does it work? And, second, OK, now where do I use it?" Hicks says. "I like this chemistry because of the safety factor of using it in the summer. We have not seen any adverse effects no matter what the weather pattern is. In the middle of the summer from June 15 or 20 to about August 20 is what superintendents call 'the survival zone.' I get everything the way I want it by that period and I just try to maintain it as it slowly weans off and turns worse until I can grow it back. If you have something that gives protection and is safe to use, that's a huge bonus for a superintendent."

From THE FEED

Our followers' biggest summer challenges as August approached...



Robert Mackie

@reeebert

#1 Transition Blues in Charleston! Labor definitely almost a tie for second with weed pressure and untimely costs a close 3rd.



Jay Wade

@jaywadelll

Definitely labor. Seems to be an issue at nearby courses too



Ian Daniels

@EanDaniels

Weather! Drought conditions. 2.5" rain in 2 months. 20" deficit for the year in our region of NY. Irrigation is no supplement.



Tim Matty

@bigfishmatty

Maintaining high expectations/quality product w/ impending mass exodus of rockstar college seasonals. #bye guys



Dan Francis

@francisdmarrion

Weather and Labor w/o a doubt... Untimely rains w/ disgusting temps, and the ole saying "hard to find good help!"



Jason Haines

@PenderSuper

Finding staff. Is anyone out there?



Matthew Wharton

@CGCGreenkeeper

Labor is definitely a challenge but the summer of 2016 will be remembered in the Queen City for weather induced disease.

Tartan Talks No. 1

GCI and the American Society of Golf Course Architects are collaborating on a podcast series, "Tartan



Staples

Talks," exploring various trends in golf course architecture and development. Our first episode features Andy Staples, the President of Staples Golf.

We recorded the episode while touring Staples' renovation work at Meadowbrook Country Club, a former PGA Championship site in suburban Detroit. Earlier this year, Staples released "The Community Links White Paper," urging municipalities to either innovate or close struggling golf courses. Listen to the episode and Staples' vision for municipal golf by entering bit.ly/29CChTb into your web browser.



Mending Lisa's Heart

Fieldstone Golf Club, a Troon Golf managed private club featuring a Michael Hurdzan/Dana Fry course in Wilmington, Del., recently became the first golf course in the world to combine the synthetic sod wall and edge product Durabunker with the Better Billy Bunker liner product. The old-world bunkering at Fieldstone is a strong feature of the design with a number of sod-wall bunkers, the showpiece being the bunker on the 18th known as "Lisa's Heart" after club founder Lisa Dean Moseley. David Whelchel, the architect involved on site during the initial stages of the Durabunker project, was also a central figure in the original design with Hurdzan and Fry.

Still coping with fall flooding

Golf courses along the South Carolina coast are recovering from a second wave of issues stemming from devastating floods last fall. Saturated soils and cloudy skies induced a fungal disease that attacked Bermudagrass greens as they were moving into dormancy.

The resultant damage only became apparent when temperatures finally picked up after a mild spring. Instead of emerging with vigorous green growth from its cool-season hibernation, large swaths of Bermudagrass were dead.

Courses from Myrtle Beach to Hilton Head were affected with the Charleston area the worst hit. Similar

damage also appeared in central and south Florida.

"I saw more catastrophic loss of putting greens grasses in the area from February to the end of May than I have seen in the last 25 years," says United States Golf Association Green Section agronomist Patrick O'Brien. "Conditions were perfect for Pythium root rot. They couldn't have been more ideal."

Damage was widespread and did not discriminate between public or private facilities or between varieties of Bermudagrass. Loss of grass on some putting greens was as much 70 percent forcing golf course superintendents to make costly repairs.

INDUSTRY BUZZ

- **Toro elected Richard M. Olson as CEO.** Olson will replace Michael Hoffman effective Nov. 1. Hoffman will continue to serve as the chairman of the board.
- **Bayer announced EPA registration for Exteris Stressgard.** The formulation provides dollar spot, brown patch and leaf spot control while adding additional benefits such as dew mitigation and fast knock-down of damaging mycelium.

For more industry news, subscribe to GCI's Fast & Firm newsletter by entering bit.ly/2a2KmS8 into your web browser.

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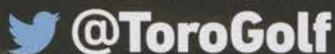
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ABOVE AND BEYOND



John E. Kaminski, Ph.D. is an associate professor, Turfgrass Science, and director of the Golf Course Turfgrass Management Program at Penn State University. You can reach him at kaminski@psu.edu.

What a crazy end of the internship visit season for me. This summer I visited 13 of the interns from the Golf Course Turfgrass Management Program at Penn State. The visits took me to various spots across the United States and also to Ireland.

Now in my eighth year of internship visits at Penn State, I have come to see what seems to motivate students, what actually teaches them something and what discourages them to the point where I will be surprised if they're in the business in 10 years. It's a little depressing to think about, but it's the reality of the business. At least for now.

While the superintendent and his or her assistants play a critical role in a successful internship, I have to admit that a lot of the weight on whether an intern will be successful starts well before a student arrives at the course. Once on property, the responsibility is shifted towards the superintendent and the staff.

So without further discussion, here's a Top 10 of what makes a good internship. Some of these are for the students, some for the superintendents/assistants and some for both.

10 INVOLVEMENT FROM ADVISORS. Students that are given no direction and randomly send out resumes to many different courses will

fail. Advisors must play an active role in finding a good fit for each student. One of the reasons that I visit each student is to find out about the internship at that course and for that superintendent.

9 EXTENDED INTERNSHIPS. I can't say enough about how little is learned on a three-month internship. While doing several of them can help diversify a portfolio, working three months in the heat of the summer is less than an ideal learning environment. Figure out a way to attract an intern that sticks around six-plus months.

8 GO TOP 100. While I don't subscribe to this personally with my students, I can't help but recognize that getting a big name on your course will help your resume. Having a single three-month experience at a Top-10 course on your resume, however, won't do much for you. Be smart about these selective work experiences on your resume. They're important, but not everything.

7 WORK AT A SMALL CLUB. This ranks above the Top 100 course because you're probably (not always) going to learn more here. Students generally are more involved and take on a lot of different tasks. They also know how to manage a course with minimum resources. Couple this with No. 6 and now you're building a portfolio.

6 IT'S NOT ABOUT THE MONEY. Selecting an internship, and even first

or second job out of school, should not be about money or titles. Not yet anyway. Throw out the idea that one course pays \$10/hour while the other \$13. If that's how you choose your internship, then good luck to you.

5 INVOLVEMENT IN "EXTRAS." Not everyone can host a major event at their club, but that doesn't mean there aren't opportunities for students to be involved in more. A few examples could be volunteering at a nearby tournament, attendance at a board meeting, involvement in USGA/consulting visits, special projects, etc.

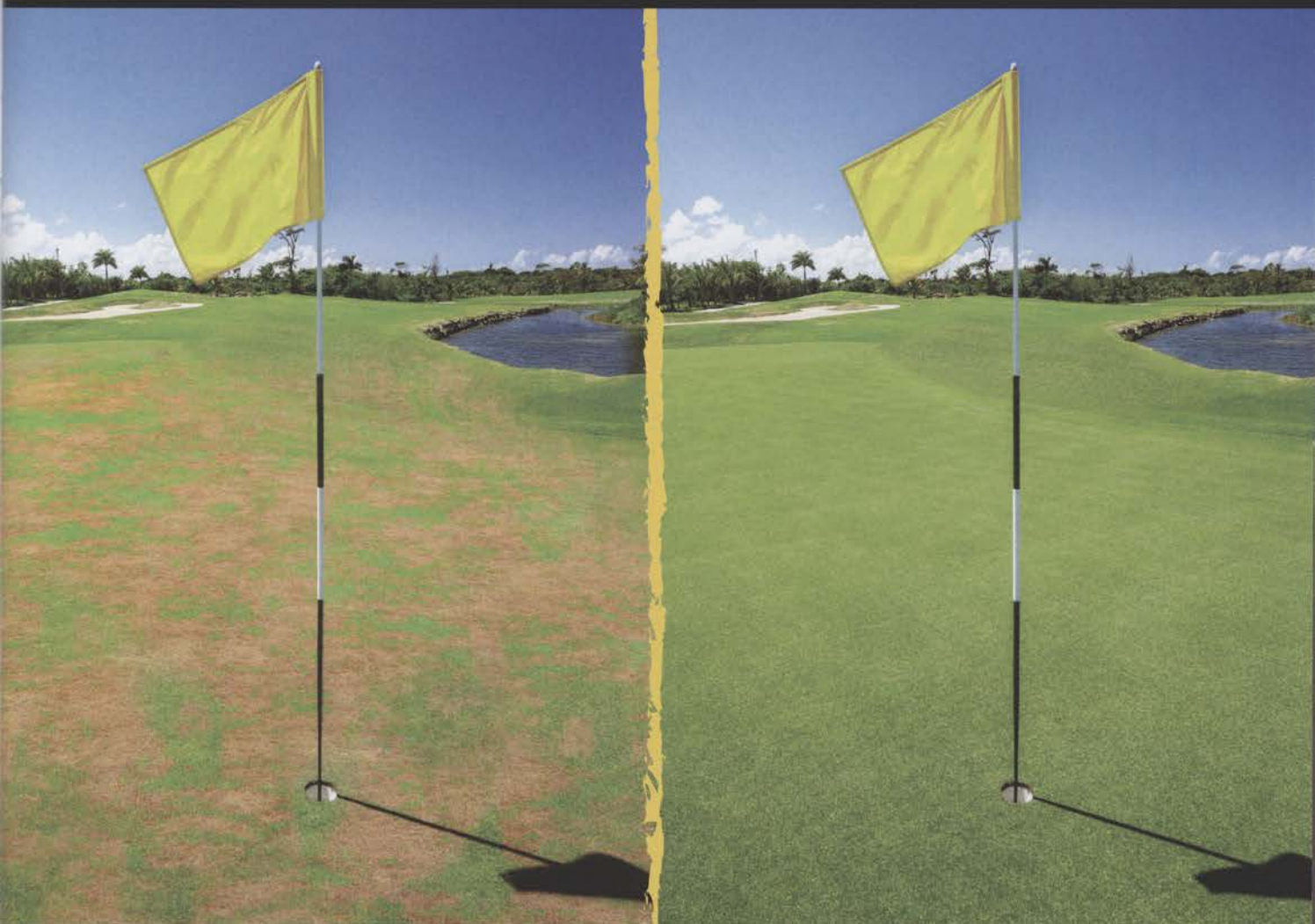
4 GIVE THEM SOME RESPONSIBILITY. I'm a big fan of earning responsibility and not just getting it for being there, but students that are given additional responsibilities (even just a taste) may actually surprise you. Don't be afraid to put them to the test to see how they hold up. If they fail, don't be afraid to give them a second shot.

3 GET THEM TO DRINK THE KOOL-AID. This should probably be next, but if superintendents do No. 2, then they are probably doing this anyway. Students want to be part of a team and not treated as general labor. Crews that get students to drink the Kool-Aid of the maintenance philosophy and the team will get a harder working and happier intern.

2 FIND/BE A MENTOR. Regardless if you're the employee or employer the responsibility is the same. Employees must seek out internships where they will be mentored. Superintendents (and their assistants) must be willing to dedicate extra time to mentor their interns.

1 HAVE A PLAN. Without a defined five- or even 10-year plan, you certainly will not achieve many of the items listed above. You may get lucky and hit a couple or even a few, but having a plan of what you want to get out of your internship as it relates to your career path will not only make for a successful internship, but also the more likelihood of a successful career. **GCI**

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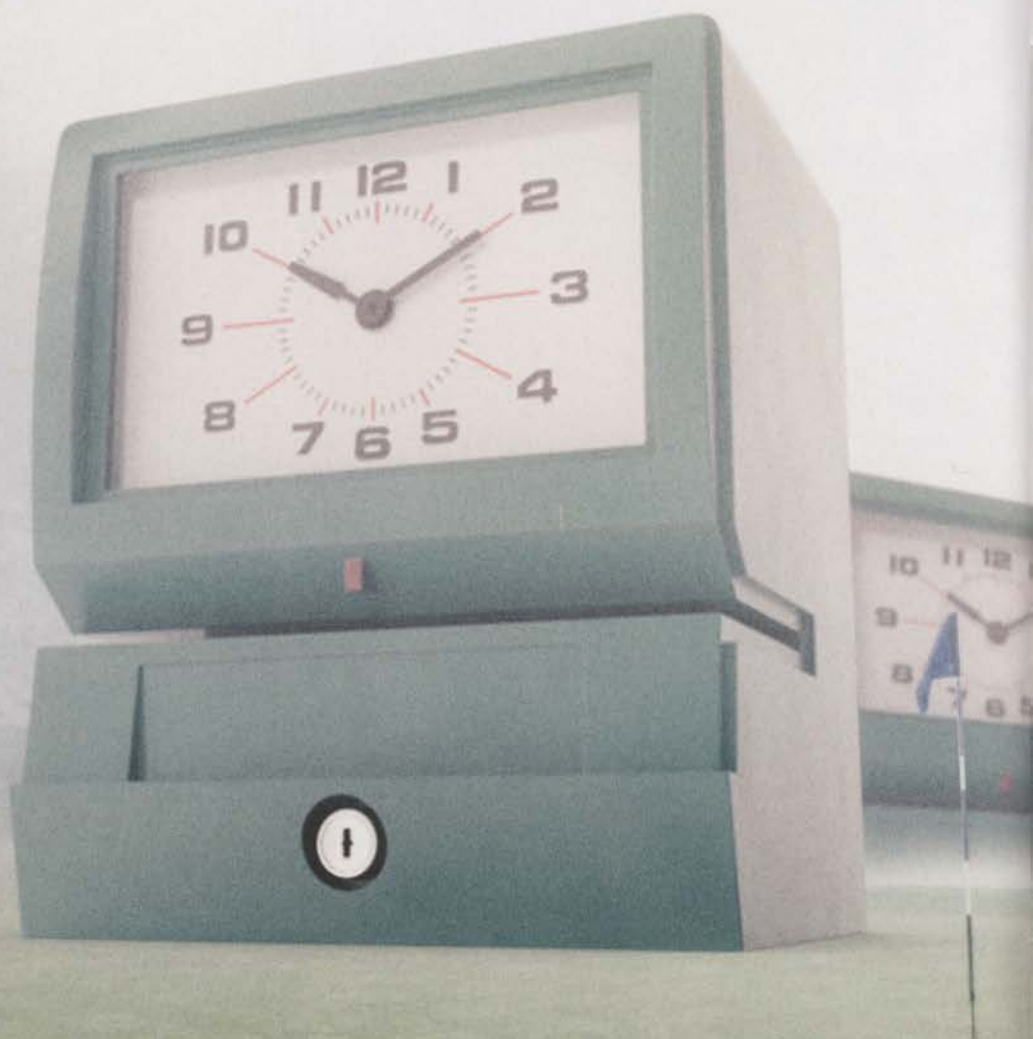
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AGAINST THE CLOCK

A Department of Labor rule increasing overtime eligibility could affect significant change upon golf courses and the assistant superintendent position.

By **Patrick Williams**

As golf courses struggle with attracting players and finding and maintaining employees, the Department of Labor has announced a new rule that could cause further hindrances to the industry.

The final overtime rule, which goes into effect Dec. 1, updates the overtime regulations of the Fair Labor Standards Act. Under the rule, the salary threshold for overtime-exempt workers will increase from \$23,660 to \$47,476, and will continue to increase every three years based on the 40th percentile of



WHAT IT MEANS

Per capita income in some golf-heavy parts of the country:

Berrien County, Mich. – **\$24,304**

Douglas County, Calif. – **\$44,105**

DuPage County, Ill. – **\$38,931**

Franklin County, Ohio – **\$28,807**

Harris County, Texas – **\$28,454**

Horry County, South Carolina – **\$23,693**

King County, Wash. – **\$40,656**

Maricopa County, Ariz. – **\$27,477**

Monterey County, Calif. – **\$25,048**

Montgomery County, Md. – **\$48,916**

Orange County, Calif. – **\$25,052**

Palm Beach County, Fla. – **\$33,072**

Suffolk County, N.Y. – **\$37,427**

Source: United States Census Bureau

earnings of full-time salaried workers in the South, the United States' lowest Census region. Employers will have to make a choice to shift currently exempt employees who earn less than \$47,476 to nonexempt and pay them overtime for weeks they work more than 40 hours, or give them a raise above the new threshold to keep them exempt from overtime.

Lobbyists representing the golf industry from the Golf Course Superintendents Association of America, the National Club Association, the Club Managers Association of America, the Professional Golfers' Association and the National Golf Course Owners Association share the position that the final rule will negatively impact the industry, and the Department of Labor should have taken more business and economic factors into account when drafting it. "That increase that the Department of Labor has provided is a 100 percent increase, and it starts six months after the rule was finalized," says Brad Steele, vice president of government relations and general counsel for the NCA. "That just doesn't work – in no sense of business does that work."

Numerous superintendents, golf course operators and industry experts agree that within a few short months, the new rule could begin to jeopardize the job status and security of assistant superintendents and weaken business cost structures. Some say employees will benefit from the rule, often to the detriment of their course. But because every course is different, superintendents will have to draft plans to keep costs low and morale high.

BLIND SHOT

Paul Culclasure, superintendent at the semi-private, 18-hole Kilmarlic Golf Club in Powells Point, N.C., says he didn't hear about the new rule until a couple months ago. Since then, he has researched it, knowing it will affect his operations. "I have yet to come across the logic behind doing this," he says.

When President Barack Obama signed a memorandum in 2014 directing the Department of Labor to increase the salary exemption, which was last done in 2004, he hoped to help employees by making more of them eligible for overtime and increased pay.

However, Steele says the rule is consider-

ably damaging to both business operators and their employees. Employers at many golf courses and other businesses will not willingly pay overtime but instead adjust staffing levels, salaries and shift hours – hurting affected employees' ability to learn, show their worth and grow in their jobs, he says. Some managers and superintendents will cut currently exempt employees who work more than 40 hours per week to 40 hours or below and hire part-time workers to make up the additional work. Others might cut vacation or retirement benefits upon transferring an exempt employee to nonexempt. Additionally, pay changes for non-maintenance workers at some courses and clubs, such as assistant golf professionals and assistant tennis professionals, will impact business operations across the board.

Overall, superintendent reactions to the rule have been mixed, says Chava McKeel, director of government affairs for the GC-SAA, who has spoken about it with members of her government affairs committee. "Some people actually were supportive of it, and some weren't," she says. "Some said, 'We're going to have to lay off some people,' 'We're going to have to hire new people,' 'We're going to have to shift some people down to nonexempt.' There wasn't anybody that had a common story, though. So it's hard to say definitively what the impact is, although there will be an impact."

At Kilmarlic, exempt employees work long hours during the club's busy months and have more time off during the winter months, says Bryan Sullivan, director of golf. Those employees have been there for years and seem fine with the way things have been going, he says.

With the new rule, though, superintendents at thousands of seasonal facilities like Kilmarlic will have to figure out how to protect their budget and operations while ensuring employees that job security, pay and benefits will remain largely unchanged. "I think a majority of facilities now are trying to get by with fewer employees but still trying to maintain the same conditions that their guests expect," Sullivan says. "So when you start putting these types of rulings on us, on golf courses, it's definitely going to affect some areas of how you run your operation."

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MINIMUM WAGE AND THE MOWER

With the prospect of major labor initiatives on the horizon, robotic mowers are looking like more of a certainty for many courses.

At least that's what Paul Culclasure, superintendent of Kilmarlic Golf Club, says. He sees the Department of Labor's new overtime rule as a step toward more laws that could hurt the industry, such as a federal minimum wage increase to \$15 per hour.

The state of California and New York City have passed laws to increase their minimum wages to \$15 by 2022 and 2019, respectively. The plan to hike the federal minimum wage up to \$15 is also part of a national debate. It was a major initiative outlined in former Democratic presidential candidate Bernie Sanders' platform, and Democratic presidential nominee Hillary Clinton has claimed support of a phased-in \$15 federal minimum wage.

With such an increase, superintendents wouldn't have any choice but to raise prices for golfers, or severely cut labor, Culclasure says. "I think if this continues in this trend, the companies that are advancing robotic mowers – we've all laughed and joked about it for years and years and years, but that may be the next step, is robotic mowers," he says. "Just logistically that's the only choice we're going to have."

Robotic mowers have become more accurate over the years, to the point where they can maintain a target area within centimeters, Culclasure says. He feels the big three equipment manufacturers will unveil automatic mowing equipment relatively soon. Toro has already released its GPS-integrated GeoLink sprayer technology, which includes computerized spray nozzles. "Guys that aren't computer-savvy – if you're working on equipment, (you) better start learning because it's coming," he says. "And superintendents too."

If the federal minimum wage does increase to \$15, superintendents will have to cut some people, and automatic technologies would be the easiest and most affordable way to keep up with the grounds, Culclasure says. "I think guys are starting to realize the most expensive thing we do is pay people, which is sad," he says. "I would hate to see the industry go that way, but we're just trying to survive and keep golfers coming. We can't go up on price."

businesses, says Melissa Low, senior director of communications and government relations for the CMAA. For golf courses, the rule will impact currently exempt assistant-level employees, including assistant superintendents, who earn below the new minimum salary threshold. The average base salary for

an assistant superintendent last year was \$41,372, according to the GCSAA's 2015 Compensation and Benefits Report.

The assistant superintendent at Kilmarlic, Junior Avalos, was promoted from a crew position and put on salary this year, Culclasure says. Although his salary exempts him from overtime

he used to receive in the summer, it provides more stability throughout the rest of the year. "I think this time of year he's missing the hourly, but he did also tell me in December, 'This is nice. I like that I know what I'm going to get this week no matter what,'" Culclasure says.

If employers respond to the rule by converting assistant superintendents to hourly, it could hurt those assistant superintendents' morale, despite the possibility of a slight raise, Culclasure says. At the same time, many employers will not be able to afford giving their assistant superintendents significant raises to keep them exempt.

Anthony Benes, superintendent for Old Works Golf Club, a public, 18-hole course in Anaconda, Mont., foresees the rule and resulting costs leading to raised prices for golfers. The majority of the staff at Old Works is seasonal, so the new rule probably won't heavily influence its business. The club is also managed by Troon, and Benes believes any changes to staffing or operations would be part of a larger, company-wide initiative.

Across the golf industry, assistant superintendents already see relatively stagnant wages, Benes says, and the rule could cause employers to shift them to hourly or give increased responsibility to less-qualified employees. "It's one of those revolving door positions," he says. "You might get a little bit better attention with a little bit better wage, but it's going to have bigger impacts for the property than it will for the people that are in those positions."

Superintendents in parts of the country such as rural Iowa

will themselves be affected by the rule, says Rick Tegtmeier, director of grounds for Des Moines Golf and Country Club, a 36-hole private facility in West Des Moines, Iowa. Many of them have already started looking for loopholes.

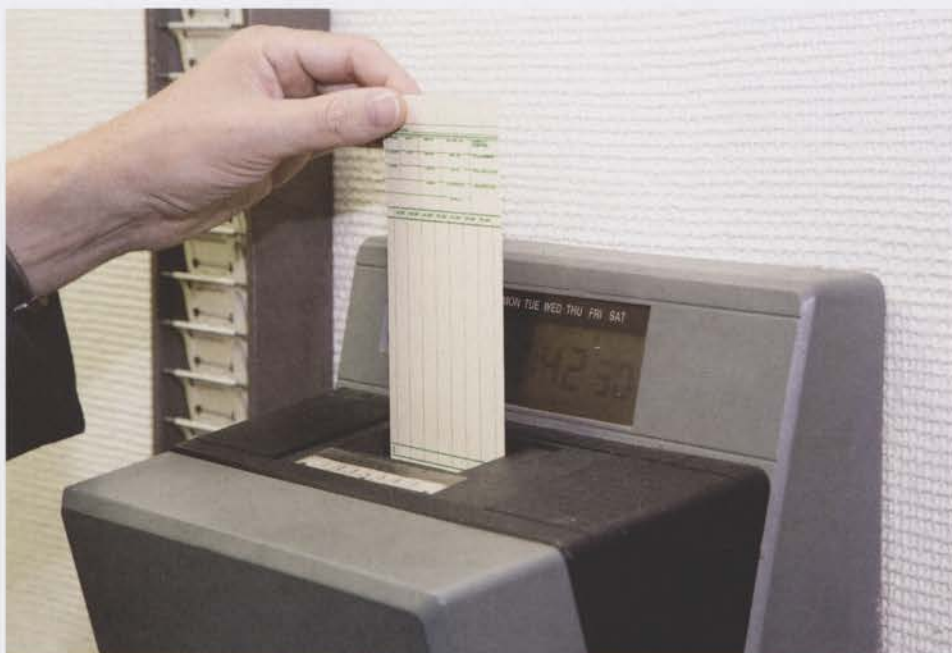
At the same time, Tegtmeier feels like some clubs take advantage of assistant superintendents by regularly working them between 50 and 70 hours a week and paying them low salaries. "Having a person get overtime, because if they're asked to work overtime, I think it's a big deal," he says. "I think it helps their morale, helps make them feel that if, 'Hey, if I have to stay here a little bit longer, at least I'm being compensated for it.'"

On the two courses at Des Moines Golf and Country Club, the first assistant and second assistant superintendent jobs have been paid an hourly rate before Tegtmeier began his position 10 years ago. The assistants work between 100 and 150 hours of overtime a year, spread out between every other weekend.

In Tegtmeier's view, the rule will generally help the employee, but hurt the employer. "There are a lot of clubs that have a lot of people on salary just to avoid that overtime law, and now they're going to have to step up to the plate," he says. "I do think that's a detriment to the clubs, to the golf courses."

THE DUTIES TEST

The question of whether an assistant superintendent at a course is exempt depends not only on their pay, but on their individual job duties, Low says. "It's hard to just by title alone to say, 'Oh, that person is exempt, or, 'They are nonexempt,'" she



Under The Fair Labor Standards Act, the salary threshold for overtime-exempt workers will increase from \$23,660 to \$47,476. The rule goes into effect Dec. 1.

says. "It really comes down to looking at what they actually do, because the assistant superintendent at one course may have a little bit different duties than they have at a different course, and that may preclude them or exclude them from what it is."

In addition to meeting the salary threshold, an exempt employee must meet a white collar exemption, such as an executive, administrative or professional exemption, Steele says. Assistant superintendents would not likely fall into the administrative exemption because it pertains to office and non-manual work, but the executive or professional exemptions could come into play under the right circumstances.

An employee must meet three requirements for an executive exemption, Steele says. First, the employee must be in charge of a specific department or unit of their business. Second, he or she must direct the work of at least two full-time employees. Third, he

or she must have the ability to hire, fire or promote those employees or have "considerable discretion" when those decisions are made.

The professional exemption contains a learned professional

primary duty must consist of work that requires advanced knowledge in science or learning that has been acquired at an "intellectual institution," according to the Department of Labor.

“It’s hard to just by title alone to say, ‘Oh, that person is exempt, or, ‘They are nonexempt.’ It really comes down to looking at what they actually do, because the assistant superintendent at one course may have a little bit different duties than they have at a different course, and that may preclude them or exclude them from what it is.”



—Melissa Low, CMAA

category that could apply to assistant superintendents, Steele says. Learned professionals'

Although duties requirements for exempt employees have not changed with the new

rule, now is a good time for employers to look at whether their employees meet them, says Kerri Reisdorff, a shareholder for the labor and employment law firm Ogletree Deakins, which has worked with the GCSAA. Currently, many employees in the United States are classified as exempt when their job duties are considered nonexempt under FLSA rules. If an employee were to file an overtime claim, their employer might not be able to defend their payment practices in court, so employers should consult with lawyers and accountants about how they can comply with the duties test.

CALCULATING RATES

Employers have multiple strategies to choose from when adjusting employee pay, but there is one objective they should share, Reisdorff says. "The overall goal is keeping your labor costs the same, or as close to the same as possible, and then also keeping morale up, which means keeping labor costs as close to the same as you can," she says. Likewise, employees generally hope for consistency between pay periods.

Employers should calculate the annual value they see by claiming an exemption for someone below the new salary minimum, Reisdorff says. They can do this by dividing the average number of hours they work per week into their weekly



LOBBYING FOR LABOR CHANGES

Lobbyists from the golf industry have toiled to direct the Department of Labor in another direction on overtime changes.

Their concerns became reality when the White House announced the rule on May 17 – the night before National Golf Day 2016 – and it wasn't in the form they had hoped.

For the ninth consecutive year, golf organizations hosted National Golf Day in Washington, D.C., to increase politicians' understanding of the industry. Over the years, the event has begun to focus more on specific issues, including, this year, the overtime rule and other business and labor regulations, says Chava McKeel, director of government affairs for the GCSAA.

Industry representatives had been actively discussing overtime changes with lawmakers up to that point. Last September, the GCSAA, NCA, CMAA, PGA and NGCOA sent a letter to the Department of Labor outlining comments and concerns about changes that the department had proposed at the time.

Industry representatives' primary concerns with the proposed rule were that its proposed threshold of \$50,440, reflecting the 40th percentile of full-time salaried workers nationally, did not consider changes in cost of living from region to region, that it would have a negative effect on workers' employment status and that it would have a negative effect on employees due to the seasonal nature of golf. The representatives also provided comments that bonuses and commissions should be included in the salary threshold and that the standard duties test should not change.

The Department of Labor made changes to the proposed rule in response to public input. The previously proposed salary threshold of \$50,440 decreased to \$47,476 to reflect the 40th percentile of full-time salaried workers in the South, the country's lowest-wage Census region. Up to 10 percent of the salary threshold can come from bonuses and commissions – a total of \$91.30 a week for assistant golf professionals, tennis professionals, fitness instructors and others who are eligible. No changes were made to the standard duties test.

Any positives that came about from changes to the proposed rule were minor, says Brad Steele, vice president of government relations and general counsel for the NCA. The salary threshold will still more than double, and the 10 percent of salary that can be taken from bonuses and commissions is negligible.

A regular on Capitol Hill, Steele predicts that the final overtime rule will go into effect, despite legislation opposing it. Republican lawmakers have introduced the Protecting Workplace Advancement and Opportunity Act, which states that the rule needs to be stopped and would direct the Department of Labor to provide an economic impact analysis for small businesses, he says. They have also introduced Congressional Review Act legislation, which would overturn the rule. If either pass Congress, the president will likely veto them.

But Steele is still trying. "We will continue to lobby Democratic members of the United States Senate to let them understand exactly how bad this rule is, not just for the club industry but certainly for businesses in all sectors of the economy," he says.

salary. If employers are considering raising an employee's salary to keep them exempt, they should be mindful that the salary threshold is set to increase every three years. Ultimately, if the value of keeping an employee at exempt status is less than the amount it would take to raise that employee above the new threshold – and it often is – then employers might want to allow their workers to be converted to nonexempt.

When calculating new non-exempt wage levels for assistant superintendents and other currently exempt employees, employers should average the number of hours those employees work throughout the year, Reisdorff says. The average should account for both slow winter hours and busy summer hours, including those that will be adjusted to a time-and-a-half rate.

Employers can also choose to pay seasonal rates, such as a lower rate in the summer and a higher rate in the winter, Reisdorff says. "What you can't do is fluctuate that rate every week or every month or that sort of thing, because then that would be a fairly clear sign that all you're doing is trying to avoid paying overtime," she says. Employers should consult legal help when considering implementing seasonal rates and other changes, in part because states have passed their own FLSA laws that could pose additional restrictions. In Missouri, for example, employers have to give 30 days' written notice before implementing a wage decrease.

SHOTGUN START

Superintendents will have to decide how to best adjust to the overtime rule, not only

by recognizing the increased salary threshold, but by understanding the duties test, how to keep labor costs fixed and morale high, and knowing who to consult if they need assistance, Reisdorff says.

Fitting into the minority of clubs with a member waiting list, Des Moines Golf and Country Club has always been responsible with its money, Tegtmeier says. He is glad, and he thinks his assistant superintendents are also, that the club pays them hourly.

At Kilmarlic Golf Club, Avalos seems fine with the changes, and Culclasure aims to make the potentially difficult situation into a win-win for both employer and employee. Using a labor tracking program, he will average Avalos' overtime from this summer and calculate it into a new payment method. "I don't know if we're going to go back to hourly or if we're going to do some sort of base salary so he's getting a steady paycheck in the winter and then pay overtime," he says.

Some superintendents have reduced labor costs by chemically controlling pond banks with growth regulators, says Culclasure, who is looking at areas his crew might be able to naturalize or turn into pine straw beds. The club has already switched from walk-behind mowers to triplexes and given course maintenance duties to cart staff employees.

The labor rule just presents one more obstacle for the industry. "Courses are going to have to adapt a little bit with this one," Culclasure says. **GCI**

Patrick Williams is a GCI contributing editor.

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

Every few years I'm compelled to write a column for the members, golfers and guests who enjoy the turf you're responsible for. No matter how many public-service ads or articles about the super at the major-championship venues, I'm struck by everyday golfers lack of knowledge, understanding and compassion.

So, it's time again. Get your pro, GM or locker-room guy to post this somewhere prominent. I'm can't promise it will do much good, but we've got to keep trying.

Dear Member:

I'm writing this because despite your love for golf, you don't know one important fact: Maintaining a golf course is hard. It's something your super and his crew know too well, but are afraid to say it without thinking they're complaining.

No, I'm not asking for sympathy: Your superintendent and crew chose this profession knowing how difficult it can be. But because they work from very early until dark, they don't have free time to educate you about what they're doing and why. So all I'm asking is take a few minutes to read what follows, think about it, maybe seek out your super and ask questions, and come away with a better understanding of what it takes to keep grass green, rough tamed, greens firm and true, bunkers pure, trees and shrubs pruned, leaves raked, and 150 acres or more in prime condition.

Let me start recalling what I recently read on a T-shirt being sold to course personnel: "I solve problems you don't know you have in ways you don't understand." That about says it all.

Unless you've done the job, don't complain about your course's conditioning until you know the facts; plus chemistry, labor management practices, environmental regulations, meteorology and a dozen other disciplines.

And just because you mow your lawn, doesn't mean you know what we do. You're not putting on that lawn, are you?

Your course superintendent faces countless obstacles, challenges and pitfalls to get his, or her, job done. The two biggest challenges? Weather and people.

Particularly in summer, conditioning issues are exacerbated by heat, rain, humidity and their collective unreliability. But there are problems throughout the year, including wind, rain, snow, sunlight—both not enough and too much of each. If you dismiss the weatherperson on your local news with, "What does he know?" imagine how your maintenance crew feels. We prepare as best we can for what is going to happen. But we can only react to the weather, not out-think it.

As for personnel, labor issues are often more serious than the weather. Workers aren't knocking down our doors asking to be paid minimum wage and brave the elements from sun-up to sundown. Most superintendents can't find good assistants let alone reliable hourly workers. But somehow, they do, and hope the best

of them show up again the next day, next week, next month, next year.

Don't think, "Wow, what a great job. You get to work outside, get exercise and ride around on tractors." It's harder to find young people, or any people, who want the long hours and low pay. The industry is facing a crisis with the millennial generation, who don't think hot, cold, wet and everything in-between makes for an ideal work environment.

Every region has its own problems. For example, in the Northeast, when late March offers up that rare warm day, club members want to know why the course isn't tournament ready and green. That early in the year maintenance crews are skeletal, grass is just starting to grow, and it was 40 degrees the day before with frost on the ground.

We can't simply throw a switch and create July-like conditions.

If you like to play early in the morning, good for you. But realize even though the crew has been out for about an hour, they're still getting the course ready for a full day of play. What has to be done first thing? Set tee markers, move cart signs, fill ball washers, check water coolers, change hole locations, blow leaves and other detritus off cart paths, clean restrooms, roll greens, fill divots, trim and/or mow selected areas, rake bunkers, water greens ... That's why early guys might catch up to the crew and play a few of imperfect holes.

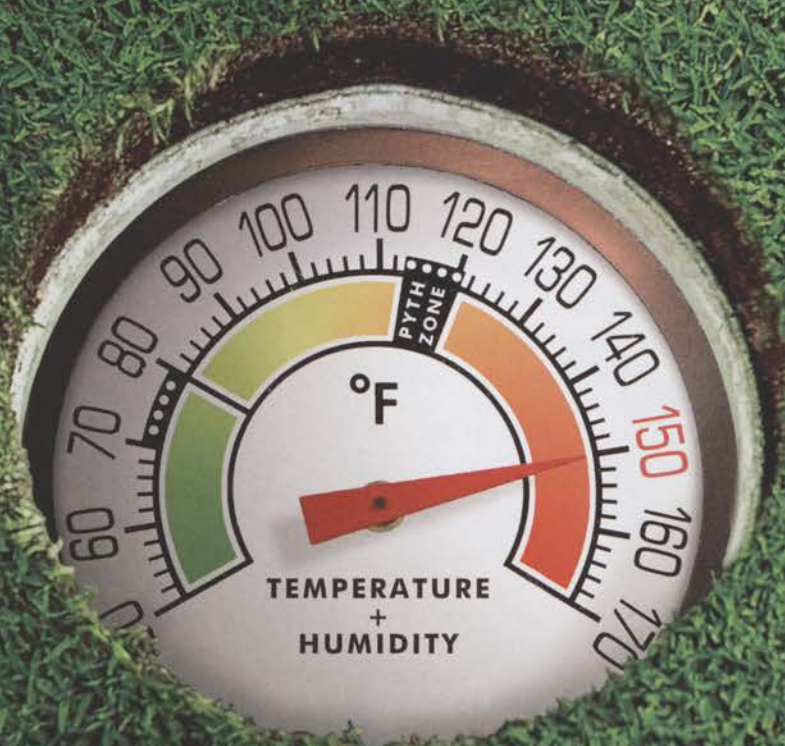
Here's a thought: Why not stop and say thank you? Remember how I said it's a hard job? It still is. But we love it, and we want you playing on a course that's in the best possible shape. We want you to have fun and come back again. But for you to have fun, we have to work hard.

One last point: Our job would be easier if you'd replace divots, fix ball marks, not drive the cart onto the tees and greens, not drag your cleats across the green, put cigar and cigarette butts in ashtrays, pick up broken tees, and not slam your driver/3-wood/wedge/putter into the ground when you hit a bad shot.

Do that and we'll gladly say "thank you" to you. Play well. GCI

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WHAT IS IT LIKE ENTERING THE
INDUSTRY IN 2016? WE SIT DOWN WITH
FOUR FUTURE TURF GRADS AND GET
THEIR VIEWS ON THE INDUSTRY AND
THEIR EXPECTATIONS FOR THE FUTURE.

By **Guy Cipriano**

identify a group of motivated 21, 22 and 23 year olds on their first major industry trip. Ask them if they are willing to meet in a hotel lobby at 6:30 a.m. for a roundtable discussion. Hope they don't tell you to "bleep" off.

Isn't being in your mid-30s, great?

Jacobsen provided this GCI editor with an opportunity to spend 2 ½ days touring production and manufacturing facilities, golf courses, and stadiums with participants in its annual Future Sports Turf Managers program.

Our whirlwind through the Carolinas included candid conversations with The Peninsula Club's Jared Nemitz, Sage Valley's Chuck Green and the University of South Carolina's Donnie Lindler.

I also learned twentysomethings can present themselves like industry veterans. One of our missions in the Carolinas involved understanding how young turfies view the industry. Are they fretting the industry's future? Or are they bullish about it? Why are they getting into this industry? What are their expectations and goals? Where do they see themselves in 2026?

Receptions, bus rides and meals offered plenty of time to interact with the 20 recent or soon-to-be college turf school graduates representing 19 colleges. Before breakfast on a Wednesday morning, Eric Langford, Tanner Schoenfelder, Dylan Farber and Andrew Nisbet agreed to discuss their backgrounds, aspirations and impressions of the industry.

Langford and Schoenfelder are interning at Oregon beauty Bandon Dunes and New York brute Bethpage Black, respectively; Farber works on the crew at 2017 PGA site Quail Hollow Country Club; Nisbet serves as the second assistant superintendent at Nantucket Golf Club. Langford (Iowa State), Schoenfelder (North Dakota State) and Nisbet (University of Connecticut) are recent college graduates. Farber is close to earning a degree from Central Piedmont Community College.

Our conversation lasted 30 minutes. I could have spent three hours with this articulate, passionate and humble quartet. But the bus to Sage Valley was waiting for us.

Dylan Farber, Andrew Nisbet, Tanner Schoenfelder and Eric Langford are in the early stages of their respective golf industry careers.

WHY DID YOU PICK THIS INDUSTRY AND HOW DID YOU LEARN IT OFFERED CAREER POSSIBILITIES?

LANGFORD: "The summer before I switched to turf, I was working in a kitchen in Ames (Iowa) at a big-time restaurant. I just wanted to get out of there, and I saw a golf course was hiring. I got a job on the grounds crew. I was stuck on the fairway mower all day. I figured it couldn't get much worse than that, and I still loved it."

SCHOENFELDER: "I was at

Fargo Country Club playing in a high school tournament and asked the head pro if he was hiring high school kids, just because I wanted to be on the management side of it and go that route. So I got my start. The head pro I talked to at Fargo and his dad bought a little club. He gave me a call and asked if I wanted to go out there and help. It was a small, nine-hole course. There were five guys on the crew and they needed an extra hand, and I was pretty young. I went up there



Sage Valley director of golf course maintenance Chuck Green frequently meets with industry groups, including Jacobsen's Future Sports Turf Managers.

and fell in love with the turf side of it, the irrigation side of it. With only five guys, we did everything from irrigating to cutting greens to fertilizing. I got certified out there. I was the only guy certified, so I was spraying. It was really interesting."

FARBER: "I had no clue about it until I was 21. Straight out of high school I went to Western Carolina to be an emergency medical care major, and I was on track to go to med school – then the whole story about following an ex-girlfriend back home. She went to college with

me, she wasn't happy and we transferred back home. I tried to go UNC Charlotte as a nursing major, but their program was suspended. I withdrew and I was at a crossroads of my life. I wasn't sure what I was going to do, and I started working at Cabarrus Country Club with Tim Davis, one of the longest standing superintendents in the Southeast. He's been there for 28 years. I just fell in love with the business. Once I figured out you could get a degree in it, I was in."

NISBET: "I wanted to be a cop. In my second year of college,

I went to the Connecticut State Police training. I realized instantly it wasn't for me. I went to my boss at my golf course and said, 'You know what, this is something I love and something I'm good at. Can you go to school for golf?' He said, 'You can either be a head pro or a superintendent.' And he was actually the head pro and superintendent, so I had to pick a route. I ended up looking at Coastal Carolina for its PGM program and UConn's turf program, and UConn's turf was cheaper and I liked being outside. I transferred into that."

WHAT IS TURF SCHOOL LIKE THESE DAYS?

LANGFORD: "Different. When I first got into it, I dove in head-first. I took a summer course and didn't know anything. I didn't even know turfgrass science was a major. The fact there was so many different types of turf that was used ... warm-season, cool-season. It was a pretty crazy experience at first. It's definitely something that once you actually start taking the classes and you're passionate about what you are doing, it's easy to learn."

SCHOENFELDER: "I didn't know



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what to expect. How much science to expect? How much hands-on experience we would get at NDSU? Overall, I'm pleased with all the classes. I probably know a lot more about farming than I ever need to know in my life being up there. There are some really specific golf course classes, some irrigation ones that have really stuck out and the science behind it is crazy. But then again, we learn a lot in the field that we don't see in class. It's a great mix between internships and classwork."

FARBER: "You learn a lot about how you do things and why you do things on the golf course actually on the job, but



then you get into the classroom and learn the reasoning why the plant needs those things. School for me was just the ... I don't know how to say it. It makes sense of everything you

do on the golf course. Why you do it? Why it needs it? So the experience you get while you are in school, no other major really does that for you – you spend half of the time outside

Participants in Jacobsen's Future Sports Turf Managers program received opportunities to see various aspects of the industry, including the company's production facility in Charlotte, N.C.

and half of the time inside."

NISBET: "It's a great mix of hands-on and in the classroom learning. People come up to you and say, 'What's your major?' And you say, 'turfgrass.' And they say, 'Oh, you just grow grass.' But it's a bachelor of science when it you get down to it. You get deeper into stuff that you didn't even know existed. What I like about turf classes specifically are that the

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classes are smaller, so you network with students and faculty so much quicker and faster and better than I think any other major on the campus. Those very concentrated majors are fantastic. We are all in great positions now because of that and how well we have networked and connected within our own organization."

WHAT DO YOU KNOW ABOUT THE CONDITION OF THE INDUSTRY YOU ARE ENTERING?

LANGFORD: "I hear a lot of stuff about long hours. Everybody always preaches that. But I remember listening to the Turfgrass Zealot podcast, and I remember listening to [Hazel-

tine National superintendent] Chris Tritabaugh and how he's doing something different at his course and not necessarily making his guys work those long hours. There are different scenarios I have heard with people not necessarily putting in those hours all the time. It's definitely going to be part of the industry, but it's not going to be the whole time."

SCHOENFELDER: "I think it's crazy seeing the trends in golf courses being built and destroyed throughout the years. Jared at Peninsula Club had a graph in the '60s when the Big 3 were playing, it was through the roof, and then in the late '90s when Tiger was booming

it, it went through the roof, and now it's diminishing. Jobs aren't in as great of numbers, but we are in a pretty good spot to get a job. With that said, working with the new science and a bunch of different sciences getting done at Cornell like I have learned already at Bethpage, that's what I think is the coolest part of the industry — just the new things coming out every new year."

FARBER: "The biggest thing I have taken from it so far is that first you have to love what you do. Find that thing that motivates you to come to work every morning. Two, networking. Like Jared said, it's not necessarily who you know, but who

knows you. There is no more truth to those words. In this business, it's a lot of politicking that people don't understand and once you wrap your head around that, the younger you are when you wrap your head around that, the more it's going to benefit you."

NISBET: "On Cape Cod, it's that very high-end spectrum, and I'm trying to grab as much experience as I can there and how we manage it. We are in this gray area where superintendents are getting older. We just went around the table and said how many kids are in our turf school, and there aren't many. There are going to be a lot of jobs. There are going to be

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so many opportunities in those next 5-10 years. And what's great now with the technology we utilize, you can basically determine your quality of life depending on what you want to do and what level you want to go into. I like that there's options now, especially with how the new technology lets you do that."

PEOPLE FROM OTHER GENERATIONS OFTEN SAY YOUR GENERATION IS LAZY AND ISN'T WILLING TO WORK LIKE PREVIOUS GENERATIONS. DO YOU HEAR THOSE THINGS? WHAT'S YOUR REACTION TO IT?

LANGFORD: "We actually talked about that a lot in my classes. To me, it's just a stereotype and I let it be just that because when you actually start working, it doesn't take long for people to see that you are not a typical millennial. You just have to do your work and it's very easy to overcome that in my opinion."

SCHOENFELDER: "It's proving yourself when you are young. We all started on golf courses pretty young. If you can prove yourself at the ages of 14, 16, 18, those guys you worked for can be references and people are going to call them up and they are going to say, 'Yeah, this guy works his tail off. He's always there on time.'"

FARBER: "Some of the advice I have given myself over the years is to shut up, keep your nose to the ground and do what you know how to do. One of my assistants told me to not really pay attention to the chatter. People are always going to talk. That's just what they do. As long as you keep doing what you know how to do, those people will eventually shoot themselves in the foot and you go from there."

NISBET: "We are just getting into it. You are going to meet kids that are lazier than others. I think we just take a little bit longer on average to realize

what we want to do and the options in society, and then we put our nose to the grindstone and do it. My brother just transferred into UConn and he just started working on a golf course and he texted me and my mom: 'I finally realize it takes passion and hard work to get what you want.' He got into UConn by .05 of a GPA, and he busted it for a whole year. He learned it on his own and that's what it takes. He's turning 21 and maybe it takes a little bit longer than the Baby Boomers. It's different how society is. But we are getting there."

WHERE DO YOU SEE YOURSELF IN 2026?

LANGFORD: "I hope to be a superintendent at that point. I don't know where. Hopefully somewhere on the West Coast. I have only been in Oregon a week or two, but it's amazing so far."

SCHOENFELDER: "If I'm going to be honest, my dream

job is general manager at a resort club on a lake somewhere. Maybe in the Midwest. Maybe I should be more specific where I want to be, but I really don't care. Anywhere with some views. But being here with all of these guys, the superintendent side of me might come out a little more. Run a crew on a golf course on a lake somewhere is kind of my overall goal."

FARBER: "By 2026, I would obviously like to be a superintendent, probably at a Tour stop course. Working in tournament golf the last two years has opened my eyes to the real monster of this game, and I love every second of it."

NISBET: "My dream job is to go back to New England somewhere and find a nice, small public course to manage. I like where I grew up ... that small course where you know everybody and it's a chill atmosphere. I miss that and hope to be back there in 10 years." **GCI**

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PLAYING THE ANGLES, KID...



Jeffrey D. Brauer is a veteran golf course architect responsible for more than 50 new courses and more than 100 renovations. A member and past president of the American Society of Golf Course Architects, he is president of Jeffrey D. Brauer/GolfScapes in Arlington, Texas. Reach him at jeff@jeffreymbrauer.com.

A shaper who has spent a career building greens for architects that never drew plans, once told me, "It's easier if the architect can at least tell me what he wants for the basic angle of the green, relative to the line of play." After all, there is a 180 degree range of possibilities, reducing the shapers chances of guessing right. And, while details can be moved around, guessing wrong on the basic orientation usually results in having to rebuild, nearly from scratch.

As an architect who does do green plans I pre-think the basic green angle well in advance of the bulldozers arrival. To my way of thinking, the basic green axis/angle is vastly underappreciated as a design element, but several factors point to its importance.

Statistically, the USGA Slope Guide shows greens need to be deeper than wide for the majority of average golfers to play them. Greens turned across the line naturally reduce depth, often unnecessarily. Such greens are nearly impossible for the average golfer to hit and hold.

Even greens at 45-degree angles are hard. On a long, narrow green with three to four club difference from front to back pins, golfers must match the perfect angle to correct distance to hit the green, often missing the green with a fairly decent shot.

From the basic premise that most greens need their long axis generally

aligned to the line of play to provide adequate depth, there is still the design question of "how many degrees off center is acceptable?" I determine the approximate green angle using a few basic factors.

Most often, I follow natural contours. If the green site contour runs 10 degrees to the right, the green usually angles about 10 degrees right. Greens that fight against the natural slope usually look unnatural and often require too much drainage and earthwork to be practical. The steeper the general directional slope, the more likely the green is angle with it. On flatter sites, we can more easily alter contours and base the green angle/axis on golf-related design parameters, which include, in approximately the following order:

APPROACH SHOT LENGTH. Top golfers can stop approach shots on a dime, which is exceptionally difficult for average golfers with lower ball flight and spin. Holding greens becomes increasingly difficult on longer approach shots, where many golfers need room to "run out" their approach shots. Greens for long approach shots should be aligned closely to the line of play, while the angle/orientation can gradually increase as the expected approach shot shortens.

My very general (and oft broken) rule of thumb about 1-3 degrees per club and adjusted for wind, lie, etc. On public courses, we favor lower

angles, expecting many poor tee shots to result in longer than the "expected" approach shot length.

FAIRWAY WIDTH. Strategically, architects often ask golfers to place tee shots on one side of the fairway for a better approach angle. For similar green designs, 100-yard approach shots require less fairway width than 200-yard shots. Conversely, where the architect controls fairway width by design, wider fairways allow steeper green angles. On older tree-lined courses, smaller green tilt can achieve the same strategic effect.

PREVAILING WIND. Where wind is fairly predictable, crosswinds and headwinds increase shot "bend" and headwinds add spin to reduce roll out. Tailwinds reduce spin, add roll out and straighten shots. We might add a few degrees in headwinds, and typically reduce the angle for downwind shots, to best fit the likely shot patterns.

VISUAL PRESENTATION. Greens appear to be more sharply angled at ground level than in plain view. Greens canting 30 or more degrees usually appear to angle much more, depending on design details, often looking scarier than accommodating. The "1-3 degrees per club" rule of thumb also helps avoid this visual phenomenon.

COURSE BALANCE. While I have never achieved perfect course balance, theoretically, over 18 greens, an "ideal" pleasant, but reasonable and balanced test of golf would include a similar number of greens angling left and right, with:

- One or two greens angled at zero degrees
- One or two greens maximum at 45 degrees
- One to four greens angled from 50-90 degrees, mixed appropriately on a variety of par 3, 4 and 5 holes. I often use shallow greens on the longest par 3 and par 4 hole, figuring average players often come up short, approaching with a wedge, while it tests distance control for better players. GCI

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BOLD BRINGS BETTER

By Guy Cipriano

Superintendent Jason Mahl sparked conversations about improving Moraine Country Club. He's now ready to take the historic course to another level.

Moraine Country Club reopened less than two weeks earlier and Jason Mahl had already shifted his attention to improving a product he played a big part in enhancing. Under a tree behind the 18th green – a symbolic location for an improvement conversation because removing thousands helped transform Moraine – a quartet of confidants encircled Mahl.

His former Louisville Country Club boss, Ric Kehres, and highly regarded Valhalla Golf Club superintendent Roger Meier traveled from Kentucky to see the course. Chad Dorrell made the 35-mile trip to Kettering, Ohio, from Springfield Country Club. Assistant Noah Pier arrived on the Moraine grounds with Mahl well before sunrise, preparing the course for visitors on this sultry late-June day.

Mahl accepted praise from his colleagues. He also proved to be the most inquisitive member of the group. Huge chunks of the last

10 years of his working life were dedicated to an effort that swelled into a \$5 million renovation, the largest post-recession renovation in Ohio. The end of construction brings exhilaration, weariness and moments of reflection, all of which Mahl has experienced since the mid-June reopening. He also understands it can't yield complacency, thus the extended conversations with superintendents who have parlayed upgrades via renovations into stronger courses. Mowing lines, maintaining approaches, topdressing. Mahl absorbed every topic discussed under that tree.

Slowing when construction stops isn't in Mahl's makeup, especially when you consider some of his bold moves in the last 10 years. Mahl arrived at Moraine in 2006 after serving as an assistant superintendent at Pine Valley, the sensational and sandy New Jersey course many consider among the world's best golf venues. Before arriving at Pine Valley, Mahl worked for Kehres at Louisville Country Club. A young architect named Keith Foster oversaw a



Moraine Country Club recently reopened after a massive renovation. The course hosted the 1945 PGA Championship.

renovation during Mahl's time in Louisville. Everything about the renovation, from the grueling days to Foster's detail-driven approach, enthralled Mahl.

Starting a new job in September and recommending to his bosses in October a solid course with a PGA Championship pedigree needed significant work, might be viewed as a risky action for a superintendent. But Mahl proceeded with a comprehensive presentation to Moraine's board anyway.

"It was a to-do list and one of the things on it was to develop a golf course master plan," Mahl says. "I introduced the idea to the committee and board and told them about Keith Foster. At first, when I said something to them, they thought I was a little bit crazy. Finally, once I got Keith here and explained to them the vision Keith has ... What I wanted was a working document, kind of a road map of any tree removal, any future changes."

Foster is picky about where he works, limiting himself to no

more than two projects per year. His relationship with Mahl, whom he considers a "top-shelf" superintendent, sparked Foster's initial interest in Moraine.

Overgrown trees along key corridors causing obstructing views of the property, failing drainage and a stew of turfgrasses in playing areas altered Moraine, the most notable design by Alex "Nipper" Campbell, a Scottish professional golfer who settled in the Dayton area. The course opened in 1930 and hosted the 1945 PGA Championship won by Bryon Nelson. Moraine means earth carried and deposited by a glacier, and the club's 170-acre property fits its geological namesake. The first time Foster walked the property alone, he noticed similarities with Cape Cod gem Eastward Ho! "The ground at Eastward Ho! is nothing short of inspiring," Foster says. "It's bold. It's dynamic. It's sweeping. It's grand. In essence, I think it's epic."

Moraine, in Foster's mind, had the same potential as Eastward

Ho!, which he renovated in 2004. A savvy superintendent, glacial ties and throwback green complexes convinced him to pursue the project. "You put those three things together and go, 'Sure, there is a lot of work that needs to be done. But in the end, it's just such a special place,'" Foster says.

As the economic downturn reached Dayton, Mahl commenced the improvement process. In the winter of 2007-08, his team embarked on wide-spread tree removal. Out went seven acres of trees between the eighth and 17th holes. Out went two acres more between 14, 15 and 16. Out went another ½ acre between 7 and 16. Trees

were removed in other select locations, and by the end of the winter, Mahl estimates they cleared 2,000 trees planted during the 1950s and '60s.

"You could not believe how steep these hills and views and vistas were," he says. "I was sending pictures to the board in the snow. The snow really shows the contours once you started dropping trees. We were all blown away. That was the cool part, kind of what we revealed underneath and what was hidden over the years."

Tree removal teased what awaited. Renovation discussions started turning serious in 2011 and '12 as the master plan devised by Foster made

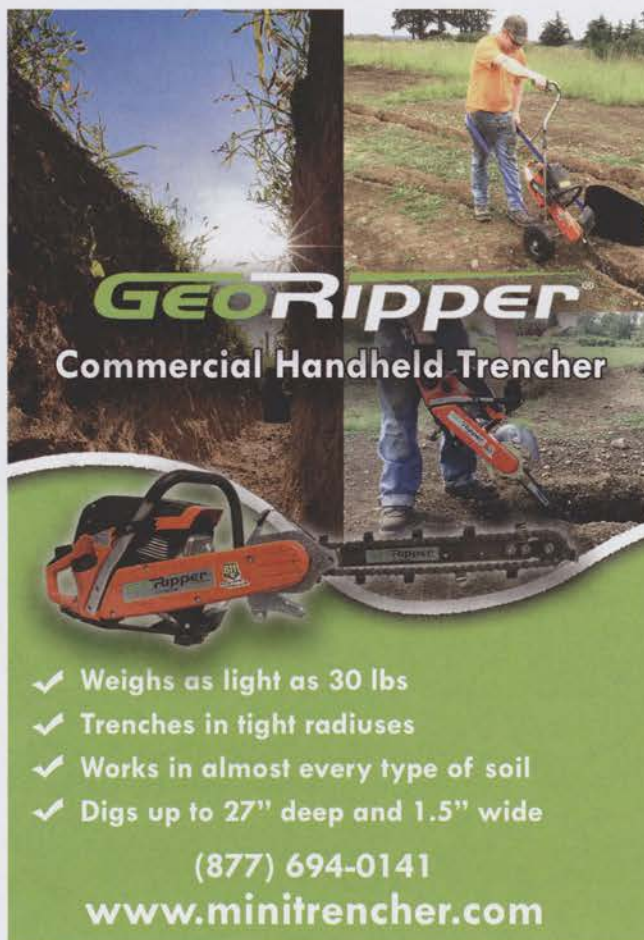
enhancements such as regrassing and adding drainage priorities. Mahl visited multiple Mid-Atlantic and East Coast clubs that had converted fairways to 007 bentgrass. He also visited Pine Valley and swung by southeastern Pennsylvania with multiple Moraine representatives to see Philadelphia Cricket Club, where Foster was completing a renovation. The group met with Philadelphia Cricket Club director of grounds Dan Meersman and then walked the course. Foster declined an invitation to join the group.

"I think it's essential for clubs to visit other clubs that have done it," Foster says.

"I don't feel like I have to be part of it. I want them to look at it from the perspective of not me selling them on what they should do, but rather allow them to see what really is possible."

Moraine and Philadelphia Cricket Club are 550 miles apart and will never compete for the same members. But visiting Philadelphia Cricket Club near the end of a renovation further nudged Moraine's leaders toward pursuing their own massive project.

"Moraine was a great golf course before, but it let them know how good it can be with the clean lines and everything defined," Mahl says. "That trip



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to Philadelphia was kind of the shining moment of what made things happen. It was a very good template."

Everything happened fast after the trip, with Moraine members approving a renovation plan and the course closing in 2015 for construction. Members of Mahl's crew remained employed during the renovation as they managed more than 1,000 truck deliveries. The crew seeded and hydromulched 115 acres and meticulously fertilized and watered the course during the grown-in.

All key areas of the course received attention. Fifteen greens were restored to resemble

Campbell's original intent and putting surfaces increased by 10 percent because of what Foster calls a 24- to 30-inch "belt cut" of low-mow Kentucky bluegrass replacing collars. Mahl and Foster worked together on grass selection and drainage. Greens were seeded with Pure Distinction bentgrass; fairways with 007. Fairways comprise 30 acres and are 11 percent larger than their pre-renovation size.

Mahl and his crew completed a series of in-house drainage projects from 2010-11, but the renovation gives Moraine gravity drainage capabilities. The club has nine miles of underground drainage that

didn't exist in 2006, increasing the chances of producing firm conditions when the new grasses mature.

Foster's work increased the bunker total from 48 to 60. The bunkers feature flat bottoms and steep, grass faces. The bunkers, along with native areas lining numerous holes, will frame greens and fairways and provide golfers with memorable visuals. The crew mowed the native areas in late May, and Mahl tells industry friends the aesthetics should be different in 2017. When standing on mounds and gazing at the interior of the course, parts of Moraine already look painting-like. "As Keith says,

"Moraine is a sleeping giant," Mahl says.

Foster knows Moraine has the right person overseeing his most recent work. Mahl, a Willard, Ohio, native who attended The Ohio State University, is primed to take Moraine to the level he envisioned when he boldly told the membership the course possessed unfulfilled potential.

"I believe my programs are better because the superintendents that I work with make my work better than it really is," Foster says. "Jason is no exception to this." GCI

Guy Cipriano is Golf Course Industry's associate editor.

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FUTURE SHOCK



Henry DeLozier is a principal in the Global Golf Advisors consultancy. DeLozier joined Global Golf Advisors in 2008 after nine years as the vice president of golf for Pulte Homes. He is a past president of the National Golf Course Owners Association's board of directors and serves on the PGA of America's Employers Advisory Council.

Author Alvin Toffler died last month, and the death of one of the world's first futurists got me thinking about, well, the future. It was nearly 50 years ago that Toffler warned of a sickness brought on by the accelerating pace of technological change. He called the sickness "future shock," also the title of his groundbreaking book.

The way Toffler saw it, future shock was a real psychological malady, the "dizzying disorientation brought on by the premature arrival of the future." And "unless intelligent steps are taken to combat it," he warned, "millions of human beings will find themselves increasingly disoriented, progressively incompetent to deal rationally with their environments."

Is golf suffering from future shock? Are the changes taking place outside our world too much to absorb into our tradition-laden business models and practices?

It's naïve to think that change on a global scale does not affect golf in ways that are and will continue to fundamentally alter the game and the business. The most important of those changes should cause us to acknowledge the truth in the following:

- Golf doesn't operate in a vacuum. People who play golf and those who consider taking up the game are influenced by macro-economic and social forces. Consumer confidence,

housing economics, jobs, household income and education all play a role in who decides to play our game, how much they play and where they play. These forces are ones that make innovative offerings such as TopGolf appealing to people at every socio and economic level.

- Golf is graying. Many people playing golf are Baby Boomers whose frequency and total of rounds played diminishes with age. Will the initiatives aimed at new golfers, women, juniors and millennials backfill the demand once boomers age out of the game? If not, what will?

- Environmentalism is expanding. In most provinces of Canada and many U.S. states, the use of pesticides on golf courses and sports fields has become more restrictive. This trend will continue to put pressure on course owners and superintendents to be conscientious stewards of their small piece of the planet. We will continue to see dramatically new methods in the care, upkeep and generally accepted course conditioning standards. Many wonder how golfers will respond and will a better understanding of environmental challenges lower their expectations for course conditioning.

The question left in the wake of these changes is how will you deal with them? Managing change and becoming a change agent requires a focused understanding of not only

macro forces, but also your markets and customers. Here are four guidelines to keep in mind:

HAVE A CLEAR-CUT PLAN AND KNOW THE RESULTS YOU WANT. Many of the most successful clubs credit strategic thinking and planning. If your facility is considering a strategic plan, first steps include validating and aligning your mission, vision and objectives; researching and understanding your market; and reconfirming your brand promise to deliver consistent experiences and value. With these steps as a foundation, you can begin to identify the actions that will lead to intended results.

SET SMART GOALS. Goal setting is easy, unless you want to get it right. Effective goal setting requires focus on desired outcomes. To set the right goals for your club or course, make them SMART: Specific, Measurable, Action-oriented, Realistic and Time-specific. See that the goals align with the end results you want.

IDENTIFY AND DELEGATE. Organize a trustworthy group of process-driven thinkers. Keep the group small enough to focus on priorities but large enough to get the work done. Most team members must possess or be taught how to learn on the fly, as the best competitive advantage comes from innovative solutions and new ideas. Delegate tasks based on specialized knowledge and capabilities. Empower your team to identify and consider every possibility and go beyond the popular or pedestrian solutions.

HOLD EVERYONE ACCOUNTABLE – INCLUDING YOURSELF. Accountability for completed results is essential to effective planning and achievement. Top performers want to post a score. Owners, boards of directors and fellow members hold managers accountable. You should do the same for your staff. **GCI**



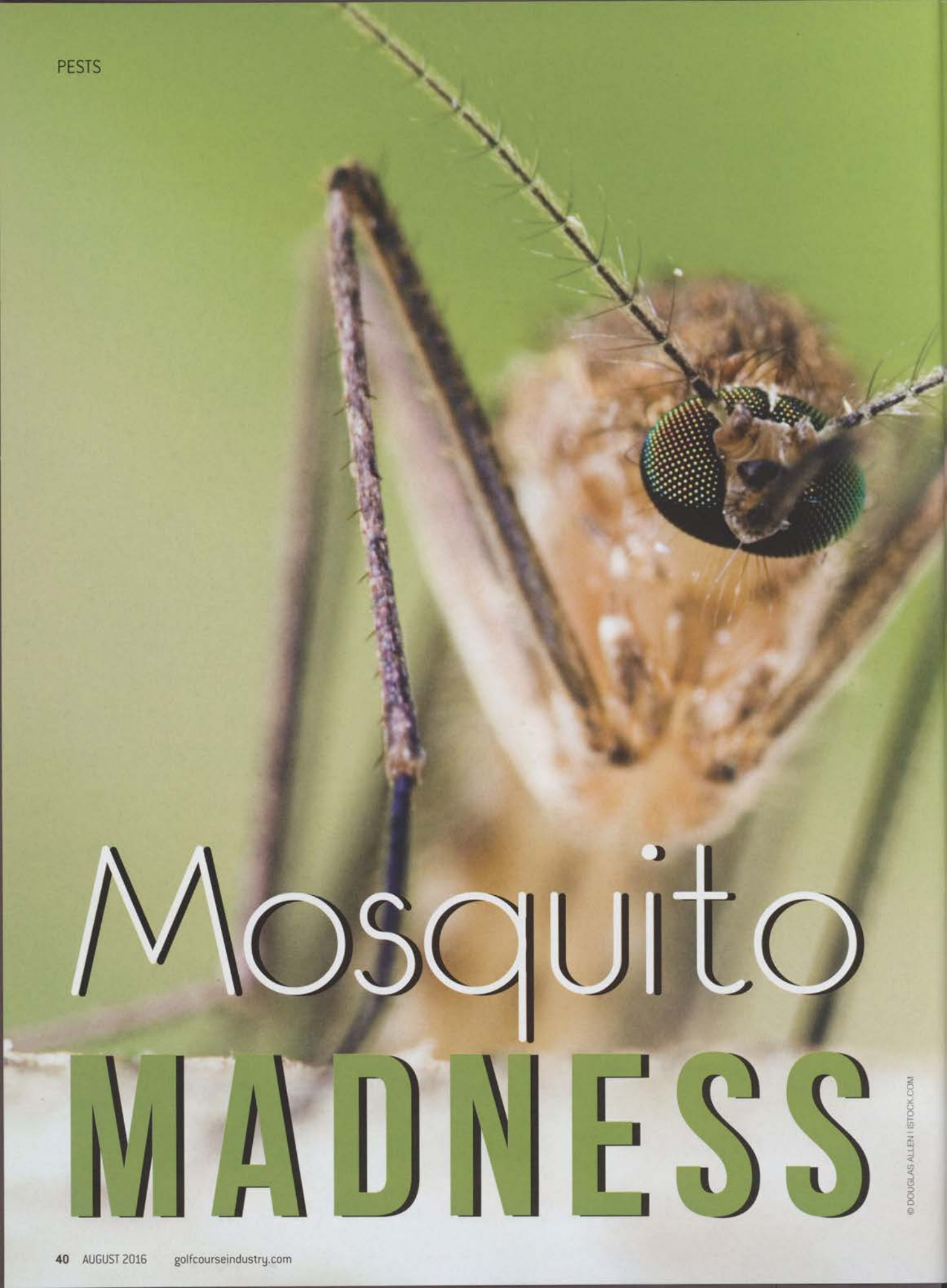
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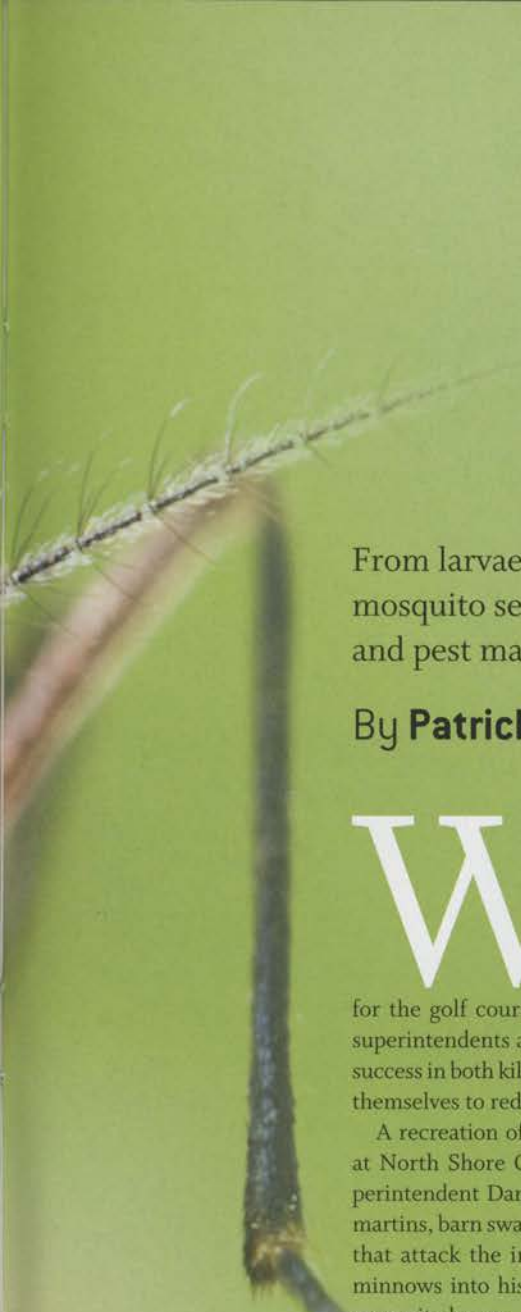
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Mosquito **MADNESS**

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From larvae to adult, mosquitoes complicate golf course operations. As mosquito season picks up throughout the United States, superintendents and pest management professionals increase measures to kill them off.

By **Patrick Williams**

Whether they are swarming around a group of golfers finishing a round at dusk or a stand of spectators at a PGA Tour event, mosquitoes have presented many a problem for the golf course superintendent. However, both superintendents and pest control experts have found success in both killing the larvae and the blood-suckers themselves to reduce problems on golf courses.

A recreation of natural cycles kills off mosquitoes at North Shore Country Club in Glenview, Ill. Superintendent Dan Dinelli maintains flocks of purple martins, barn swallows, tree swallows and dragonflies that attack the insects by air, and releases fathead minnows into his demonstration wetland to eat the mosquito larvae.

The golf course's workers try to avoid letting water sit in tires and buckets, but if it does sit, they place mosquito donuts inside, Dinelli says. "It's naturally occurring bacteria — you're just stepping it up," he says. "And it's safe for fish and everything."

Mosquitoes still carry the West Nile Virus around Glenview, about 20 miles north of Chicago, Dinelli says. Throughout an approximate 30-mile radius of Glenview, the number of crows has remained low as what he presumes is a result of their contracting the virus.

West Nile mosquitoes show up in Chicago every year, says Dr. Stan Cope, director of entomology and regulatory services at Terminix. They tend to breed in municipal storm drains in big cities. However, the fact that mosquitoes and birds carry the virus does not necessarily mean it will show up in human populations, he says. Although effects of the virus can be serious, about one in 200 people who contract it develop a

severe illness.

Still, Dinelli doesn't want to take any chances. "It makes it worth putting up these defenses," he says. "It makes it worthwhile just to keep that disease to a minimum."

Knowing where mosquitoes reside is a key step in being able to reduce their populations, Cope says. "Adult mosquitoes like to rest where it's cool, dark, moist and out of the wind," he says. "They'll sit there until they sense a host coming by, whether it's a person or an animal."

Mosquitoes congregate near standing water and lay their eggs there, says Robert Scott, global category development manager at Mosquito Magnet. "A mosquito could in theory breed inside of a soda bottle cap," he says. "It really does not need to be much water at all." Because mosquito populations are less likely to swarm around flowing water, he says, pond aeration practices could help keep mosquitoes at bay.

Manholes are one place where mosquitoes can breed and superintendents might not realize it, Dinelli says. If a drought occurs and the systems have not flushed, water can sit below the drain.

Turf drainage is also important, Dinelli says. The North Shore course is flat with heavy soil, so it doesn't naturally drain well, but workers constantly repair drainage and add to the system.

Superintendents could also find standing water in a saucer underneath a potted plant, on a tarp, in a wheelbarrow or on the top of a five-gallon drum, Cope says. If they find standing water in one of these items, they can simply tip the item over. "It's always better, if you can, to control the immature stages, which are not only the larvae but also the pupal stage, which is the stage between the larvae and the adult, where the adult just develops," Cope says. "For one thing, they're



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concentrated in the water. They're also not biting people yet, or biting animals."

If superintendents can't locate all of the breeding areas or effectively treat those areas, they should contact a pest management professional, Cope says. Despite superintendents' best efforts to treat or remove breeding sites, mosquitoes still fly out of their pupae. Pest management companies offer truck-mounted spray programs and longer-lasting barrier spray treatments for adult mosquitoes.

For the past two years, Terminix has treated mosquitoes at TPC Southwind in Memphis, Tenn., in preparation for the FedEx St. Jude Classic, targeting areas with high vegetation and foot traffic with its Attractive Targeted Sugar Bait. The spray contains a mixture of fruit juices, date syrup and microencapsulated garlic oil, Cope says. "It's not regulated by the EPA — that's how safe it is — and the label actually says it's safe for

people, pets and food," he says. "You don't see that on too many insecticides."

Mosquito Magnet is beginning to test its mosquito traps on golf courses, Scott says. "We have done a little work with them last year, specifically a couple of courses out in the Midwest, just to see how our products would work within that type of environment, because we haven't really targeted that market too much yet," he says.

The company's traps take propane tanks and emit the propane into carbon dioxide, mimicking human breath, Scott says. The CO2 acts as a primary attractant, and the trap contains a secondary attractant of either Octenol or Lurex, which both mimic human sweats and oils. The company's patented "Counterflow Technology" then sucks the mosquitoes up into a net, dehydrating and killing them. "There's a variety of solutions out there to help target mosquitoes at different times in their develop-

Thinking outside the box

The crew at Victoria National Golf Club in Newburgh, Ind., installed five bat houses last year for less than \$900 to accommodate the mosquito-eating mammals, says superintendent Kyle Callahan. Each house shelters about 200 bats, and because bats can consume approximately 2,000 insects per night, they are eating approximately 2 million insects per night, he says.

The bat houses present more of a long-term solution than a short-term one, Callahan says. "It takes time for the bats to find them," he says. "It's not like bats see a house and say, 'Oh, there's my new house for the year.' So it's a process, just like if you were doing anything maintenance-wise. You can't just go out and aerify your greens one time and just be done."



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ment," Scott says. "Our traps in particular are for the adult mosquitoes."

For a mosquito to develop from an egg, the outside temperature must be at least 50 degrees, Scott says. Southern mosquitoes like *Aedes albopictus* (Asian tiger mosquito) and *Aedes aegypti* (yellow fever

mosquito) often bite during the day. Northern *Culex* mosquitoes often come out in the morning and evening, he says.

At the Raymond C. Firestone Public 9 in Akron, Ohio, mosquitoes become more of a nuisance in the mornings and evenings of the summer season, says superintendent Stephen Seaburn. On humid mornings, some crew members opt to wear netted hardhats.

The water on the course's approximately one-third-acre irrigation pond is relatively stagnant and gives rise to some biters, Seaburn says. "It's not like a swamp where you have an infestation of mosquitoes, but you do have some activity,"

he says.

Crew at the Public 9 largely avoid mosquitoes on the course by maintaining quality drainage, Seaburn says. They have installed bat houses and barn swallow nests near water features and native areas, including two bat houses near the irrigation pond. "Every winter we make a certain type of barn swallow house, and then we put them throughout the golf courses—mainly towards our native areas or off the beaten trail," Seaburn says.

The adjacent Firestone Country Club in Akron, Ohio, which hosted the World Golf Championships British Invitational June 30 through July

3, has less of a problem with mosquitoes than the Public 9.

Although crew have built bat houses at the country club, mosquitoes were never much of an issue there to begin with, says Larry Napora, director of golf course operations.

The Firestone Reservoir, which sits north of the country club and south of the public course, could be to thank, Napora says. "We always seem to have a constant breeze, and what I've found is, if you have a breeze, the mosquitoes don't seem to hang out with you," he says. **GCI**

Patrick Williams is a GCI editorial contributor.

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PUMPING 2016



Brian Vinchesi, the 2015 Irrigation Association Industry Achievement Award winner, is President of Irrigation Consulting, Inc., a golf course irrigation design and consulting firm with offices in Pepperell, Massachusetts and Huntersville, North Carolina that designs golf course irrigation systems throughout the world. He can be reached at bvinchesi@irrigationconsulting.com or 978-433-8972 or followed on twitter @bvinchesi.

I am a big fan of not skimping when it comes to irrigation pump stations/systems on golf courses. If the irrigation system doesn't have any water because the pump system is not operational, it doesn't matter how great the irrigation system is – irrigation does not work without a properly operating pump system. I can also install an irrigation system that can be expanded or upgraded in the future. It may not be easy, but it can be done without replacing the entire system. On the other hand, pump systems in order to be upgraded or expanded in almost all cases need to be replaced. To avoid that large expense and huge headache, just do it right from the start. What things should a modern golf course irrigation pump station include so that it will have a long life and not be obsolete one year after you install it?

First, make sure it is of sufficient capacity. The pump station flow is what determines how fast you can water the golf course (water window). Do you want to irrigate the entire facility in four, six, eight or 10 hours? Most designers recommend under eight hours. Needed capacity is just a matter of how much water the irrigation system uses a day or week divided by how many hours you allow the system to operate. Suppose a new design or your existing system uses 322,000 gallons per night and you want to irrigate in six hours. That would require a minimum pump station size of 895 gallons

per minute (322,000 gallons divided by six hours divided by 60 minutes per hour). However, that capacity assumes you can use the 895 gpm flow every minute of the six hours which won't be the case, so you need to add a safety factor and some room for the pumps wearing. Realistically it would be a 950 or 1,000 gpm pump system. That would work well in a northern climate, but let's say your course is located in a more arid climate and the system uses 885,000 gallons per cycle in a night and you want to irrigate in six hours. Then the minimum pump station requirement is 2,459 gpm (885,000 gallons divided by six hours divided by 60 minutes per hour); realistically a 2,750 or 3,000 gpm station – bigger pump system, larger safety factor. I have been at many golf courses where run times are 12 hours or more. That's no fun for the superintendent as it affects maintenance operations and play.

Pressure is another major component. Every golf course's irrigation pump system requires a different operating pressure as it is based on pipe size and routing (friction losses), sprinkler operating pressure (60, 65, 80 or some other psi) and the elevation change over the golf course. Elevation change is where you see the most problems, as the elevation change was not taken properly into consideration during the design/specifying/ordering of the pump station. Remember every foot of elevation

changes is 0.433 psi (2.31 feet = 1 psi) up or down.

Variable frequency drives (VFDs) are standard items on pump systems these days, but make sure your system still has one on at least the main pumps. The pressure maintenance pump may also need a VFD. Some manufacturers try and sell you a drive per main pump, but that is really only necessary under very specific circumstances. In order for a pump system to be smart, it requires logic. Programmable logic controllers (PLCs) are much smaller than they use to be, but contain lots more memory. This logic will contain all of the software/code for system operation including how the pump system integrates with the irrigation system. If your system has a filter, make sure the filter controls are integral to the pump system operating software. Standalone filter controls do a poor job of integrating with the software and you have a filter on your pump system instead of a filter as part of your pump system. The same applies to transfer pumps. They should operate automatically based on the logic contained in the pump system control panel.

Power monitoring is an additional feature available on pump systems. This feature is not for every course, but where power is expensive and there are times of use load restrictions on the power supply it is worth the money.

Probably the biggest improvement in pump stations is monitoring. Today, monitoring is mostly Internet-based and allows you to monitor operation and controls from anywhere you can use a smart device. In addition to the normal flow and pressure readouts and what pumps are on or off, new monitoring provides pond levels, wet well levels, power use and which pump operated when along a timeline. Pay attention to what each manufacturer can provide in terms of monitoring and integration with the irrigation system controls as there are differences. **GCI**

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FACTS & FIGURES

Recent research examines how and why superintendents collect course data, and how it benefits their overall agronomic programs.

Data collection is more and more popular and prominent in the turfgrass management community. However, misunderstandings exist regarding what to measure, how to measure and what to do with the information that will bring about agronomic benefits.

This past spring, Golf Course Industry, in partnership with POGO, conducted a research

project to analyze and identify these trends with golf course superintendents.

Turf managers from throughout North America were pulled from GCI's circulation list and asked to complete an online survey questionnaire via SurveyMonkey. The data was then collected, organized and analyzed by GCI editors.

The following are breakdowns and analysis of some of responses we believed superintendents might find interesting

as they consider their own data collection methods and how they fit into their overall agronomic strategy.

For more information on the topic of agronomic analytics, please check out a recent webinar about optimizing turfgrass performance by entering bit.ly/2ahb7kX into your browser.

— THE EDITORS



Crunching the numbers

Nearly three-quarters (75 percent) of respondents indicated they record and analyze data about their courses to assist in decision making and agronomic strategy. Of those respondents, approximately half (47 percent) indicated they compiled and analyzed their course data using Microsoft Excel, while more than a quarter (27 percent) said they use the POGO system.

In contrast, 39 percent of respondents indicated they do it the old-fashioned way, employing some sort of manual recordkeeping system that includes written logs, photographs, historical notes and records.

Interestingly enough, nearly 9 percent of respondents said they simply eyeball the course conditions, visually assessing the current situation against their agronomic knowledge and an intangible gut feeling based on past experiences. As one respondent summed up: "I go out on the course every day and look at everything, which is what a superintendent should be doing."

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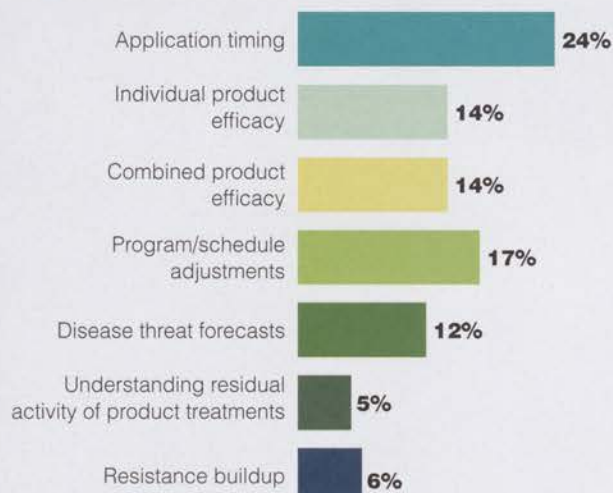


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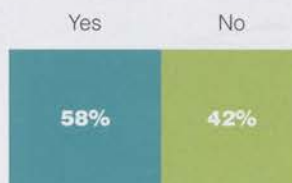
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Which metrics really matter to superintendents?



Do you use a handheld meter?



Decision makers

More than three-quarters of respondents (87 percent) indicated they use their compiled data resources irrigation decisions, agronomic strategy or both. Of those respondents, 87 percent indicated the data influences decisions on when and where to water, while 59 percent said the data influenced agronomic decisions such as cultural practices, pesticide applications and fertilization. Half of respondents (50 percent) specifically indicated that the data they accumulate influences both irrigation and agronomic decisions.

As one respondent indicated through his response, data collection and analysis allows him to "... go home at night and not worry."

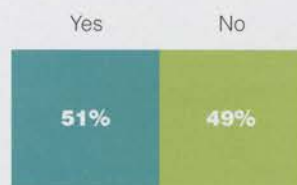
Do you use a device with replaceable sensor tines?



If so, how often do you replace those tines or change their depth?



Has metric collection and analysis paid for itself?



Do you replace sensor tine length to accommodate root depth?



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ANOTHER CHECK OFF THE BUCKET LIST



Monroe Miller retired after 36 years as superintendent at Blackhawk CC in Madison, Wis. He is a recipient of the 2004 USGA Green Section Award, the 2009 GCSAA Col. John Morley DSA Award, and is the only superintendent in the Wisconsin Golf Hall of Fame. Reach him at groots@charter.net.

The finishing holes of life offer each of us, if we're healthy and socked away a few bucks, the chance to do things we dreamed about during the working years. Those things are popularly called the "bucket list." Superintendent careers are intense, family responsibilities always come first and money is usually tight. So when the time comes to retire, also comes the opportunity to get in gear and fulfill some of your dreams.

Cheryl and I took our second genealogy trip to Europe in June. We were gone three weeks and traveled to Sweden, Germany and France. My wife is half Swedish, and she felt very emotional as we visited villages and churches of her not so distant ancestors. It's difficult to describe the feeling of standing at the fount in a 12th century church where one of her grandfathers was baptized. That scene was repeated several times, and always included a stone church of a similar age. It also included many Swedish people who were anxious to help us find answers to her questions.

I couldn't miss the contrast of old churches and cathedrals with how we tear down buildings, often after only a few decades. There are a lot of things Americans aren't smart about, and that is one of them. Southwest Sweden is mostly forested, and her family left to work in the forest and furniture industry in western Michigan. We can

now write the story of her family.

Four years previous, we traveled to Cornwall, Scotland and Norway. As proof that I really am an American mutt, a trip to Germany was required to finish the story of my immigrant ancestors. The Muellers came here from Leipzig, Germany. I had dug deeply to learn about them, and, frustrated, finally contacted a German genealogist. I wanted to know exactly where in Leipzig they lived and worked, and he informed me I had a pipe dream: "If we even could learn that information, it could take 25 years and thousands of dollars." We opted instead to study an 1840 artist rendering of an aerial view, and realized even then it was a big city. We turned our attention to Leipzig itself, its history and the Bach Festival going on that week.

The trip to Oberkaufungen, Germany, was more fruitful, and I came home with confirmation of the family that left there in the 1830s. Also, since we are only a year away from the 500th anniversary of the Reformation, we visited Martin Luther sites that will be packed next year.

Our visit to Germany and France had to include some World War II history. Nobel laureate Elie Wiesel, the Holocaust survivor and witness and author, passed away shortly after we got home. We were grateful we had visited the German concentration camp KZ Buchenwald near Weimer. It was a difficult long day, and that was

amplified when we learned that Wiesel had been imprisoned there.

We could clearly see the remaining differences between the old East and West Germany, and when we visited eastern France, World War II was once again prominent. My uncle was killed at the age of 20 in the Vosges Mountains as a rifleman in the 100th Infantry Division. That was in mid-November 1944, and he was buried in a U.S. military cemetery at Epinal, France. After four years, my grandparents had him brought home and buried in our hometown cemetery. But he had rested during that time in the Epinal cemetery and I am the only family member to have now visited it.

We went from eastern France to Normandy, spending three days learning as much as we could about June 6, 1944 and subsequent weeks. That, too, was emotional and included a trip to La Havre, France, where another uncle landed post-D-Day. He lived to tell about it, but didn't say anything about it until 15 years ago when I sat with him for hours taking notes. He walked across that part of Europe as an infantry scout and was in Trier, Germany, when the surrender came.

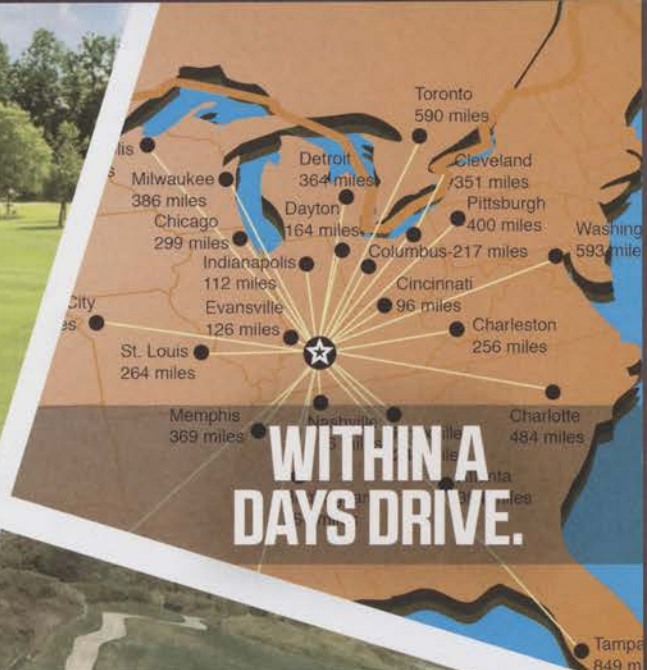
One thing missing from this trip that was front and center on our previous trip to Europe – golf. We saw only a sign to a golf course in Sweden, didn't see a sign or any other evidence of a course in Germany, and drove by one course in eastern Normandy in France. It was a radical change from Scotland and Cornwall where it seemed there was a golf course every few miles.

Some might wonder why anyone would care about a trip I took. I would! But my hope is to convey the wonderful things that can be part of retirement if you do consistent and careful planning. If you do, you can visit all 50 state fairs or all the major-league ballparks. You can try to play all the top 100 golf courses and even just play golf every single day. You can do just about whatever you want. Good luck! **GC**

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SMALL STUFF



Paul F. Grayson is the Equipment Manager for the Crown Golf Club in Traverse City, Mich., a position he's held for the past decade. Previously, he spent 8½ years as the equipment manager at Grand Traverse Resort & Spa. Prior to that, he worked as a licensed ships engine officer sailing the Great Lakes and the oceans of the world.



DECORATED BEVERAGE CART

The course's money is all in one pot. If the beverage cart makes \$1,000/day profit, we could buy a new, state-of-the-art mower every 30 days. So as an equipment manager, I have a stake in the beverage cart's success. Some good-to-know things: A clean cart sells more and the tips are bigger (soap, water, wax, and Armor All or engine oil will make it shine). A driver without tattoos sells more and the tips are bigger (concealer works). A driver with a smile sells more and the tips are bigger (just think of how happy your customers are to hand you money). A driver without piercings sells more and the tips are bigger (you could take them out when on the job). A driver with nice clothes sells more and the tips are bigger (golf attire will work). The beverage cart that is out there from when golf starts until when golf ends sells the most every day (a BevCart in the barn earns nothing). The driver that provides the best service makes the most in tips (know your

customers and what they want that time of day, in that weather). A driver's tips increase each year they do the job (as you learn more about your customers and discover what works the best). There are dozens of themes each month the beverage cart can be decorated for (the party decorations store can show you your options).



GRASS JUICE LUBRICATED BEARING

It was meant to be an emergency fix, temporary until the ordered parts arrived, one day, two at the most, but it is working so well that I am letting it run to see what happens. Each day when I check the cut and height, I check how the bearings in this roller feel. They seem to be fine. What is so strange is that these are very ordinary bearings, not stainless steel, ceramic or other exotic bearing materials suggested for wet conditions. There is some precedent for this. Years ago, I was asked to assist with the repair of a Reclaimer (a piece of coal mining machinery) built back in 1927. The amazing thing is that it is lubricated with coal dust, the same stuff that more modern pieces of equip-

ment struggled to keep out of their bearings. Have I discovered something useful?



THE SPARE KEY

Having a cart key handy to move the ball picker so that the rough mower can mow under it is essential.



EMERGENCY, EMERGENCY, GRASS EMERGENCY

Unit #26 blew a hydraulic hose, painted the grass on 18 rough with 8.5 gallons of hydraulic fluid and finished off by showering the driver with oil. He went home to wash up after helping me remove the failed hose. A new hose installed and the machine would be running again. Luckily, there was a sale on hydraulic fluid and I bought four, five-gallon buckets of it along with the replacement hose. I needed two buckets now and two in reserve. The hydraulic oil fill of the machine's hydraulic tank is small and at an awkward angle so I used a spare electric sprayer pump, the pigtail off one of the battery tenders, some Tygon tubing, and a spare tractor battery. This rig transferred the hydraulic oil without getting any more on the ground. Once refilled with hydraulic oil, I was able to drive the mower to the wash station and hose it off. From there, it went into the shop to tighten a few things, check it more closely and then back out to test mow with it. It works fine again. **GCI**



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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.



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.

MODIFIED RYAN RENOVAIRE SLICER

A 50-pound block was added to each weight tray by using Sakrete High Strength Concrete Mix placed into a wooden form along with ½ inch by 24 inch threaded rods to lift the weights on and off as required. This added weight was ideal for slicing the Bermudagrass fairways and roughs. One end of the threaded rod was longer and it was placed through a hole in the bottom of the weight tray along with a lock washer and nut that held each concrete block in place. Because of the added weight, the original hitch broke in two. Both ends were removed and a steel plate was placed on each end of the new, beefed-up 2-inch square tubing, with four holes, one on each corner, to bolt them together. At the other end that attached to the tractor, a pineal hook was placed inside the square tubing and bolted in place. Both slicers were modified for a total cost of \$500 and it took five hours total to modify them. Jim Vajen is the director of golf course and community landscaping at The Golf Club at Fiddler's Creek in Naples, Fla.



CHEVY DUMP TRAILER

This 2000 Chevy 1 Ton Dump Truck had about 40,000 miles on it when it was involved in an accident and the transmission also gave out. It was not worth repairing. The engine was used in another truck and it was turned into a dump trailer. It is towed with a John Deere 5320 Tractor or with any ¾ ton or larger truck. The frame was cut in front of where the cab used to be and a hitch was welded in place. The electric/hydraulic dump mechanism has its own 12 volt battery for a standalone operation that can also be recharged from the tractor. The outside dual wheels were removed so the trailer fits easily on the cart paths. It is used to haul pallets of sod, seed, fertilizer, topsoil, sand and waste vegetation. A small amount of scrap metal and welding wire was in inventory and about four hours of labor was all that was needed. The Desert Mountain Club team in Scottsdale, Ariz., is Shawn Emerson, director of agronomy; Alex Ward, Apache Course superintendent; and Bob Voita, mechanic III. The club has six golf courses.



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OHP	ohp.com	23
PBI Gordon	GordonsProfessional.com	13, 55
Rain Bird	rainbird.com	49
Redexim	Redexim.com	29
SePRO	sepro.com	51
SipcamRotam	sipcamrotam.com	59
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SYMBIOSIS



Pat Jones is editorial director and publisher of *Golf Course Industry*. He can be reached at pjones@gie.net or 216-393-0253.

If you harken back to high school biology class, you will probably recall that “symbiosis” describes how two different organisms live in close proximity and rely on each other to survive. The classic example is the clownfish and the sea anemone. The fish provides food for the anemone and the anemone provides protection for the fish. One would not survive without the other.

I was reminded about the concept of symbiosis recently when another industry magazine decided to trot out the hackneyed term “the dark side” to describe turf sales reps. The story itself was fine – the usual “supers transitioning into sales” feature. Every media outlet, including GCI, has run that story six times. But, choosing to sex-up the story by using the ominous phrase “the dark side” as the basis for their cover design was cutesy, calculated crap designed solely to get attention.

And it did.

I broke my longstanding policy of ignoring what the other mags do and called bullsh*t on social media ... and several hundred supers, salespeople and others responded. Our friend Dave Wilber even cranked out a passionate TurfNet blog post about it and kept the conversation going. And it's a very important conversation. Why?

Symbiosis: Salespeople cannot survive without supers and supers cannot survive without salespeople.

There was, perhaps, a time when sales was considered a lesser role in the world of turf. There was a smug, underlying belief among some supers that those who couldn't grow grass became “peddlers.”

And perhaps there was a time when salespeople weren't as well-educated as they are today. I used to hear supers say, “I know more about their products than they do” or “that guy doesn't have a turf degree so he's clueless.”

Neither of those is really true today. The vast majority of good turf reps have successfully grown grass for a living and most of the ones I know these days have degrees and a decade or two of agronomy experience. Today, it's a demanding profession in which experience, scientific expertise and a deep understanding of the problems their customers face is mandatory for success. Sure, you still hear stories about “order-takers” and lousy reps who show up without appointments or act like fools. Guess what? They won't be around two or three years from now.

Another thing I hate about the term “the dark side” is that it implies dishonesty. It suggests that salespeople would do or say whatever it takes to move a case of product or a pallet of fertilizer. That's bloody nonsense. The good ones are in it for the long run. They value their relationships with supers so much they

would NEVER recommend something they don't truly believe is the right choice. Why on earth would a rep jeopardize both a friendship and a longstanding business relationship to make a quick buck?

Distributor reps and supplier technical experts are also rapidly replacing university and extension support as funding for those programs continues to dry up. Think about the brilliant PhDs who made their careers with universities but now work for manufacturers. Did they become dumb or evil the day they left public life? The ones I know are not only accessible and incredibly supportive of customers, they're also extraordinarily careful about overselling their company's products.

And passion? Good reps are just as passionate about your product as you are. Your failure is their failure. Your success ... well, it's still your success but I bet you'll always recognize that it was a team effort that included your supply partners. Because success is symbiotic.

And that brings me to my final point. We're at a critical juncture in this business. Superintendents are going to continue to be challenged by labor shortages, water restrictions, fertilizer regulations and a host of other barriers to success. There is no room for divisiveness or an “Us vs. Them” mentality.

Instead, I think one of the keys to success in the future is to adopt a team approach that makes the most of the expertise, experience and resources your sales and supply partners can bring to the table. Find solutions together. Create a better product together. Have fun and try new things together.

The clownfish won't last long without the anemone ... and vice versa. Let's stop with the dark side. In fact, let's stop having sides at all. We're all turfheads and we're all in this together. **GCI**



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You're stretched. Whether it's time, labor or money, superintendents are always feeling the squeeze somewhere. That's why we stretched our legendary LF line of fairway mowers out by three feet. The additional width allows you to cut up to a massive 11 acres per hour without sacrificing quality-of-cut. As the industry's *only* 7-reel, Tier 4 Final fairway mower, the all-new LF557/577 from Jacobsen is the *only* answer for superintendents that demand productivity and superior results.

