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LIFE'S (NOT) A BEACH

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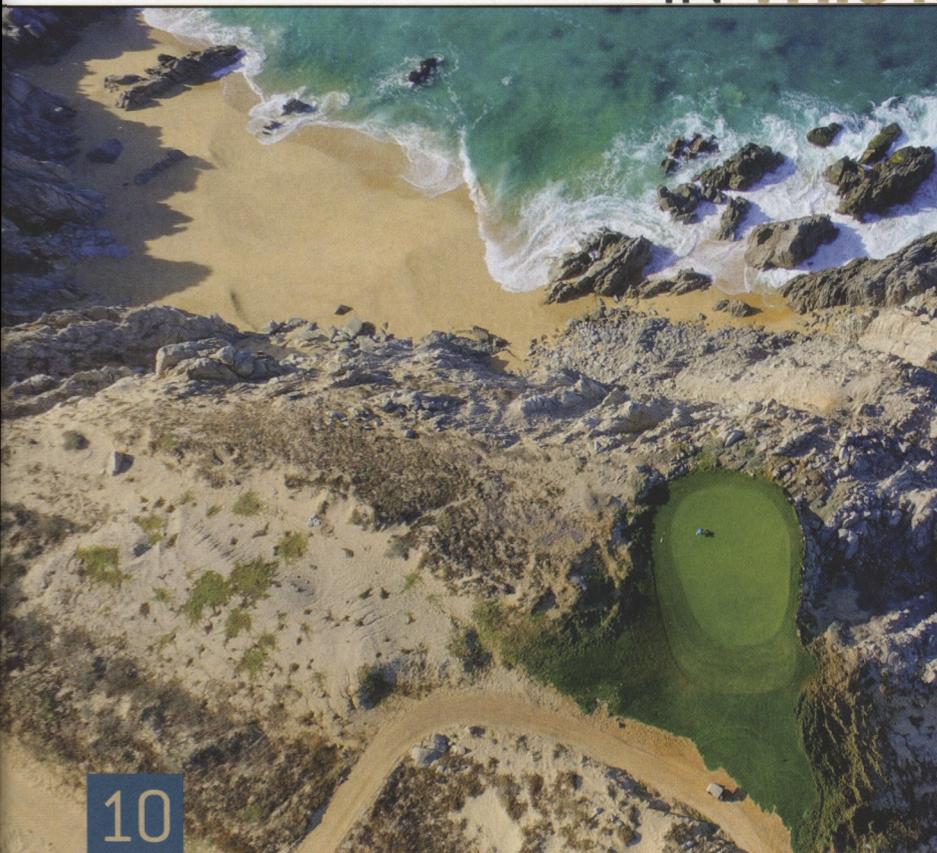
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ON THE COVER

An overhead shot of Quivira Golf Club in Baja California. Jon Whitte/Quivira Golf Club

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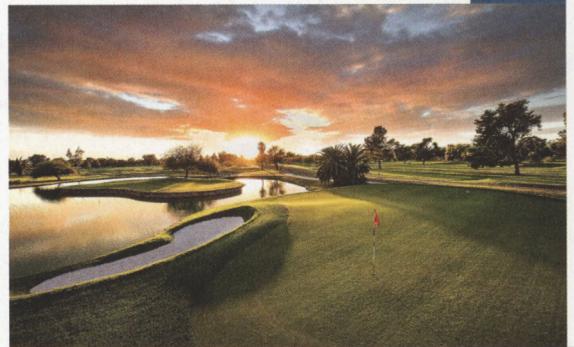
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GET ENERGIZED

Former Chrysler top boss, and one of the all-time greatest executives, Lee Iacocca is quoted as saying: “Nothing frightens people more than change they can’t control, and nothing energizes people more than change they can influence.”

Lee’s words speak volumes about the modern golf course superintendent and the agronomic and management challenges you face day after day, season after season.

Consider some of the issues you can’t control that contribute to fitful sleep – unexplained pathogen outbreaks on seemingly healthy greens; the untimely death of your pump station; or a lack of enough seasonal employees, or worse, the means to pay them.

So how do you better champion your own destiny?

Professional development consultant Dr. Alan Zimmerman offers some perspective on those who fret over the unknown and those who choose to act. In fact, check out Zimmerman’s website (drzimmerman.com) and sign up for his weekly e-newsletter. There’s a lot of great free info available to boost your professional management acumen.

On the road to professional resiliency, first doubt the doomsayers – those who gripe, moan and host their own pity party rarely persevere through times of turmoil. Zimmerman advises to block out those individuals and avoid letting their needlessly negative attitudes influence your decision making as you attack a problem.

Next, maintain perspective. Zimmerman says a lot of people need to learn how to do this. Remember, things can always be worse – a lot worse. Assess the issue at hand and take stock of what needs to be done in the now to rectify the situation. Rely not only on your instincts, but also on your wealth of professional knowledge of matters pertaining to both turf and people.

Another matter of perspective is understanding that we are in a constant state of transition, that the situation at hand will move forward, eventually conclude, and become part of the past. An irrigation system will get fixed. A pathogen will get treated and run its course. You will hire that superstar to replace the assistant who suddenly left. Adopt as your mantra the ancient proverb: “This, too, shall pass.”

Finally, accept change. Go ahead and say goodbye to the way things used to be, Zimmerman says. Successful leaders realize there are always better ways to do the job and achieve goals, such as abandoning old ways and being open to new techniques and technology. This also includes new ways of thinking and being open to the thoughts and ideas of new employees, subordinates and industry peers.

As northern superintendents prepare for the season ahead and southern turf managers get ready for the summer slowdown, get energized by evaluating

the things you can influence not only as a superintendent, but as leader who has a firm grip on the changes they can control in both work and life. **GCI**

“Remember, things can always be worse – a lot worse. Assess the issue at hand and take stock of what needs to be done in the now to rectify the situation.”



Mike Zawacki
Editor

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LET'S TALK **UNIFORMITY**

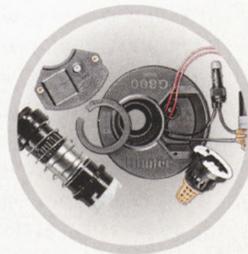
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Wild, wonderful, winter work

Tubes, skis, snow and lifts are keeping a crew at a West Virginia facility working year-round.

By Guy Cipriano

EVEN IN A STATE WITH THE THIRD HIGHEST unemployment filling open positions on a golf course maintenance crew can be tricky.

For the operators of Oglebay, a 72-hole facility in the northern West Virginia panhandle city of Wheeling, embracing winter has provided a competitive labor advantage. The crew spent the waning stages of 2017 converting the practice range into four snow tubing runs.

The addition of tubing increases recreational opportunities and revenue-generating possibilities while allowing superintendent Nick Janov-

ich to offer more year-round positions. Now approaching 30 full-time, year-round workers, Oglebay's crew is responsible for preparing, maintaining and operating tubing and ski/snowboard areas from mid-November until mid-March.

The tubing runs opened Jan. 4 after a frantic construction and testing process that, at times, flustered Janovich and his crew. Discussions about adding tubing intensified last summer, but snow was needed to fortify written plans. The crew tweaked the slope – and tweaked again – once it started snowing in December.

“That was frustrating from my standpoint because we felt we were a little bit slow because it was snowing and we were making snow, but we didn't have it going because we were testing and testing,” Janovich says. “There's really nothing we could have done about that. We couldn't do anything in August.”

Oglebay has supported skiing for decades, with the park's most recent version of the sport commencing in 2004 following a public fundraising effort to obtain modern machinery and equipment. When the golf season ends Nov. 15, the crew



immediately shifts to winter sports mode. Approval to begin the tubing construction arrived Dec. 1, and Janovich's team hustled to build runs and make snow on practice turf. Grades and slopes must be precise to halt momentum at the end of runs, thus resulting in a 12-foot base in some areas.

The testing process included turf ingenuity. Realizing customers of all sizes enjoy tubing, the crew placed fertilizer bags in tubes to determine how different weights handled runs. "We really wanted that consistency and control," Janovich says, "and we wanted to know what our thresholds are."

Janovich concedes the slope is "not perfect," adding that closures are sometimes necessary when runs become too fast or temperatures rise into the 40s or 50s. But tubing has generated a winter buzz for Oglebay.

The runs can accommodate 30 tubers and waiting lists are common. The slope was constructed to easily expand to six lanes and this year's demand suggests the additional

lanes will debut next winter.

Five or six employees are needed to operate and oversee the area during tubing hours, which usually don't begin until late afternoon. The ski area has similar hours and requires at least two or three employees to operate the lift. Plus, Oglebay runs three snow-making shifts – 7 a.m. to 3 p.m., 3 p.m. to 11 p.m. and 11 p.m. to 7 a.m. – that require two employees each. Employees are also needed to operate Snowcats, which are used for grooming, throughout the day. Add it up, and as many as 20 maintenance team members could be working on a busy winter day.

Winter work forces employees to use different skills. The solitary of 70-day degree days doesn't exist during winter shifts. Operating a lift, unlike riding a mower, yields frequent interaction with custom-

ers. Staff burnout, Janovich says, is a bigger issue during the ski and tubing season than the golfing months.

"The summer is not a big deal," he adds. "People like what they do. People like skiing – it keeps them working. But when you are out there and it's 15 degrees and you're running a lift for eight hours, it's tough. There's definitely an emotion there to overcome."

Besides providing a steady income, winter work includes the fulfillment of seeing satisfied customers. Not many crews can boast they brought a new activity to a 90-year-old park. And not many cold-weather golf facilities can offer almost every prospective maintenance employee a year-round position.

"I think you're going to have to find ways to make it a year-round thing," Janovich says. "This was an outlet for us to keep staff on year-round, bring in a little bit of revenue, albeit not a lot, but enough to justify keeping people on. We're super competitive now. There are golf courses in our area ... Yeah, they are going to work people for nine months and then lay them off for three months. That's not us."

Guy Cipriano is GCI's senior editor.

Tartan Talks No. 20



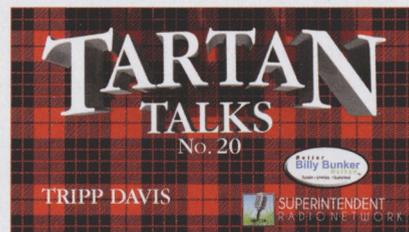
American Society of Golf Course Architects members are easy to identify at the Golf Industry Show. Their wardrobes, after all, look alike.

We spotted one of the good folks wearing the Ross tartan and decided to record a podcast in San Antonio. The result is a Tartan Talks episode with **Tripp Davis**.

The former University of Oklahoma golf star turned successful architect provided a regional flavor to the podcast, describing his recent work in Texas, where soil types vary by site. Davis also explains how the emergence of zoysiagrass is influencing agronomic and architectural decisions in the state. "We want the superintendent to be very involved in that decision," Davis says.

The desire to support superintendents, whom he considers among his closest friends in the business, has turned Davis into a GIS stalwart. He was omnipresent in San Antonio, welcoming visitors to his booth, presenting about strategic design at an ASGCA forum and leading a zoysiagrass tour at Oak Hills Country Club.

Enter goo.gl/i55r81 to hear the podcast.



YOU'RE KILLING ME!



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@jeffreydbrauer.com.

At the just completed Golf Industry Show in San Antonio, I enjoyed reconnecting with many of my longtime superintendent friends. One thing I do within a year after opening is to ask them, "What are the five hardest 'designed in' maintenance challenges at your course?" I got some updates from those who have now managed their course from two to 20 years.

Sand bunkers were the maintenance challenge most often mentioned. We typically design flashed, cape and bay style bunkers, semi-intentionally favoring aesthetics over ease of maintenance. And, while understood, those with ever tightening budgets (and who isn't?) wished we would have opted for a design that was more maintenance friendly.

Concerns include both the steep banks around the bunkers, often requiring hand mowing, and the sand itself. This was particularly prevalent in renovations, where superintendents easily saw the change in maintenance regimen. Growth retardants help but are expensive. While I recommend shaggy edges, few others do. Golfers resist them as being too hard, noting that missing the green by 10 feet often creates a harder shot than missing by twenty.

Sand washing and shoveling after a big rain is still a pain point, mostly because it is always an unsched-

uled and time-consuming operation. Bunker liners and angular sands reduce sand movement but create other problems. Earlier fabric liners are secured with stakes, which have loosened up over time when hit with rakes and even the occasional golf swing. The good news is liners like Better Billy Bunker are now common, and at GIS, there were at least three new fabric bunker liners (from Sand Trapper, Z-Line, and Polyplast) that don't require stakes. When it's time to replace your liners, there are better options.

Tees are often a concern. Dave Downing, then director of construction and agronomy at Wild Wing Plantation near Myrtle Beach and now a partner at Golf Management Solutions, recalls us agreeing that "Tees can't be too big." We were wrong, ending up with an average of 10,000 square foot per tee. Even with a relatively compact core course, tee mowing required over time or two devoted crew members.

We also shared a laugh about his back tees:

Dave: My back tees didn't need to be that big.

Me: How many golfers use them?

Dave: 50.

Me: 50 a day, a week, a month, or a year?

Dave: 50 since the course opened in 1994!

Fortunately, it's possible to reduce them to a 15- to 20-foot squares, and similarly nip/tuck middle tees if play is down at your course.

Greens were also mentioned by most superintendents, as most golfers demand they be perfect, and they hope for design help.

We gave Dave some wild greens, attempting to stand out in the crowded Myrtle Beach market. Standing out is a commercial plus, and it must have worked, as Avocet is the only remaining 18-hole course at Wild Wing. However, that doesn't make any steep slopes such as stair steps, edge rolls or dips any easier to manage. Whether it's Bermudagrass facing cold north winds, or bentgrass facing warm south winds, steeper green slopes require extra care and some hand watering. Nearly any combination of stress factors such as a steep slope, heavy traffic and/or tight mowing radius hurts turf.

At our recently re-opened Superior National in Minnesota, superintendent Mike Davies is adjusting to the extra work required to maintain his new bunkers and has mentioned steep green slopes. The third green features a steep false front, which was harder to grow in.

Mike also pointed out a few mowing problems. We measured those, and each was caused by final shaping ever so slightly exceeding the recommended maximum 33 percent mowing slope or a sharp transition at mound tops or bases, meaning we should have paid closer attention with a digital level before approving the shaping.

Mike and one other superintendent don't care for using "flat tile" in sand-based greens, believing it raises the water table, possibly contributing to soggy greens in early spring. We have used flat tile to save money, and avoid bringing up rock in trenching, but are re-thinking that practice in the name long-term maintenance.

Fairways got questioned, as in, "Why are there so much of

(BRAUER continues on page 48)

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Nanea Golf Club is on the island of Hawaii. But they're never on an island with John Deere.



In terms of service and support, a golf course superintendent can, at times, feel like they're on an island. And yet, Billy "Biggie" Quirit, equipment manager of Nanea Golf Club, Island of Hawaii, never feels that way, thanks to his John Deere Golf dealer. Says Biggie "They've done really well at supporting us with our equipment, our parts, even our financing." Sitting on over 1,000 acres, Nanea is breathtaking in both its conditioning and size. "The 8000A is one of the best fairway mowers we've seen. And the greens mowers are pretty much bulletproof."

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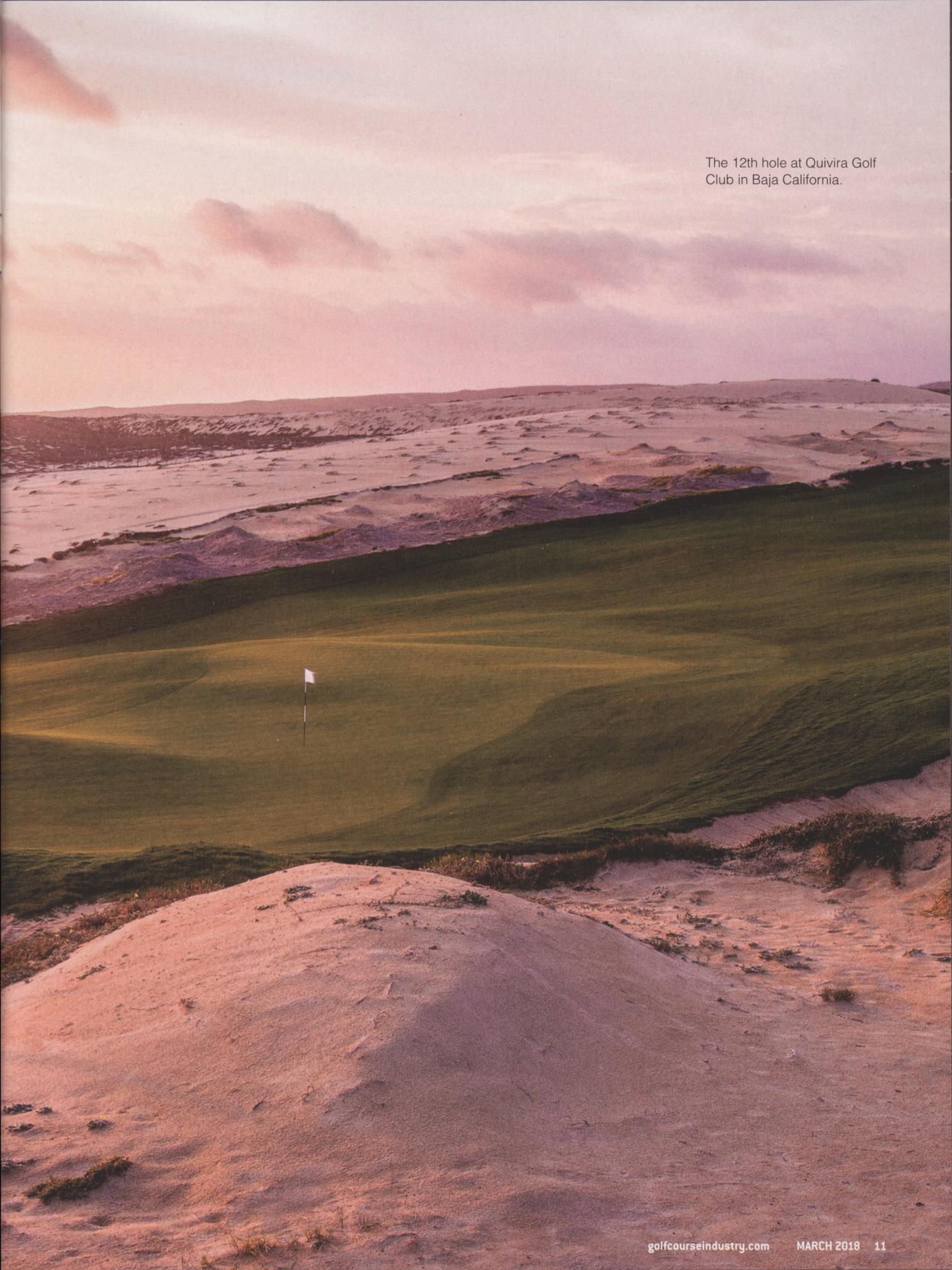
By **Judd Spicer**

If great power is indeed accompanied by great responsibility, then the golf course equivalent sees great beauty coupled with, well, a whole lotta' sweat, toil and TLC.

From the grandeur of an oceanside setting in Mexico's Baja Peninsula to the lush privity of a South Carolina sea island alcove, a pair of premier properties handle daily course challenges with creativity, flexibility and a love of the labor.

Meeting the high expectations of member clientele sees the brass and brawn of Quivira Los Cabos and Haig Point on Daufuskie Island rise each morn to ensure that their grounds stay true to the distinct allure of their respective settings.

The 12th hole at Quivira Golf Club in Baja California.





QUIVIRA GOLF CLUB

CABO SAN LUCAS, MEXICO

Quivira Golf Club, which opened in 2014, uses reclaimed water to irrigate its paspalum playing surfaces.

Deservedly-dressed with ample accolades upon its 2014 debut (including a nod as “Best New International Course” by golf resource of particular note), the Jack Nicklaus Signature design at Quivira Golf Club is an aesthetic stunner.

Powerfully staged beside the Big Blue, Quivira routes, rises and ebbs through a mosaic of terrains on the tip of the Baja California Peninsula, ambitiously steering the player across beachfront, desert, dunes and granite-lined cliffs.

Open to club members and owners/guests of the adjacent Pueblo Bonito Oceanfront Resorts and Spas, the native routing across 175.5 acres of golf course requires some seri-

ous manpower to not vibrate a playing surface contrived in appearance.

Armed with a crew of nearly 40 course workers, the daily duty is ensuring that the beauty of Quivira isn't just pretty for pretty's sake.

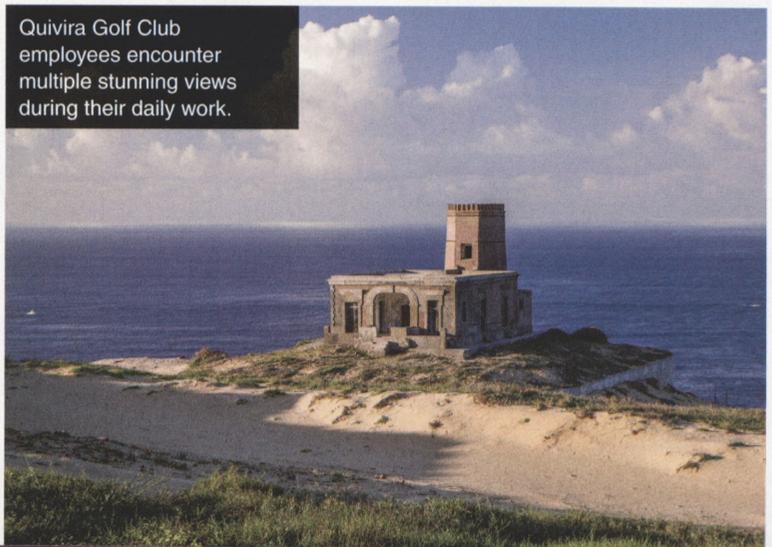
“We embrace the rawness,” says Antonio Reynante Vega, director of golf at Quivira Golf Club. “It looks rough, and we want that – we don't want a perfectly-manicured course. Now, we do want it to be perfectly-playable, and the turf

should be in ideal condition and the greens should be in perfect shape. But the look of the course should be rough; it should be raw.”

Examplifying the balance of appearance, Vega says: “The

12th is a long, downhill par-5. It's a huge, natural dune. And so, according to the designer, the transition between the sand and the perfect turf, it needs to have rough vegetation in-between to make for a logi-

Quivira Golf Club employees encounter multiple stunning views during their daily work.



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cal transition. In the end, the whole point is to make the golf course look as natural as possible. If you have nothing but sand and perfect golfing turf, it looks awkward.”

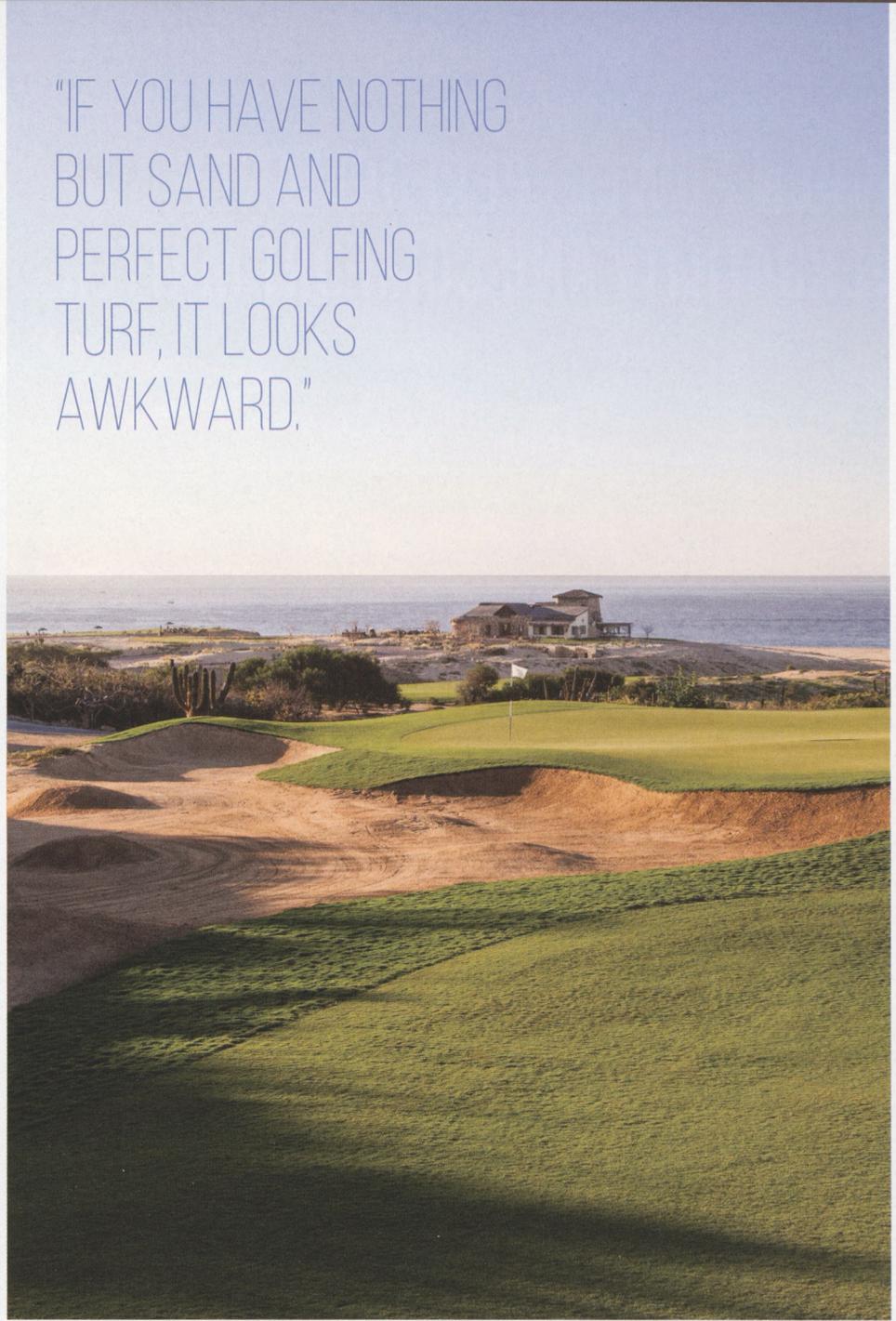
Quivira’s desert rusticism and adjacency to the Pacific are met with an ongoing host of nature’s challenges.

“It’s a very interesting and special land,” Vega continues. “And the Baja is a desert, along with being beside the ocean, with lots of wind here on the Pacific side.”

Thar she blows. “The wind can be a huge challenge, because we get a lot of salt and silt,” Vega says. “The wind brings a lot of sand; we get a number of holes topdressed across the year, and we have to work with that. We gain level on the fairways and some greens can lose some grades. It’s continually keeping track of that, which is also a huge challenge.”

Constantly watering the salt tolerant, tee-to-green platinum paspalum (irrigated with reclaimed water) is a measure of calculating sport and science. “We have to take care of sand getting on the tee boxes and fairways, to mow the grasses sometimes twice a day,” Vega says. “Our water has a lot of nitrogen, so this grass grows very, very fast. And because it’s a desert, you can’t skip a day of irrigation.”

Vega is also seemingly well-served by studying the lyrics of Bob Seger. “To preserve the natural environment of desert vegetation, the irrigation system has to be very well calibrated,” Vega says. “And here, again, the wind is a challenge. In the summer months, when it’s especially windy, we have to make sure that, most of the



Like every hole on the course, the 17th hole at Quivira Golf Club features views of the Pacific Ocean.

time, the sprinkler heads throw the water against the wind and let that wind work the water for us.”

While Vega, a former pro, may be able to help corral the askew balls of Quivira guests, there’s nothing he can do with the savage swing of Mother Nature. In August of 2017, a storm of hurricane proportions brought 38 inches of rain in nine hours to the grounds, washing out several holes and

incurring damage to Quivira’s extensive rise-and-fall of cart paths, along with an assault on the grounds’ irrigation systems, pipes, cable and software.

“For a place made out of dirt and grass, water is the worst enemy, not wind,” Vega says.

Working tirelessly to restore the course to full order and playability in prep for Cabo’s high-season, Vega and his crew appear to have successfully achieved the task in less than

four months’ time, a task which also included a shift of the home hole’s green 50 yards inland.

Making life a beach for the guest is a palate of pleasing the player while staying true to a luminary’s distinct vision. “Mr. Nicklaus integrated the native environment into the golf course, which I think is a beautiful set-up,” Vega says. “So, the grass, dune, desert and ocean combination make a truly unique experience.”

HAIG POINT CLUB

HILTON HEAD ISLAND, S.C.



While existing on the Down Low in contrast to its famed Hilton Head neighbor across the Calibogue Sound, the narrative of diminutive Daufuskie Island, S.C., reads like a page of a famous book.

In fact, it was the setting for Pat Conroy's "The Water Is Wide."

Just five miles long and less than three miles wide, Daufuskie is small in size but long in historic value, with the island's unique yarn spinning back 9,000 years to its original inhabitants, the Cusabo Indians. Subsequently a European settlement and later home to the "Gullah" people (post-Civil War freed slaves), today's island life remains an eclectic (and artistic) throwback, with no cars and accessible to residents and guest only by water taxi or ferry.

Getting there for exploration and relaxation? Sounds fun. Getting there for work? Maybe not such a gas.

Among the country's most exclusive residential communities and private clubs, Haig Point on Daufuskie is a primo, 29-hole property with its Rees Jones-designed course annually recognized among the best plays in golf-rich South Carolina. The 364-member club tracks its dues among the top 5 percent in the nation, and fields just about 12,000 rounds per year.

Not that a dearth of play eschews the tall task of operating a premier club on an island. While

All turf care supplies needed to maintain the golf course at Haig Point Club are delivered via barge.

Haig Point Club features 29 holes because of concerns about potential storm damage to multiple holes along the Calibogue Sound.



inclement weather is an annual concern, the “L & L challenges” (labor and logistics) present a continual test for course managers.

“Everything we get comes by barge, and that barge comes once a week . . . if he feels up to it,” half-laughs Scott Hamm, director of golf course maintenance and grounds at Haig Point.

And if the barge pilot doesn’t feel “up to it?” “For example, we ordered 20 tons of starter fertilizer for my overseed; the barge got delayed, so it took us two weeks to get that shipment,” Hamm adds. “So, we need to plan everything out at least a month in advance; so, all my topdressing sand I need to do that by hand this time of year (fall). We get it bagged, palletized, delivered on a flatbed on the barge; then we go pick it up, put it on another truck, drive it to the maintenance facility and unload it. So, we touch that



Serene surroundings make Haig Point Club a soothing environment for members and employees.

sand five times before it gets on the ground.”

The island commute requires constant pre-preparation and planning for a host of course duties, which is why Hamm and staff go so far as to make their own fertilizers (150 gallons at a time). “And we keep enough preventative fungicides on hand for the greens because, in order to get product over from the mainland, it could take two days,” Hamm says. “And if there’s an outbreak of Pythium, in two days, you’re done.”

Working the turf, the Haig

crew experiences only minor salt water issues on its nine-hole Osprey Courses, and sprays calcium to help combat the salts.

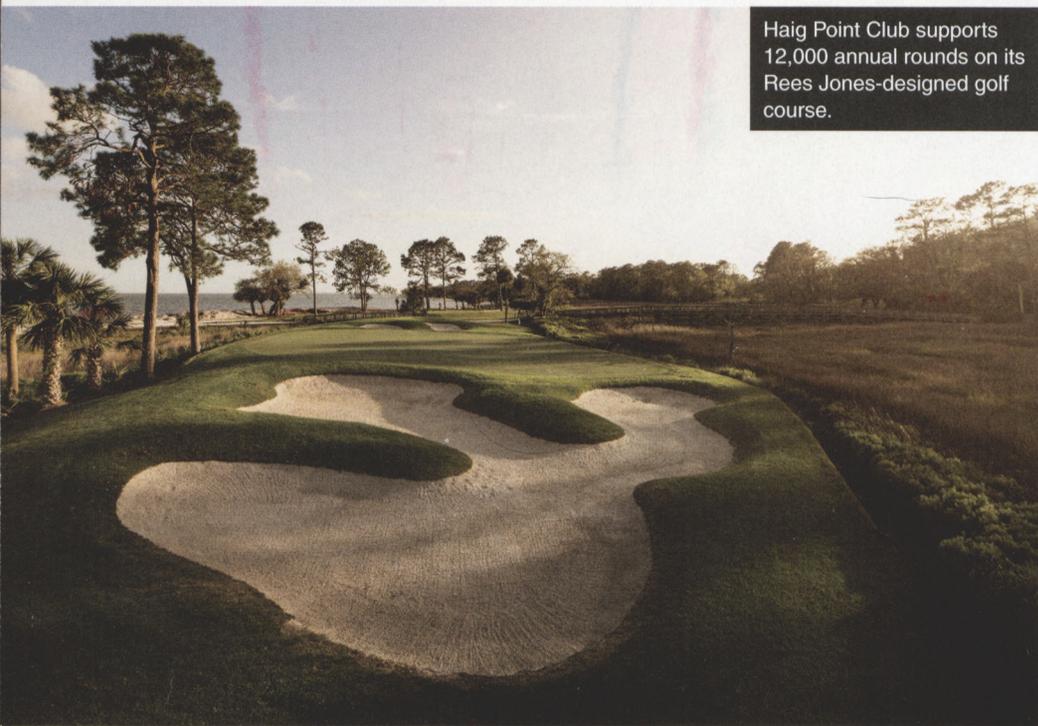
Situated on a 1,100-acre property, surrounded by the Calibogue Sound, Intracoastal Waterway and the Atlantic Ocean, Haig’s spread is relatively flat, low country terrain, with tree-lined fairways spread with oaks, maple, and giant magnolia and Spanish moss. A round is generally paired with playing partners ranging from alligators to bald eagles to myriad deer.

Akin to Quivira’s concerns, Haig Point is on constant weather watch. “The weather in the low country . . . I’ve been here just over a year, and we’ve had three main storms since then,” Hamm says. “So, one of the biggest challenges in that respect is not only growing grass, but keeping the facility cleaned up. With Hurricane Matthew, we cleaned millions of cubic yards of debris off the property. Literally, every street was piled up almost 20 feet on both sides, so it was like driving through a tunnel going down the road.”

In designing the course, Jones wisely implemented two No. 8s and two No. 17s. “The reason they did that is because if we get a really bad hurricane and wipe these two greens out, you still have 18 holes to play,” Hamm says. “The back of those greens are literally 20 or 30 yards from the Calibogue Sound, so it makes sense.”

Maintaining a beautiful, natural setting rarely makes life a beach for those charged with meeting high expectations. From a sea island charmer on one end of the continent to a potent Pacific play 2,500 miles away, the portraits may be different, but the day-to-day challenges of manning the perfect paints are equally palpable. **GCI**

Judd Spicer is a Southern California-based golf writer who has contributed multiple stories to GCI.



Haig Point Club supports 12,000 annual rounds on its Rees Jones-designed golf course.

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WE GOT A PLAN FOR THAT



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.

"Joe, we're going to have to do more with less this year."

How many budget discussions between superintendents and their GMs have started that way in the last 10 years? My guess, most of them. I'd also venture to say, based on our interaction with superintendents and GMs across the country, the ongoing search for greater productivity is here to stay.

If productivity achieved through cuts in agronomic budget, staff and equipment is not high on your GM's list of priorities, you may stop reading now and move on to something more relevant. But if the idea of more with less is a challenge you're dealing with, here are three ways to survive and prosper in the new normal.

UPDATE YOUR ACTION PLAN. Planning is essential to process improvement. If quality and budget requirements have added pressure to your plan for facility care and upkeep, new solutions to longstanding challenges are required. There is method to the madness of doing more with less.

First, redefine the scope of operations for your course. Restate your intentions in a revised agronomic plan. Evaluate the acreage being maintained, modify the fit and finish of peripheral and tertiary acreage and explore new solutions to relieve the

upward pressure on labor costs.

Second, increase – yes, increase – the quality standards for the acreage that receives primary focus. Greens, tees and fairways must always be improving or they're going downhill in the minds of golfers. Emphasize the quality standards and upgrades at every opportunity. Demonstrate to your golfers why playing a better course enhances their enjoyment of the game and the club. Educate your golfers regarding the differences in quality.

Third, photograph areas where qualitative improvements are evident. Those images will come in handy in the next budget cycle.

WIN THE BUDGETING GAME. Many facility managers think they need to be at the top of their games during the budgeting cycle. Top managers also know the budgeting isn't really a cycle – it's an ongoing process that begins with information gathering, adds documentation and builds to a well-planned presentation.

The advance preparation requires that you can inform and educate those who are involved in reviewing and approving your budget. Teach them why the improvements in quality are needed to index and defend pricing decisions. Share photos that show how improvements enhanced the course and its reputation. Cite examples of where improved course conditions have enabled courses to increase fees.

Provide financial analyses of labor hours for the various tasks based on the cost per acre for superior conditions or per-square-foot for greens and tees. Provide supporting data from GCSAA and other benchmarking sources. Non-experts need data to help them understand the measurements of quality. Connect quality standards directly to costs to ensure that all involved understand that quality standards are worth upholding and defending.

Win the support of those in decision-making roles long before the budgeting presentation and review period so they understand the quality argument.

ASK FOR MORE. Golf course capital needs are endless. Look ahead of the current-year budget and inform all involved what the following budget year will require. AICPA (www.aicpa.org) publishes the depreciation schedule for golf course equipment. GCBAA (www.gcbaa.org) and ASGCA (www.asgca.org) provide life-cycle guidance for golf course features like greens, tees and bunkers. Your future budgets are filled with additional needs, so plant the seeds for the future.

While you're asking for more, you can also ask more of yourself and your crew. Most superintendents dedicate countless hours to their jobs; there's not a more conscientious group of professionals in this business. Most are also dedicated to ongoing education – improved methods, fresh ideas and best practices that improve quality and efficiency.

Think you can't do more? Ample research has shown that we're all capable of more if we believe it's possible and if we prioritize our efforts. Start small in a key area such as labor, which represents 52 to 55 percent of most golf course budgets, according to data from Global Golf Advisors. Two percent improvement in efficiency translates to a \$10,000 savings in a \$500,000 budget. **GCI**

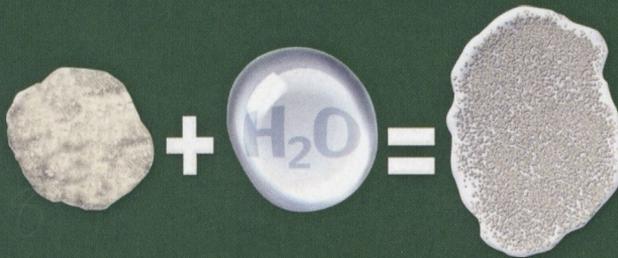


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Fairway Dreams

Despite the draw of resources to the marquee areas of your course, fairways require unwavering attention. Seven key practices to keep the expansive surfaces resistant to biotic and abiotic stresses.

By **John Torsiello**

Expectations for fairway conditions vary from course to course. Heavy emphasis on other areas such as greens and bunkers might limit the amount of time and resources devoted to fairways.

Considering constant concerns over the conditions of a course's agronomic jewels – greens, green surrounds, bunkers and tee boxes – it's no wonder fairways have become a red-headed stepchild at some courses.

This is not to say superintendents neglect their fairways, which can comprise significant acreage – up to 40 acres on some 18-hole course. But with budgets, resources and manpower at times stretched thin, fairways may not get enough love.

"Usually, priority of focus goes in this order – greens, tees, fairways, roughs," says University of Tennessee turfgrass pathologist Dr. Brandon Horvath. "Thus, fairway conditions aren't as paramount as those areas, and if either of those areas have issues, it isn't uncommon that fairways can be overlooked.

"I often recommend developing a plan that you would be comfortable using on greens, and then substituting more cost-effective options to reduce the impact of the plan on the budget," Horvath adds.

There are financial implications for inadequate fairways, and it all boils down to expectations, says Christopher Gray, product manager for Lebanon Turf's professional fertilizers.

"When golfers and the membership expect a certain level of conditioning, meeting and exceeding those expectations is critical," he says. "As conditioning starts to deteriorate because of lack of proper maintenance, golfers will likely choose to play elsewhere. If daily play begins to shrink, the entire golf facility will begin to suffer. Less golfers means not only less greens fees

but also less food and beverage sales and less pro shop traffic."

Here are seven keys to keep fairways in championship condition.

BACK TO BASICS

It starts with covering the basics, says Dr. Eric Miltner, agronomist, turf and ornamentals at Koch Turf & Ornamental. Get the basics right first then fine tune. "With all of the products, equipment and 'systems' out there, it's not hard to overlook the most important and critical steps," he says.

Turfgrass management's

primary cultural practices include: mowing, irrigation and fertilization, with Miltner adding soil cultivation to the mix. "Based on that, my five most critical actions to promote health, density, disease resistance, color and playability of fairway turf would be soil testing, nutrient management planning, proper mowing, effective irrigation management and soil cultivation," he says.

Not maximizing one or more of the basic practices could weaken the turf, making it more susceptible to both biotic and abiotic stresses, says Dr. Zac Reicher of the Bayer Green Solutions Team.

"For instance, missing scheduled aerification could increase thatch and decrease water and air movement, increasing susceptibility to diseases and some insects," he says.

LAB REPORT

Establish and follow a soil nutrient testing program, as well as physical testing. The testing program tells a lot about the ability of the soil to support plant growth and play. "Remember that soil, climate, and plant species are the basic building blocks," Miltner says. "Although you can't control climate, you can manage the soil and plant species. Keep records of your soil testing program so that you know the long-term trends and whether your fertilization program is moving in the right direction."

Tissue testing can supplement this monitoring component of soil tests, Miltner says. Fertilize and manage pH and other issues based on those soil test results. "Utilize the 4Rs of nutrient stewardship in your program (right source, right rate, right time, right place) to



The proper fertilization program can provide balanced nutrition, limit nutrient loss and help manage valuable labor resources.

manage both plant health and environmental stewardship," he says.

FEED IT

Moderate fertilization maintains health for tolerance to stress and pests as well as encourages recovery from divots and traffic. Proper fairway nutrition should include balanced nutrient availability over time, even with changing conditions, Miltner says. Enhanced Efficiency Fertilizers (EEFs), including stabilized nitrogen, slow-release and controlled-release fertilizers can provide balanced nutrition, limit nutrient loss, and manage valuable labor resources.

"Good nutrition helps turf to tolerate diseases and insects, compete with weeds, and tolerate the traffic and injury that comes with constant play," Miltner says.

A comprehensive fertility strategy is the foundation for promoting fairway turf health, density, disease resistance, color and playability, says Dr. Raymond Snyder, director of agronomy for Harrell's.

"You need to consider fertility inputs that reflect the turf's needs relative to the

conditions, such as play, geography, and turf type," he adds. "A properly fertilized fairway turf minimizes weed establishment, resists diseases associated with poorly fertilized or over-fertilized turf and promotes ideal turf color."

WATER IT

Because irrigation efficiency is so important to turf performance and maintenance costs, superintendents' water budget should assume a baseline evapotranspiration (ET) of not

more than 80 percent of reference ET, says Dr. Larry Stowell, a managing director at PACE Turf. System modifications to improve irrigation efficiency will be needed if current water use exceeds the estimated water budget for the facility.

Moderate irrigation maintains fairway tolerance to stress and pests, as well as encourages turf recovery without adding to soil compaction, Reicher adds.

In arid regions, irrigation distribution, frequency of irrigation, quantity of irrigation water used and the quality of irrigation water are critical factors in fairway management, Stowell says. As drought regulations become more common, irrigation efficiency raises to the top of the management concerns for premier fairway quality. "Without sufficient water, it is not possible to deliver a dense and healthy turfgrass stand," Stowell says. "The result is voids, weed infestations, and increased susceptibility to diseases and insects, not to mention the negative impact on golf play."



Distribution, frequency, and water quantity and quality are key factors when irrigating fairways.

GET TO THE ROOT

Superintendents simply must not neglect cultural practices such as topdressing, core cultivation and thatch management. "These practices help maintain firm/fast playing surfaces that players of all abilities appreciate," Horvath says. "When they aren't done, the fairways can get puffy, soft and play poorly. Scalping, poor lies, deeper divots from lack of density and other problems occur as a result."

Aerification controls thatch, enhances air exchange, relieves compaction and improves water movement, which all increases fairway rooting and stress tolerance, Reicher says.



Neglecting cultural practices can lead to poor playing conditions on fairways.

Superintendents with warm-season turf should consider fraze mowing, an intensive cultural management practice that involves harvesting much

of the top layer of turf, allowing the turf to re-establish from below ground/soil level stolons (Bermudagrass), and produces a firm/fast playing

surface. A phased approach of, for example, six holes per year is recommended to prevent closing the entire course. "This is still a new technique,"

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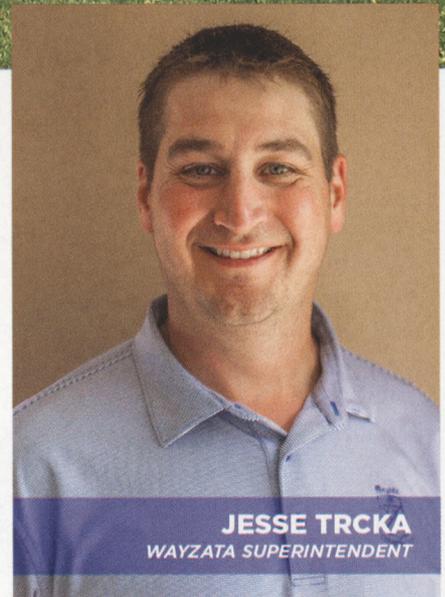
Most years, the members of Wayzata Country Club in Wayzata, Minnesota, would have their spring golf interrupted “just as the greens were getting good” as the grounds crew went out to aerate.

To appease a restless membership, Jesse Trcka, who is in his seventh season as superintendent at Wayzata and a graduate of the Penn State Turfgrass Management Program, introduced the Air2G2 324 into the aeration program. The Air2G2 324 relieves **Compaction**, increases **Porosity** and enhances **Respiration** by laterally injecting air into the soil profile with minimal surface disruption, and without causing root damage.

Trcka says his goal was to “minimize the core aeration that we are doing on the golf course to make it easier on the membership here because aeration created a big inconvenience.”

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“Using this tool,” Trcka says, “it has given us a chance to provide some mid-summer relief with minimal invasion so the members don’t even know we’ve been out there.”



JESSE TRCKA
WAYZATA SUPERINTENDENT

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Horvath adds, "but one that has potential huge dividends."

Soil modification or management plays a role in fairway health. "Cultivate the soil and plant canopy as appropriate to maintain favorable growing conditions," Miltner says. "Think about soil compaction, gas exchange, root development and health, water movement, organic matter and canopy management, and plant growth habit in planning your cultivation practices. All of these things have major impacts on the health of your grass and playability of your golf course. This list might seem elementary, but if you do all of them well, you'll be 90

percent of the way there and limit the time you spend chasing problems."

IT'S IN THE TANK

Preventative pest control is more effective and efficient than curative applications after pests or damage are detected, Reicher says. Preventative control maximizes density and stress tolerance, and can also limit secondary damage from other pests, like vertebrates foraging for white grubs.

A proactive fungicide program also supports a healthy turf system that is operating under near maximum growing potential, further enabling resistance to stress associated



Preventative pest control is more effective and efficient than curative applications after pests or damage are detected, says Dr. Zac Reicher of the Bayer Green Solutions Team.

with play and traffic. Traffic management enables recovery from abiotic stress associated with cart traffic.

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The higher the height of cut, the easier it is to maintain turf due to the turf having more leaf blade surface.

GET THE MOW DOWN

The greatest factor affecting the performance and maintenance requirements of fairways is height of cut, Gray says. Different grass species have different HOC ranges that influence fairway quality.

“Of course, superintendents must also take into account the course expectations from membership and golfers as the primary driver of determining fairways HOC,” he says.

In general, the higher the fairway HOC, the easier it is to maintain due to the turf having more leaf blade surface. As the fairway HOC goes down, the amount and intensity of maintenance activities goes up. Finding the HOC “sweet spot” will ultimately drive every other maintenance practice needed to deliver quality fairways, Gray says.

In addition to maximizing photosynthetic potential, mowing at the highest height appropriate for the species also removes dew, which helps control dollar spot, brown patch and other cool-season turf diseases, Reicher says.

Mow properly for your turf and playing conditions, Miltner adds. “Know your grass species and their tolerance and stress characteristics,” he says. “Do your best to keep mowing heights in the ranges of adaptation or consider changing species if player demand dictates that. Always keep mower blades sharp and mowers well-maintained, to limit physical injury to the plant that could result in bigger problems down the road.” GCI

John Torsiello is a Torrington, Conn.-based writer and frequent GCI contributor.

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PATH OF THE STORM

AFTER
RENOVATION,
EAGLE CREEK
FACED A
DEVASTATING
STRIKE BY
HURRICANE
IRMA.

By: Kurt Kleinham

When Jimmy Olsten, superintendent at Eagle Creek Golf Club in Naples, Fla., finished planting the last new sprigs in the middle of August, he breathed a sigh of relief.

He and his team had pulled together and made hard choices, but they hit the last possible deadline on their renovation. They would open Oct. 15 to greet the season with a beautiful, challenging course.

A few weeks later, Hurricane Irma struck.

A PRIVATE 18-HOLE Larry Packard-designed course that opened in 1985, Eagle Creek was known for compact design surrounded by the wilds, with true par 5s almost literally carved out of the jungle.

“If you miss the roughs to the right by, say, three feet, because we’re so heavily tree-lined, 90 percent of the time, you’re chipping out

of there sideways,” Olsten says. “When I say ‘jungle,’ there are areas where if you hit a ball in there, you just didn’t walk in after it.”

The course is packed into 300 acres of cypress pine and palm trees and serves as a meeting point of fresh and saltwater in the area. In that space are 200 homes, with about 50 percent condos and 50 percent single-family

houses. The course has 355 current golf members, with a soft cap of 360, and bylaws set a firm stopping point of 380.

That meant short waits for tee times for those members, sometimes just two days in advance. Walking the course, members could expect Stimp-meter readings between 11-12, which is how they preferred it.

"It's rare that we're outside that range," Olsten says. "We spend more time monitoring and working on greens than anywhere else by far, and our members feel the same way. Everything's about greens."

And Olsten had worked hard to restore those greens after joining the staff about 10 years ago. He described the cut he pulled out when he started as "fudge," he says. But years of hard work brought the greens to life in the jungle, to a point that Ken Venturi eventually described them with the term "PGA Tour-ready," Olsten says.

Even if Hurricane Irma had hit at another time or during the past few years, it had a solid chance of striking during renovation. After recovering Eagle Creek, Olsten and the greens committee established a plan of slow, small improvements rather than large-scale renovations.

"Down here, when it's time to renovate, all the folks down here ... literally scrape the course up and put it in a pile off to the side, then they build it brand-spanking new," Olsten says. "I've never understood that, and it didn't make sense to the Eagle Creek members or the greens committee."

So, five years ago, they developed a 35-year master renovation plan, with different-size projects every year to keep up with current equipment and

changes to the game. The projects weren't as much "Rebuild No. 1," as much as "Rebuild the back tee and move it 10 yards to the left," Olsten says.

"Those are the kinds of

planning, in customary small steps: regrassing the roughs with Celebration Bermudagrass, renovating the tees and fairways the previous year, adding drainage projects and

course received multiple record rainfall events, with at least two in June and then July dumping more than nine inches of rain in 24 hours.

"Couple that with being



Eagle Creek Golf Club had completed the renovation of its five finishing holes when Hurricane Irma hit Naples, Fla., last September.

things you'll see in our master plan," he adds. "Eagle Creek members love their golf course. Why blow it up and change it?" In the last five years, they've put about \$2 million total into the course for steady renovations.

So, a few years ago, they did projects like putting in bulkhead seawalls on the edge of the lake, and widening the approach right in front of the green on No. 4. But the project on the books for 2017 was one of the largest in the plan so far: Renovating five finishing holes.

"Instead of saying, 'Let's put a quarter-million into rebuilding No. 2,' we said, 'Let's put \$100,000 in each of our last five finishing holes, and make those good holes even better,'" Olsten says.

The project took two years of

enhancements.

Olsten worked with architect Gordy Lewis beginning on projects about seven years ago, and the partnership had only matured over the past few years. Lewis ended up on Eagle Creek's greens committees, which made Olsten's requests much easier, he says.

"They're really able to get into one-on-one with a golf course architect about changes. I just sit back and they duke it out, and I get my work orders," Olsten says. "It ensures that once we go out on the course and spend our members' money and we make a change, we know they're going to love it."

Eagle Creek closed May 15 to begin construction, but the summer had other plans. Even before the hurricane, the

three feet above sea level, and you've got a swamp," Olsten says. "It was unreal."

One month behind schedule in delays, Olsten and his team finally had the end in sight, a drop-dead final day to have sprigging finished in time to open: Aug. 15.

"It was like, 'Yes, we're gonna make it,'" he says.

Everything came together, even with some field plan changes to make up for the troublesome weather. With Lewis on-site, they had much more room to work when things didn't quite line up, and Golf Course Irrigation and Drainage Inc.'s site project manager kept the renovation moving whenever they were able.

"Having a flexible architect in Gordy, having an incred-

ibly talented golf course construction manager and our relationship with the greens committee, we were able to make those changes in the field for the better 99 percent of the time,” Olsten says.

Two weeks later, evacuations were underway for Miami, and Eagle Creek’s hurricane and disaster plan was already in effect. Communication was key, and frequent messages went out to members via social media and YouTube about weather predictions and how the team was preparing.

“We’ve got a pretty extensive hurricane and disaster plan,” Olsten says. “We’ve had many [storms] and we’re always going to have them, so having a good plan saves money, saves time, saves work. It gets everybody safe, that’s the first thing.”

Seven days out from landfall, the team watched the news and tracked reports. Eagle Creek had bounced back from a direct hit by Hurricane Wilma in 2005, and they were ready to weather another. “Hurricanes are hurricanes. You work, and you clean it all up and get things back to normal,” Olsten says.

Then, as distance closed, a prediction for a 15- to 20-foot storm surge came through, and everything in the preparation plan changed.

“If we had gotten a 10-foot storm surge, Eagle Creek would’ve been completely wiped off the map,” Olsten says. “It would’ve been in the Gulf of Mexico. Homes would’ve been submerged. Everything would’ve been 100 percent destroyed.”

Many people from Eagle Creek evacuated, especially those with families, says Olsten. But Olsten, his assistant and the general manager and a few oth-



Eagle Creek Golf Club received 23 inches of rain in about four hours and Category 4-force winds during Hurricane Irma.

ers stayed nearby to ride out the storm. The hurricane changed track at the last moment, barreling down on Naples.

Olsten sheltered about 15 miles north of the course and logged into the course’s security cameras remotely to watch what he could. Eagle Creek ended up with the dubious honor of being the first 18-hole golf course and country club hit by Hurricane Irma on U.S. soil.

“I remember, being online, I was hunkered down watching the cameras,” he says. “And you see the trees start to lean, and then bang, the power goes out. Right then, the internet went out. Then cell service went out. Then cable TV went out.”

“For a good 24 hours, we didn’t know what had happened at Eagle Creek. We didn’t know

if it had gotten the storm surge. We were completely cut off. Even after the storm and winds had died down, Sunday night, you couldn’t get on the roads and drive down.”

Along with the chainsaws that he and his assistant brought in their attempt to reach the course on Sunday night, Olsten also brought a boat, just for the worst-case scenario. In his gut, he thought the course might just be gone, thanks to the storm surge. In the morning, he wondered if he and the others still had jobs at all.

“We were thinking, number one, how do we get [to the course] from where we are, and two, do we have members who are dead?” he says.

The first thing he did was pull into the entrance at Eagle

Creek and took a picture with his cell phone. Miraculously, he had cell service, and tweeted out the image to members and followers to let them know that at least that part of the course was still standing.

“Honest to god, it was like, arms up, laughing, it’s still here!” he says.

Then he went down to the shop to start taking out chainsaws and bulldozers and get to the work of surveying the damage.

The first order of business was to take a wheel loader and clear the streets as quickly as possible, to help members who had stayed behind and who were blocked in by a street full of fallen palm trees and debris.

“Those streets were all 100 percent blocked. You couldn’t

drive out with a four-wheel-drive pickup,” Olsten says. “We wanted to get as much infrastructure going as quick as possible. We basically snowplowed all the streets, but it was palm fronds, and trees and limbs and bushes instead of snow, thank god.”

The first week took their communication methods back to the Stone Age, as cell service was spotty at best and the team was spread across the country to various evacuation points, like Michigan or Pennsylvania. It took multiple phone calls and networking to make sure payroll happened on time and employees knew when and where to show up.

During the cleanup effort, Olsten and his staff continued to take video or photos of updates, and through the team’s network, they sent out push notifications to keep members updated.

Though Eagle Creek didn’t end up getting the storm surge they had been warned about, but what they did get was 23 inches of rain in about a four-hour period and Category 4-force winds, says Olsten.

“The course was flooded, it was just incredibly flooded,” he adds. “You could see more debris than you could grass. It was hard to tell it was a golf course for, I would say, about a week.”

Despite the damage, Olsten and his greens committee wanted to get the course open as quickly as possible. The course was originally scheduled to open Oct. 15, and they set a goal to open by Nov. 15. “Then we started on hole No. 1 and basically put together a four-phase cleanup plan,” he says.

Phase 1 was just getting small debris off the turf so they could get back to the business of managing the turf itself. Olsten kept a close eye especially on the 12 acres of brand-new sprigs that were trying to grow in without the help of an irrigation system.

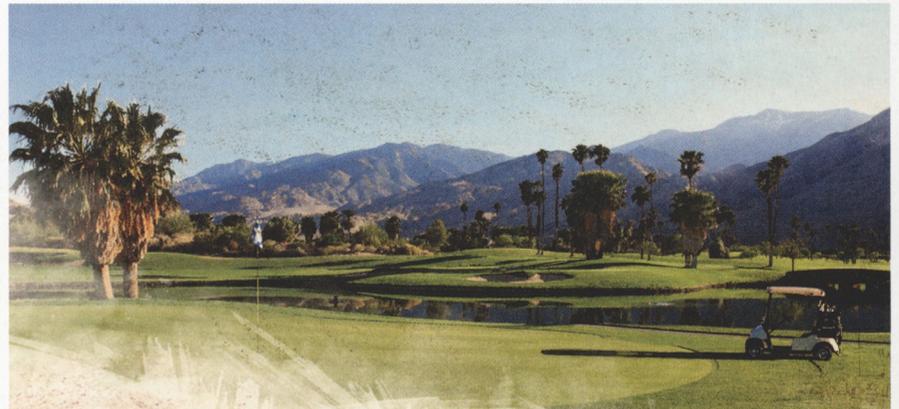
“We just piled stuff up on the edges of the cart path, on the edges of the woodlines so we could at least start mowing turf,” he says. “There were literally holes of the course where they weren’t mowed for almost a month.”

Clearing away the small debris took about 21 work days, while the team still waited on reliable electricity and water sources.

Phase 2 started work on the fallen trees and uprooted stumps. Given how heavily

wooded Eagle Creek had been, they had more to lose to start. Olsten’s initial count a week out from the storm was that they had about 1,500 trees down, and it was another 34 work days spent there. Even with

the heavy amount of work ahead, Olsten relied on his team, but also on a helpful coincidence: GCID had still been doing some minor work on the course when the storm hit. They were still under contract



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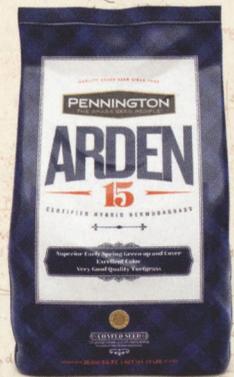
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INDUSTRY

and were more than willing to make the shift from doing golf course construction to hurricane cleanup.

Phase 3 was hand-raking the debris from peripheral landscape areas, where no machine would be able to help clean, and Phase 4 meant starting the replacement of lost trees, and the removal of the dead and dying trees still standing.

On top of the 1,500 trees lost to the storm, Eagle Creek is still losing trees to the southern pine beetle at the rate of about seven trees per day, says Olsten. He estimates that they've lost about another 350 trees so far, and the beetle's attack could go on for another six months or a year.

With the cleanup plan underway and moving, Eagle Creek opened for the season Nov. 15, "with a lot of ground in repair, everywhere," says Olsten.

Hole No. 9 was cart path only, for example. Olsten and his team were working in the peripherals while golfers were playing around them. But it was playable.

"That was our goal all along: Get it playable," Olsten says. "We worked basically from the centerline of each hole outwards. We're happy to have a season, at this point."

Though insurance claims have been filed, Olsten has been approaching the cleanup as frugally as possible in the interim, and all capital improvement projects have been put on hold. Given Eagle Creek's system of smaller, systematic improvements, that meant between \$800,000 and \$1 million was available to work with to keep the effort moving. Even with the hard work of his team and others, the recovery will take almost all of 2018, he says.

As the course has bounced back, Eagle Creek's players have been understanding, says Olsten. Most of them have seen storms come through before, and they've all had damage done to their homes by Hurricane Irma.

"What I've heard the most is, 'I can't believe how good it looks,'" says Olsten. "And it does, it's got a really long way to go, but considering what we had, it looks pretty darn good." **GCI**



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IRRIGATION FROM A NEW PERSPECTIVE



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.

Many of us have gone to what is now called the Golf Industry Show for years or several decades. I ran into Pat Jones at the show this year and he asked me how many years I had attended. I did not know, but my best guess was between 25 and 30 years, which makes me a newcomer compared to many of you. I have gone to the show each year for different reasons and those reasons may change from year to year, but two reasons for me to always attend are to network and see new irrigation technologies. Sometimes it is to deal with clients, get a break, and/or to teach or speak. It's always interesting to talk with superintendents about their irrigation systems and what they are do-

ing to keep them operating, make them better or easier to maintain.

At this year's show, I met Jayson Gajewski, a relatively new assistant golf course superintendent at La Gorce Country Club in North Miami Beach, Fla. I have some history with La Gorce, so we struck up a conversation about how their new irrigation system was operating.

Jason has a mechanical engineering degree, so he is armed with considerable technical expertise. One of the topics we discussed was his use of a drone to maintain the irrigation system. As we know, drones are becoming a big deal in everyday life. Ironically, Toro announced at the show their strategic investment, exclusive in the golf industry, with Boston-

based GreenSight Agronomics, which supplies agronomic data based on automated drones, patented sensors and proprietary analytics.

I have seen GreenSight presentations at conferences over the last several years. Their drones map soil moisture, pest stress and nutrient deficiencies. Drone technology has been used in agriculture for many years. It is estimated that 30 percent of U.S. farms are using some type of drone data.

The number isn't as high in turf, but if a major manufacturer of golf and irrigation equipment is exploring drone technology, there must be something to it. I anticipate an increase in the technology's golf applications.

But back to Jayson. At La Gorce, Jayson uses his drone to fly over the course to look for irrigation issues he would only see if he drove around to all the sprinklers or may not notice at all. Leaks and coverage issues are easily identified from above, but he also uses it to identify sprinklers that have bad seals.

If you fly over the irrigation system while the system was operating, you could identify sprinklers that do not turn, operate or pop up and down, too. Jayson is excited about the potential as he gets more familiar with the golf course and the drone.

Toro's interest in the drone technology is to integrate with their Lynx central control software. They see it as a tool to provide feedback to the golf course management staff that can save water. Not only are its moisture sensing mapping capabilities accurate, but they also show the precise location of wet and dry spots. It will also indicate what sprinklers, or lack thereof, water the wet or dry spots of concern.

As Amazon has pointed out, expect to see more and more applications for drones in our everyday personal and work life. There will most likely be multiple uses for drones on golf courses in the future. I wonder how long it will be before we hear of one being knocked down by a golfer's drive? **GCI**



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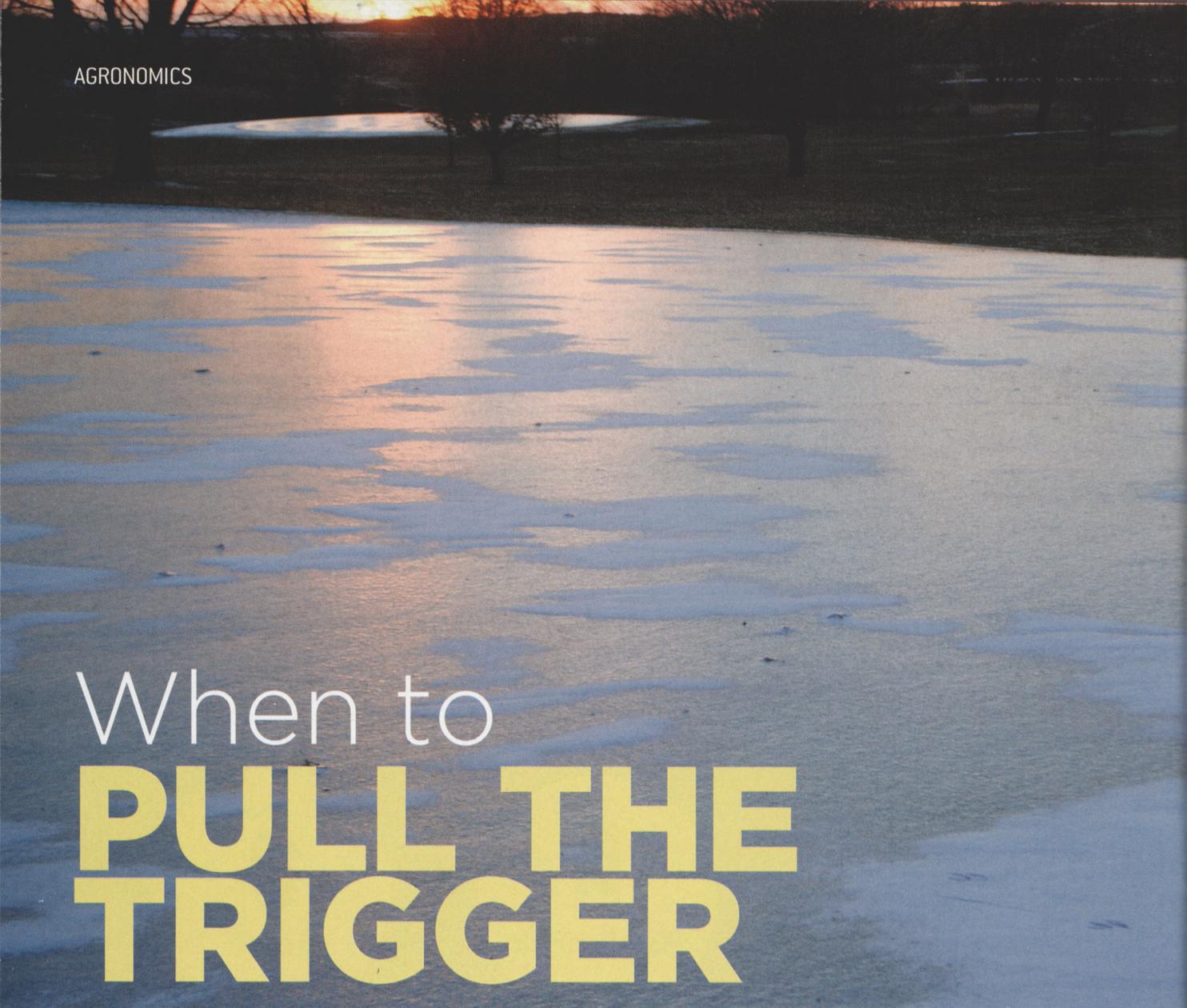


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When to **PULL THE TRIGGER**

Incorrect conclusions and misdirected decisions can do more harm to dormant turf than good. Know when the threat of winterkill requires agronomic action.

By **Rick Woelfel**

Most golf course superintendents prepare for the possibility of winterkill turf damage. Even in warmer climates, it is part of the job. But there are misconceptions about winterkill, and those lead superintendents to make incorrect conclusions and wrong decisions in turf and disease management.

One popular notion concerns ice on putting surfaces and the idea that there is a point which it must always be removed, says United States Golf Association Director

of Green Section Education Adam Moeller.

“Probably one of the more common misconceptions out there is, there is a set day — after 20 days, 30 days, whatever — that there has to be action taken,” Moeller says. “The research is somewhat misleading that if you’ve got ice cover for a certain time period, that means there is going to be injury. I think that’s how some people have interpreted that research.”

Many factors affect a course’s susceptibility to ice damage, Moeller says. In fact, some courses can experience turf injury when ice has been



The length and thickness of ice covering a green must be monitored when determining whether winterkill will occur.

to causing (turf damage). But if you've got a really thick ice layer — two-, three-, four-inches thick — that's obviously a recipe for problems and certainly a cause for concern."

Other factors in the ice equation include how rapidly the ice formed and the strength of the turf heading into the winter.

"Every ice event is sort of unique, if you will," Moeller says. "There are a lot of factors involved beyond just 'Hey, I've had ice for X amount of days.'"

Removing ice from greens can do more harm than good, says Dr. Michelle DeCosta, associate professor of turfgrass physiology at the University of Massachusetts.

"It's not just about the presence of ice, it's about what the conditions of the turf was before the ice was present," she says. "People will pull the trigger and go out and try to remove the ice. And sometimes in exposing the grass underneath to whatever ambient or fluctuating temperature conditions, that can actually cause damage. So sometimes people are better off just kind of letting it go or keeping it there and using other information to help them determine what to do."

Snow is a different matter. A prolonged snow cover is a natural insulator for the turf beneath it, protecting the soil and the plant from potentially harsh winter temperatures and winds. DeCosta, though, notes a pattern featuring snow, followed by melting or perhaps rain because of fluctuating temperatures, can be problematic for turf.

"If you've got snow and then you've got rainfall or some other sort of precipitation and

Tackling turf damaged by winterkill

Be sure it is actually dead. Take cup-cutter plugs from suspected areas as well as what you would consider non-problem areas for comparison. Put them in a window and keep them well-watered for a couple of weeks. Slow green-up is a different issue than winterkill.

Don't apply preemergence herbicides for crabgrass or goosegrass before you confirm survival. Most preemergence herbicides will prevent germination from newly introduced seed of cool-season grasses or sprigs of warm-season grasses. One exception is Ronstar, which allows reestablishment from Bermudagrass sprigs after application.

What enhanced winter damage? Winter damage often occurs first in grasses that are already stressed by other factors. Shade, winter traffic, poorly drained swales, excess runoff from non-play areas, last fall's disease or nematodes that may have gone unchecked are all factors that could play a role in winterkill. Now is the time to correct or at least record ample pictures and video to educate decision makers in order to take future corrective measures to limit damage.

Choose better grasses for repair. New and improved cultivars of Bermudagrass with winter tolerance, zoysiagrass, or cool-season grasses with enhanced winter tolerance are all examples of grasses that will likely survive better in future winters than the turf damaged this winter. If regrassing is needed, now is the time to go with the new improved species/cultivar.

Post-establishment care is critical. After reseeding, sodding or sprigging, minimize or eliminate traffic. Frequent irrigation and fertilization at light rates will speed recovery. Regular mowing as soon as the new turf reaches playing height will also help encourage spread. Aggressive use of postemergence herbicides will likely be needed to limit competition from annual grassy weeds. Pay special attention to label limitations for application to young turf.

Zac Reicher, Ph.D., is a member of the Bayer Green Solutions Team.

then you've got rain turning to ice and then you've got melting, that's when you start to run into some issues," she says.

This game of climate ping pong causes physiological shifts in the plants and their crowns about whether to come out or stay in dormancy. "There are these environmental signals going back in forth but then, on top of it, worse than the temperature fluctuations actually, are the fluctua-

tions in moisture content due to the presence of free water," DeCosta says. "That's a really bad situation that superintendents need to deal with as snow starts to melt."

Winterkill is particularly painful when it happens to your greens. The first thing is communicating to the facility's key decision maker — whether that's an owner, a general manager, a green committee member — that



Communicating why winterkill occurred and concocting an agronomic plan to repair damaged turf are critical steps in the recovery process.

unfortunate winter injury has occurred

Next, put a plan together to repair the damage, and then, along the lines of planning for that repair, consider taking steps to prevent future recurrences.

“It’s specifically about trying to get the greens back and recovered,” Moeller says. “The biggest thing I think superintendents have success with is warming the greens, warming the soil as quickly as possible. That will promote the quickest recovery, through seeding, through sodding or whatever method they might choose.

Most turf varieties have been developed to withstand

some occurrences of huge temperature fluctuations, especially if you’ve followed standard maintenance practices for your part of the country.

In the end, dealing with and minimizing winterkill is a year-round endeavor.

“(Winterkill) is an indication that you really had a lot of things going on that are really not associated with winter kill,” BASF’s Dr. Kathie Kalmowitz says. “You really had potentially much weaker turf; even if the top of the turf was fairly green going into the fall, you really didn’t have a good robust root system to support the turf and the winterkill has brought that glaringly to light.

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With Bermudagrass being pushed into new locations, winterkill has become a potential turf issue that requires vigilance.

Winterkill and warm-season turf

Superintendents tending to warm-season grasses, particularly Bermudagrass and zoysiagrass, must be especially vigilant about winterkill issues.

"For warm-season grasses, you really are dealing with a different type of acclimation," says Dr. Kathie Kalmowitz, a technical specialist with BASF Professional and Specialty Solutions who is based in North Carolina and works extensively with clients in the South and Midwest. "But also, you're dealing with cultivars that have been developed for their ability to stimulate really

good play."

"However, their root systems have to have a lot more attention," she adds. "They've been tried and tested for many years, it's just that people continue to push them into locations that are not typical Bermudagrass locations."

Sound management practices provide the optimum defense against winterkill. "You have to do a lot of cultural management in order to make sure you keep a root system that is going to withstand play," Kalmowitz says. "Many times (particularly in warmer climates) you have play 12 months out of the year."

"If (your winterkill issues) really are somewhat more severe than your neighbor down the road, it really means that you were kind of camouflaging some chronic problems that may have been going on on your course," she adds. **GCI**

Rick Woelfel is a Philadelphia-based sports and turf writer and a frequent GCI contributor.

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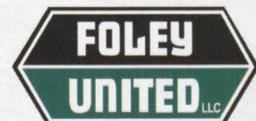
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NOT SO RANDOM THOUGHTS



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

Two major industry shows have come and gone, and in most parts of the country the golf season is upon us. The game's associations have made their announcements and proclamations, including unveiling their latest ideas for improving and broadening the game. All of which got me thinking, and prompted the following thoughts, questions, and proclamations of my own.

Are we growing golf in a meaningful way? I don't think so.

Among the ideas espoused by the game's leaders were closing courses to reach a "more manageable" level (what will that do to the constituents of the PGA of America and GCSAA who are presently employed at those "extra" courses?); "driving golf forward" (the USGA's multi-year campaign focused on four key impact areas to create new opportunities for golf to grow and endure); and targeting millennials as well as "sports socialites; interested in more than the competition."

Excuse me while I scratch my head and ask, "Will any of these initiatives will move the needle?" Again, I don't think so.

Are we that desperate that we feel we must include everyone walking the face of the earth to play our game? Just as with baseball, or most any other sport/leisure activity/hobby, you

“Focusing on where the traffic goes may save money, but it shortchanges the role of the superintendent, most of whom take pride in their efforts to care for the entire course.”

either like golf or you don't. Trying to force-feed it to all audiences dilutes the game's special allure, it's magic. For those of us who get it, golf is enjoyable, challenging and especially addictive. But also, as with anything else, frantically and wildly trying to increase the number of devotees seems to me more likely to oversaturate and minimize the game rather than enrich it, and serve only to fatten the wallets of those who profit from it.

The USGA's campaign will help fund cutting-edge innovation and industry-leading research designed to improve the golfer experience and help golf facilities reduce their reliance on critical resources such as water, nutrients, chemicals, and energy by 25 percent by 2025. That sounds good. But wait, money will also be spent on global forums to better connect the worldwide golf community and produce positive, collaborative change. Oh yes, that's just what we

need, more forums and collaborative change.

If there's one thing the golf industry has never had a problem developing, it's more talk.

I've keep hearing how Topgolf is a great idea and an industry bright spot, so I decided to try it out. For \$35 an hour I got a bucket of balls (micro-chip embedded, no less!), a waiter to serve my beverage(s) of choice, and upbeat music to serenade my swing flaws. It was fun. Once.

But for this self-admitted traditionalist, it wasn't golf. Which is fine. But will Topgolf — think of it as driving range meets bowling alley meets bar — drive people to golf courses? About half of the players around me seemed focused on hitting balls, while the other half were goofing around. The guys in the booth adjacent were trying very hard to hit the right target with the appropriate clubs, busting one another's chops when shots fell short. It was good, old-fashioned camaraderie, and in some ways was the most golf-like element on display. So maybe there is hope that Topgolfers will become real golfers. I really hope so.

I recently had a long conversation with a colleague who strongly agrees with the PGA's stand that the game would be better served by closing 1,500 to 2,000 courses. That's a staggering number and I'm sensitive to putting people out of work. But there are other sides to the argument: People are already out of work because the existing courses aren't generating enough business; closing weak courses would drive more business to better and more economically secure courses, leading them to bring on more employees; and the land currently used for weak courses could be more wisely and profitably used for other things that could employ and service even more people. It's by no means a slam dunk,

(MORAGHAN continues on page 48)



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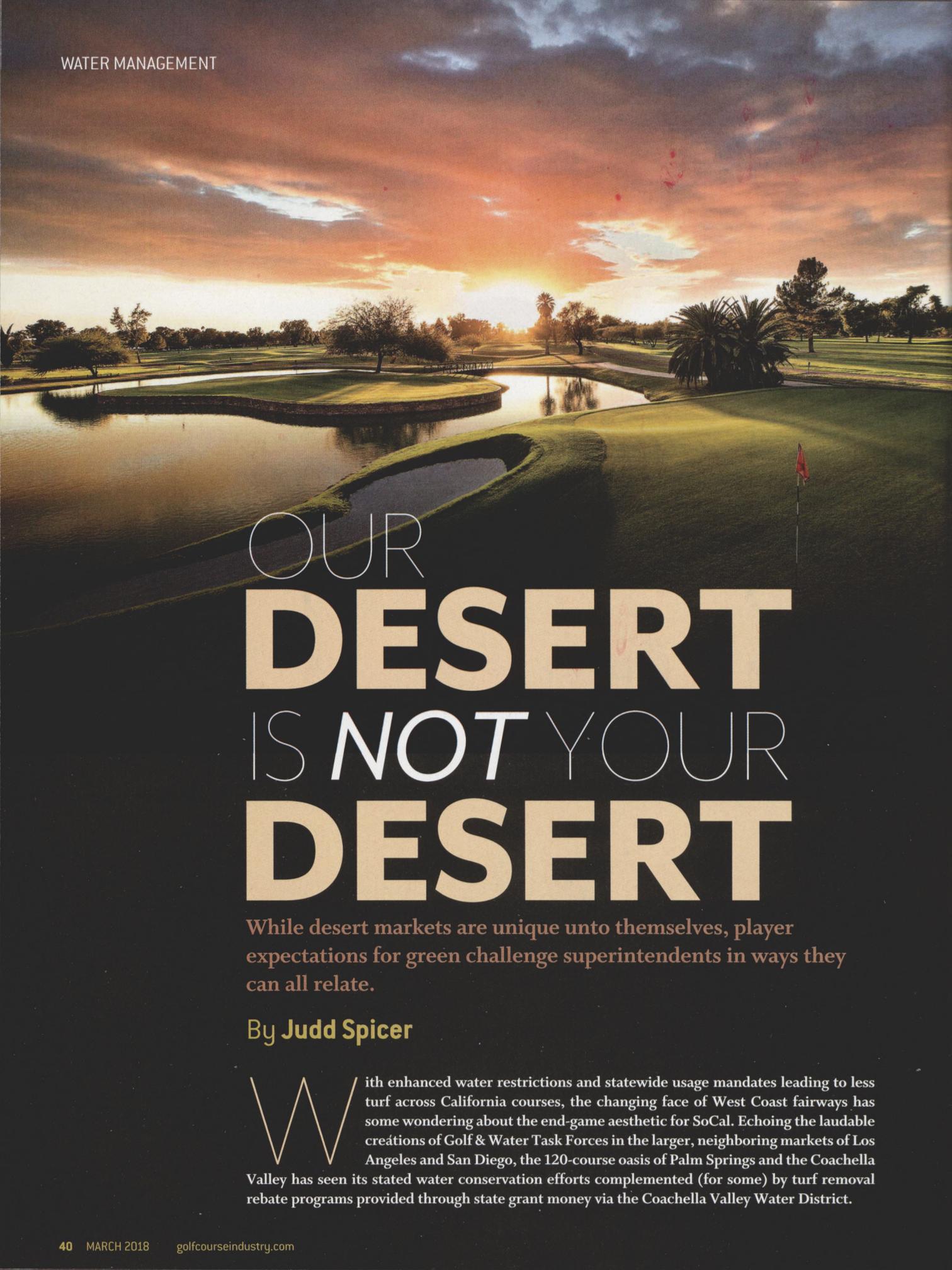
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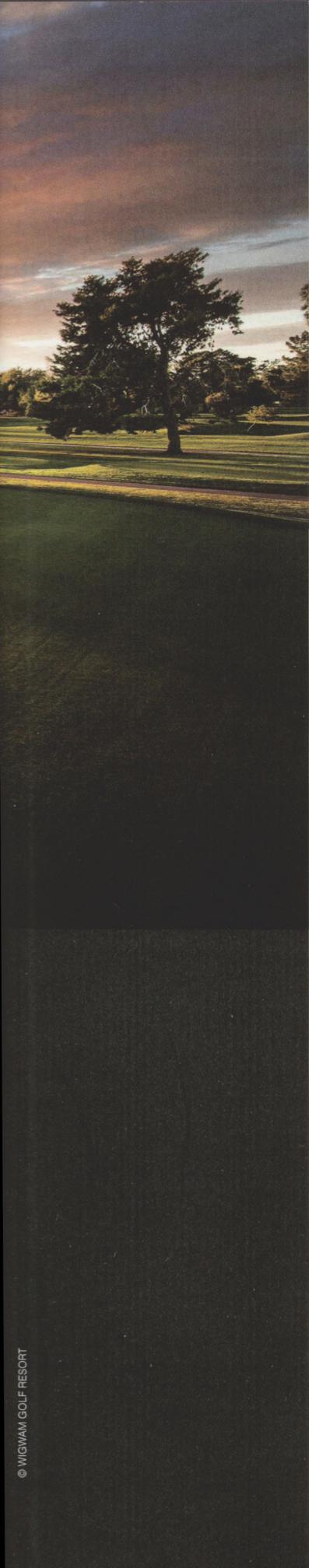


OUR
DESERT
IS *NOT* YOUR
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While desert markets are unique unto themselves, player expectations for green challenge superintendents in ways they can all relate.

By **Judd Spicer**

With enhanced water restrictions and statewide usage mandates leading to less turf across California courses, the changing face of West Coast fairways has some wondering about the end-game aesthetic for SoCal. Echoing the laudable creations of Golf & Water Task Forces in the larger, neighboring markets of Los Angeles and San Diego, the 120-course oasis of Palm Springs and the Coachella Valley has seen its stated water conservation efforts complemented (for some) by turf removal rebate programs provided through state grant money via the Coachella Valley Water District.



Offering \$1,500 per acre removed, at a maximum of seven acres, 2016 and 2017 saw 18 Coachella Valley golf properties remove some degree of turf, accounting for more than 132 acres of cumulative removal and, in turn, nearly \$1.4 million provided in rebates. For course operators and superintendents in the Palm Springs area, which accounts for nearly 14 percent of all California courses, and the environmental set across SoCal, the maiden blush of the removal-for-rebate initiative was a boon for both reality and modernity.

And for those who bought valley homes and memberships with the expectation of seeing a wash of green grasses outside their respective windows? Well, the appearance of golden Bermuda and desertscaping as a means to address real environmental concerns isn't always an easy sell.

"It's been difficult to sell a lot of the memberships on that because of how Palm Springs is perceived to be more of the 'green desert,'" says Chris Hoyer, superintendent at parkland-style Bermuda Dunes Country Club and president of the Hi-Lo Desert Chapter of the GCSAA. "Historically, this is where everything is overseeded wall-to-wall, the trees are big and lush, and the lack of desert-landscape was very appealing to a lot of the snowbirds. So, it's been hard to sell."

Over 2016 and 2017, Bermuda Dunes, a longtime, former host of the PGA Tour's Bob Hope Classic (now the CareerBuilder Challenge), removed 9½ total acres of turf from its 27-holes, most along the periphery of holes.

Backing by direction from the state has somewhat as-

suaged the sell. "The state-mandated decrease in water use, that's helped out a lot in trying to sell it to memberships and clubs," Hoyer says.

Of the 132.63 acres removed across valley courses to date – essentially equivalent to one 18-hole course – Hoyer calls the effort, "A very good start."

While a waning amount of the grant cash still remains for 2018, the program has indeed experienced a degree of quarter horsing. "It started out as a really good thought brought on by CVWD. We're sort of mirroring programs seen in Los Angeles, San Diego and Las Vegas," Hoyer says. "But, unfortunately, what's charged for water down here – it's much less than those other water districts – so the rebates offered . . . it's been a bit of a deterrent because people haven't been able to cover the costs of the actual turf renovation. We've pushed CVWD to increase those rebates, but because it's state grant money, they really can't."

Many golf mavens, snowbirds and desert-goers come to the Coachella Valley for a certain look, appearance and palate. Which, of course, means said players didn't go to play or buy homes elsewhere.

Take Phoenix, for example. Located 250 miles east from Palm Springs along Interstate 10, the desert destination adjacent is by-and-large known for an architectural style of play which poses more target golf, with tee boxes, fairways and greens separated by brown



Jason Snyder



Chris Hoyer

swaths of rocks and desert.

For the Coachella Valley market, a reluctance does exist for one desert to match another.

"Very much so," Hoyer says. "That's definitely come up in conversations where people talk about picking the Palm Springs area over, say, Phoenix, because of the wall-to-wall green; they don't like to see the

desert aspect. They like the green and lush trees. I hear that a lot; and it makes people worry, because the last thing you want to do is drive away memberships or prospective homeowners."

Hoyer admits that a genuine fear exists for courses and clubs across the area which can't afford to simply throw cash at water.

"It's scary," he says. "Because I think we're gonna' start to lose the whole 'Palm Springs feel' eventually. I don't anticipate the water situation getting any better. The population out here is increasing with more and more developments going up, and as scarce as water is becoming on the western side of the country, it doesn't feel like something that will be getting better anytime soon."

While the Phoenix and Scottsdale population is approximately 10 times that of the Coachella Valley, course operators see the desert-to-desert differences as more of a marketing scenario.

Though the markets may compete for business to some degree, the superintendent purview is a stance simpatico.

WATER MANAGEMENT

“I can’t speak for the people in marketing, but from an agronomic aspect, I think the two markets transfer very well,” says Jason Snyder, superintendent at the Wigwam Golf Resort in the Phoenix neighborhood of Litchfield Park. “And I think there’s a lot we can learn from each other.”

Working in different desert markets doesn’t mean course operators are diverging in ways to save water.

“A lot of what Palm Springs is doing is transferable to here, and probably a lot of what we do transferable there,” Snyder adds. “The soils are a little different, but there are a number of things. Not over-

seeding rough areas for one; it’s a big thing, a big commitment for people. And I know more courses in Palm Springs are trying to go that direction because of water issues. But I think that, for golfers, dormant Bermuda is a great surface to play off of.”

Overseeing the only 54-hole resort property in Arizona, Snyder’s terrain is unique for his region in its high-degree of turf, with about 400 acres of grass across Wigwam’s trio

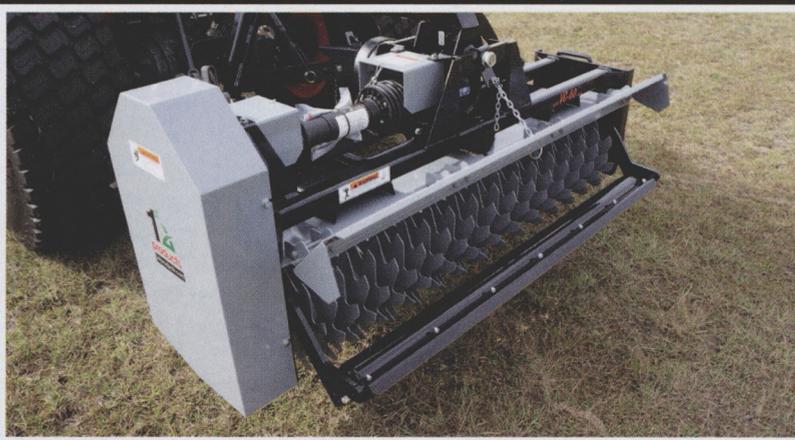


Bermuda Dunes Country Club has removed 9 1/2 acres of turf on its periphery.

of courses. Previously having worked at Scottsdale-area locales of The Estancia Club and FireRock Country Club, however, Snyder is well-versed in the more traditional look of approximately 80 acres of green grass surrounded by desert terrain.

In his current gig at Wigwam, working with off-site well water and the area’s restrictions for water usage, Snyder and his crew source from a canal running through property, its history marked from when Goodyear used to farm cotton on the land.

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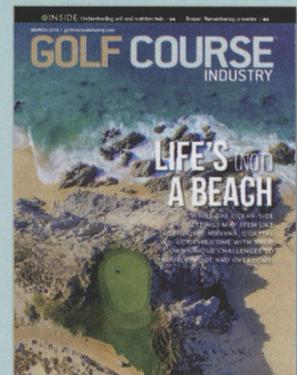


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Not that the source or seed tended in brusque fashion.

"When we decide to water, it's for a reason," Snyder says. "Each green is treated like a microenvironment. A perfect example is our Gold Course where, say, the first green, we might water once a week. The 18th green, we might have to water three times a week. We've used the POGO Turf Pro to where it gives us confidence that we don't overwater the course. We water to a number, and that number we can quantify; so, it's not just knee-jerk reaction to where we say, 'Well, let's just water this for 20 minutes.'"

Still, in trying to alter said aesthetic (along with saving water and cost) with a partial overseed across two of the property's tracks in his first year at Wigwam, Snyder's efforts resulted in some of the same blowback Hoyer has seen fellow course operators deal with in Palm Springs.

"People come down here, they want green grass; they don't want it painted, they want green grass." Snyder says. "So, now, subsequently, we overseed about 325 of the 400 acres here. In your resort setting, people want grass everywhere."

Hoyer would likely agree with such an assessment of "green expectation," yet, little-by-little, he's seeing the playing public educated on a need to conserve, and ultimately doesn't view the changing face off less turf as a threat to the destination. "I think people will understand in the coming years, especially people that are used to coming down here," he says.

With desertscaping and brown/golden peripherals

now viewed at myriad courses across Palm Springs, golfers are starting to get used to the appearance of a two-tone aesthetic.

"People from, say, Oregon, Washington, Minnesota, Wisconsin, they come down here and say, 'That's a really cool look,'" Hoyer says. "Where we've got the dormant Bermuda sprayed out with the blond look, and the green turf in the middle."

While both the Phoenix and Palm Springs markets remain unique, the future will require flexibility from players and homeowners in the SoCal desert to understand that cost, environmental needs and government oversight won't be making the resources any cheaper. Which is to say that, in the course of coming years, expect more brown in your Palm Springs town.

Not that Hoyer and his West Coast colleagues are sitting back and idly watching the train go by.

"We're always toying with paints and pigments and trying to limit what we overseed; I think these ideas might become better options for certain clubs," he says. "I know that certain clubs out here are now trying out limited overseed, which obviously saves on time, labor, seed, fertilizer. And our winters out here are becoming, in my opinion, less cold. In the last four or five years, we haven't had to really worry as much with Bermuda going fully dormant. You can find ways to keep Bermuda green all year-round. That might be an option for some places moving forward and I'm definitely toying with it." GCI



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THE WORKER MOBILITY EXPERIMENT



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.

There never seem to be enough vehicles for workers to use for dashing from one corner of the course to another.

What if there was an affordable alternative to borrowing a golf car from golf operations? You know, something for all those trips where you don't need a dump truck or a spray rig. Something you could use to run a spare part out to an irrigation dig site or take a string trimmer and a gallon of 50:1 mix out to string trim the back nine.

At first, I looked at the Rupp-like mini-bikes as representing the minimalist form of motorized transportation and the price was remarkably low. Looking at the tasks we would use them for, two wheels might not be enough and maybe too minimalist.

The next step up is a go-kart, which has four wheels and a steel roll cage that I could weld baskets and brackets to. So, I began looking for where to get go-karts, parts and technical support.

While shopping at Wal-Mart, I walked past a stack of big boxes with pictures of go-karts on them. Still being a little kid at heart, I had to stop and read the description and stare at the pictures for a while. As an adult, I was shocked at the price – the sign said \$499, about half their regular price. The idea of being able to buy



No. 65 on my equipment list: Worker Mobility Experimental Vehicle.

10 of them for the price of one golf car was intriguing. A four-year, no deductible warranty can be purchased for them to help control cost of ownership. I started looking into what the repair costs would be to maintain a small fleet of them and found that replacement parts are also about 1/10th the cost of golf car parts. All things considered, it looked like an idea worth testing.

Starting with a used go-kart that cost about \$200, I began modifying it to see if there was anything about it that would prevent us from using new ones as transportation for workers on the golf course. The first modification was to switch to golf-car tires and rims which raised the ground clearance a little bit. I swapped out the engine for one with electric start, added a battery and holder for the starter, changed it from one wheel drive to live axle

with both rear tires driving, and I altered it from a centrifugal clutch to variable speed transmission (new ones have this). I then added a roll cage, pipe insulation foam padding to the roll cage pipe and a golf-car brake assembly. Finally, I repainted the go-kart.

While I was working on the modifications, it suddenly dawned on me that one of the Crowns sister companies is a national go-kart park. In the spring, I should go meet the mechanic at the local one, see what advice he might have about maintaining a small fleet of them and see if he has any "spares" we could use.

Because the two companies don't have much in common, I have only been over there once a few years back when they were giving away a mountain of used go-kart tires. I received about 50 tires and inner tubes from the free pile to use on 4-H Maker-Space Club projects and to use as boat fenders on a boat dock.

If the test in the spring goes well, I will need to add some of the normal things that workers ask for: 12 VDC power outlet, cup holder, sweater basket, windshield, splash guards, trailer hitch, tow bar attachment point, lights, etc.

That is the great thing about winter. I get to work on all kinds of experimental things. So many, in fact, that for a while one of the major manufacturers had asked me to keep them informed of what I end up working on.

Now that the go-kart is finished and waiting for spring, I have started on another of my pet projects — Mechanical Men. Being a one-man shop and advancing in years, I need some help around the Crown Maintenance Shop. Apprentices want to get paid more than what I am being paid, so I don't see that happening any time soon. With robotics as one of my engineering specialties, I figure it is time for me to make my own helper. Stay tuned. **GCI**



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



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.

CONTAINER PARTS ROOMS

Clever way to expand the maintenance building size by adding two 8-foot by 40-foot metal storage container trailers (\$3,500 each) used for storing equipment repair parts, irrigation parts and hardware. One 36-inch outside entrance man door; six 48-inch by 24-inch by 72-inch wire shelving units; six 4-foot by 8-foot peg boards; two 4-foot by 6-foot storage cabinets; 150 tip-out storage bins; 120 small parts bins; 12 four-piece hardware drawers; and two 72-inch electric baseboard heaters were added. Thin foam sheets were used for insulation, ¾-inch thick plywood was used for the walls and flooring. Next, 3-foot by 6-foot openings were framed in-between each container to join them together. Fluorescent lights, Wi-Fi and a 6-foot mechanic's fully equipped desk was added along with the service and repair records. Compressed air was piped in from the shop area and an oil delivery system, with spill containment pallet, was piped out to the main shop area. A hydraulic hose maker with fittings station and a small tire machine was installed. The room is 640 square feet, cost approximately \$34,000 and took approximately 960 labor hours over two winter seasons to complete. Brian Goleski, superintendent, and J.R. Wilson, equipment manager, at the Noyac Golf Club, Long Island, Sag Harbor, N.Y., provided another great idea.



STRIPE MOWING ENHANCEMENT

The fairway stripe mowing patterns are now more enhanced by adding Harper model #9424 brushes (\$33 each) on each cutting unit formerly on the 2014 John Deere 8700 and currently on the 2017 John Deere 7700A fairway mowers. The brackets are made from new ¼-inch flat steel, the top piece is 2 inches wide by 29 inches long and the two side-mounting arms are 1 inch wide by 7 ½ inches long. The bolts on each side of the cutting unit were removed and a longer bolt was installed to hold each side arm in place so the brush is free floating to the contours of the Zorro zoysiagrass fairways. The brushes are used throughout the entire growing season. Each brush is mounted with two ¼-inch by 2-inch long bolts with self-locking nylon nuts on the ends and the brush head comes with a steel T-nut in the middle for a ⅜-inch by 1¼-inch long bolt. Each cutting unit takes 10 ¼-inch by 2-inch bolts and locking nuts, and five ⅜-inch by 1¼-inch bolts. Each mounting bracket costs about \$25 and it took about an hour per cutting unit to fabricate and install. Owen Coulson, superintendent, conceived this idea and Eric "Skip" Bridges, equipment technician, completed it at the Vestavia Country Club in Birmingham, Ala.





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See what top golf maintenance professionals say about their Rain Bird systems at rainbird.com/GolfSolutions.



(MORAGHAN continued from page 38)

but it's a given that there are too many courses.

Another initiative I've heard about is "maintenance down the middle," literally worrying more about conditions down the middle of each hole than to the sides. Focusing on where the traffic goes may save money, but it shortchanges the role of the superintendent, most of whom take pride in their efforts to care for the entire course. You don't have to be working at Augusta National to want to provide the most beautiful atmosphere possible and within budget.

Are we becoming a little obsessed with time? If you don't have enough time to play 18, nine is just fine. And I agree there should be other options—maybe it's three- and six-hole loops, even paying by the hole. But one of the great joys of golf is that unlike football, hockey and basketball, a "round" is not a measure of seconds ticking but shots hit and holes completed. The only time constraint I felt growing up was to play fast before darkness fell. And now that I can play when I want, if the course isn't crowded I take my time, enjoying where I am and what I'm doing, disappearing into a cool place for as long as I can. Since it's my dime, I'll take my time — as long as I'm not holding any up.

Who needs 8,000-yard golf courses? Nobody I know, that's for sure. Why tee it up from another county only to be embarrassed? Unless you're on the PGA Tour, there's absolutely no reason to play from the tips. Which leads to the whole "roll-back-the-ball" brouhaha. I'm sorry Mr. Nicklaus, but I'm not hearing many members at my club saying the course has gotten too short or too easy. Only about .01 percent of the golfers in this country have that worry, so why make the rest of us

suffer? And as for those players who do hit it "too long?" Just like the best in any sport, they fascinate us, which is why we pay high ticket prices and spend hours in front of the TV to watch them.

Tiger is no longer the answer to golf's problems, not that he ever was. He was great in his day and helped draw attention (some good, some not) to our game. I miss Tiger circa 2000. But you know what? We have to be careful not to put the fate and future of golf on the shoulders of any one player, and certainly not one whose had umpteen surgeries, just had his spine fused and is past his prime. Will he ever play the way he once did? I hope so. I'd love to see him make a mid-40s run at another major and hear the roars at Augusta once more. But will we? What do you think...

If you feel I can only be negative, join me in applauding the new World Handicap System (WHS), designed to provide golfers with a consistent measure of playing ability globally. The new system will offer flexibility in formats of play, allowing both competitive and recreational rounds to count for handicap purposes. And it will require only a minimal number of scores to obtain a new handicap, including, it is hoped, a combination of 18-hole and nine-hole rounds. I like it!

Random thoughts? I think not, and I hope you see the thread, which is my love, respect, and awe for this greatest of games. I'll end with a line from a recent story in the New York Times that was trying to make fun of golf but only made those of us already addicted smile: "Golf's biggest strength is also its greatest weakness: You disappear into a different world for five hours — a magical forest world where you drive your own buggy and send a tiny sphere into the sky."

Can I hear an "Amen?" **GCI**

(BRAUER continued from page 8)

them?" Wider fairways provide strategic options, accommodate average players, and generally speed play. But, with the cost of chemicals, we compromise on total area and make sure every inch of fairway is truly integral to the design. And, we typically discuss grass varieties more than folks at a Colorado pot shop, but choosing for color or playability is often regretted by northern superintendents.

Undersized and poorly set catch basins (whether original or settled later due to poor surrounding compaction) are more common than they should be, as well as poorly compacted drainage and irrigation pipe trenches. Constant attention by the daily supervisor is certainly required for some contractors. And, while we are complaining, why is it so hard to get a contractor to provide a timely and accurate as-built drawing? Or on renovations, getting contractors to finish out and clean up is not always to the satisfaction of the superintendent. I hate seeing construction debris years after opening.

Often, the cost of under brushing tree canopies is left out of initial construction, but then left out of maintenance budgets as well. Again, technology may be on the way to reduce costs. At our Tempest Golf Club, under construction in Glade-water, Texas, contractor Peter Dejak and Signet Golf is using a small under brushing machine that makes quick work, allowing him to cost effectively underbrush not only the golf course, but surrounding lots, thus increasing real estate sales.

Hopefully, this will serve as a checklist and reminder to those overseeing construction now. I have amended my site visit checklists based on my experience, vowing to learn from experience and not repeat the same mistake twice. The devil is always in the details, and thorough construction evaluation makes a difference. **GCI**

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

A few weeks ago in San Antonio I was standing on top of the massive “Inside the Ropes” build that members and supporters of the GCBAAspent a couple of thousand hours and more than \$50,000 to create. I was goggle-eyed, just marveling at how amazing the project was and taking pics of the various bunker designs it showcased. A familiar voice next to me woke me from my revelry.

“When are you going to write my column?”

I turned to find my old friend Rick Elyea, seed industry legend, veteran sales professional and a great supporter of the GCBAAs and other causes.

“Which column?” I asked.

“The one about being polite,” Rick said.

Ahhhhhh ... yes. He had mentioned it before: “Modern Manners for Turfheads.”

OK, this one is for you Rick.

At the risk of getting all preachy, Rick and I would like to remind folks that good manners never go out of style. Yes, we live in hectic times. Yes, there are a million people trying to sell you stuff. Yes, it’s sometimes irritating to have 15 voicemails and 357 unread emails from salespeople lurking on your phone. The “delete all” option is often very tempting.

Yet, there are very compelling

reasons to resist that urge and make some time to respond. Let me share a few ...

First, saying “no” is vastly better than not responding. It takes two seconds to reply with, “Thanks but the product doesn’t fit our program” or “Try me again on October 1 when we begin our budget process.” Afraid you’ll hurt a salesperson’s feelings by saying “no?” Hahahahaha. Even the best of us get shot down eight times out of 10. We just want to know where we stand.

Good salespeople are “pleasantly persistent.” Recently one of my reps was successful in reviving an account that had frustrated us for a decade. Why did they change their minds about us? We were friendly, polite and willing to try new things – but we also demonstrated we would stick to it.

It’s particularly important to give someone a “no” if he or she has earned the right to a response. Are they supporters of your local association? Have they been kind to you and your team in the past? Are they professionals who contribute industry knowledge locally?

So, remember a quick no thanks is both polite and a sign of respect.

Second, being kind of others — including your supplier partners — doesn’t make you weak. It makes you wise.

One of the infallible rules of busi-

ness is the people you pass on your way up the ladder are the same ones you meet going back down. Many of my superintendent friends who’ve moved into sales are pleasantly surprised at how well they are received but some are also shocked at the lack of courtesy. And that’s all it really is ... common courtesy ... to return a call or an email or a text.

I get a crapload of emails. At least a hundred a day. It’s an occupational hazard. But, if the email is from a human, I will try like hell to respond within an hour or two. Public relations people in particular are often shocked. “Wow. Thanks for the fast response!” Well, for one thing, I used to be a PR guy so I feel their pain. And it’s also the right thing to do. They are (theoretically) trying to help me do my job which is to provide y’all with useful, interesting content. Sometimes they’re pitching less useful stuff, but you never know when they might have something really good to share. Thus, I don’t blow them off.

I don’t see how that’s any different than your world. A salesperson may be offering something you simply don’t need, but going dark on them means they are unlikely to get in touch the next time when they have something you need desperately. See my point?

Finally, as golf evolves into a smaller, smarter business and resources become scarcer every day, don’t you want to have sharp sales folks on your team? Don’t you want access to the proprietary information and data they have? Don’t you want them on the inside offering you constructive ideas and solutions that may have absolutely nothing to do with their product line?

Well, you’re crazy if you don’t answer “hell yes” to all of the above. And it all starts with a simple act of enlightened self-interest ... returning a call or replying to an email.

Happy now, Rick? **GCI**

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