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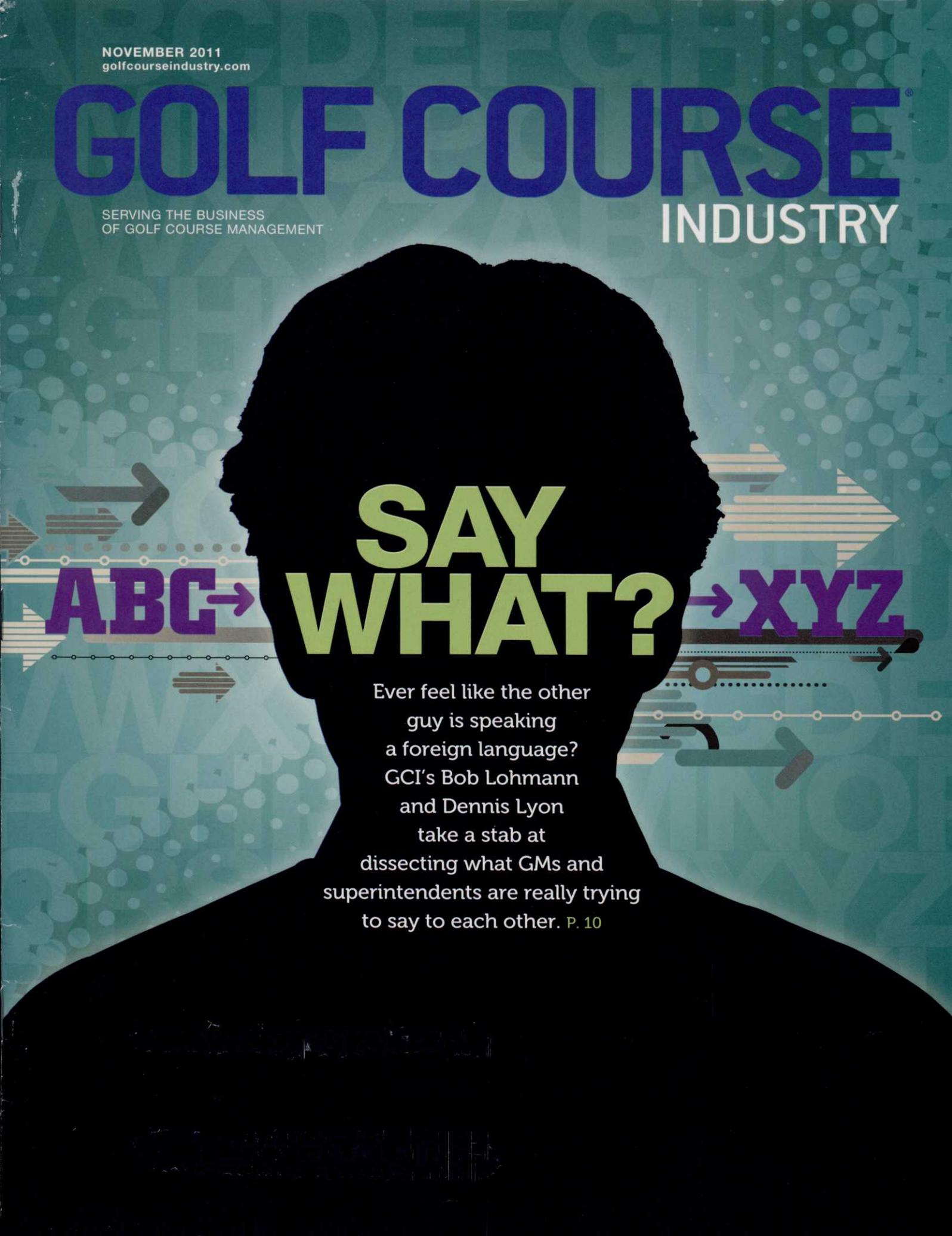
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NOVEMBER 2011
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SAY WHAT?

Ever feel like the other
guy is speaking
a foreign language?
GCI's Bob Lohmann
and Dennis Lyon
take a stab at
dissecting what GMs and
superintendents are really trying
to say to each other. **P. 10**



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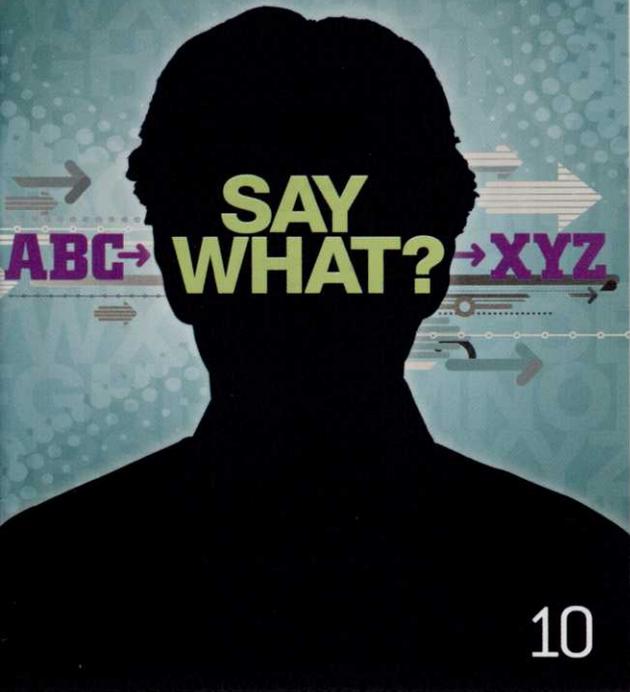
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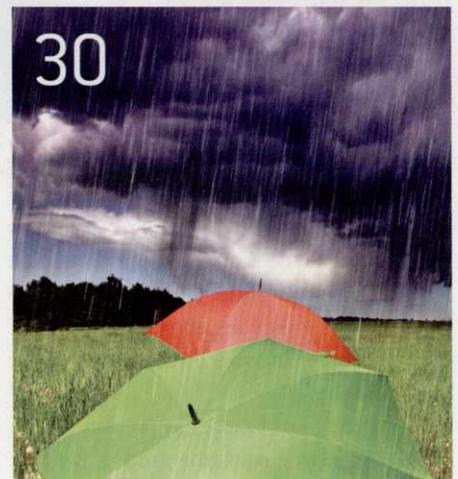
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YOUR NEW ROLE

Do you really know your role? I mean, do you understand the extent of the role you need to play at your facility that extends beyond turf care, mowing greens and troubleshooting irrigation issues?

It's an interesting question, one that was reinforced throughout the recent three-day Green Start Academy I was privileged to attend. Green Start is a great continuing education program put on by Bayer and John Deere for the top assistant superintendents in the industry from the U.S. and Canada.

It was pretty interesting to serve as a fly on the wall with 50 razor-sharp 20-something men and women, each with a solid 10-year career plan and gunning for your jobs. It's "superintendent-by-30 or bust," and that's no joke.

At Green Start, nearly each of the guest speakers – both industry experts and veteran superintendents – hammered home the idea of the greater roles a superintendent must play in the overall operation of a club or golf course facility. The intent was to better prepare these up-and-comers for greater career success.

However, I thought there were some key points being made that every superintendent – regardless of length of tenure in the industry – should be thinking about as you ponder your own career and your own role within your organization.

Here are a few of those key points:

Be the go-to guy. Agronomics is just one tent pole. You need to be an expert in other areas and establish yourself as a problem-solver. Regardless of the issue at your facility, you want your name to be one of the first ones called. While it may seem like a hassle to be consulted when the clubhouse fryer is on the fritz, being someone who is the source for solu-

tions and good ideas only adds to your value as a key member of the staff.

Know the numbers... all of them. Not just your own annual maintenance budget, but have a sense and general understanding for every department's line items and income statements. Understanding how other areas of your club or facility operate financially not only gives you a greater sense for how your department fits into the bigger fiscal picture, but also better prepares you to offer suggestions and solutions when numbers and budgets are being scrutinized.

Understand the total value you bring. While turf care is your key asset, there are other intrinsic values you bring that are more nuanced and difficult to calculate, though they're no less critical to a facility's overall success. For example, you are a team leader who provides management stability. And, you have a shared interest in providing comparative results – providing golfers with the best experience possible.

And finally, surround yourself with good people.

Great golf courses are cared for by great people, and a superintendent can't manage this all by him- or herself. While finding and managing the right crew is an ongoing labor challenge, it is essential to continued and sustained success. This also means putting up a good fight to not let great people slip away from your course.

If you're not considering these points in the overall role that you play at your golf course, then I'd suggest that you change the way you look at your role as superintendent. This is vital in driving the value that you bring and ensuring your continued success and employment.

If not, I know of 50 eager candidates looking for an opportunity to fill that role. **GCI**



Mike Zawacki
Editor

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“It was pretty interesting to serve as a fly on the wall with 50 razor-sharp, 20-something men and women, each with a solid 10-year career plan and gunning for your jobs.”



A lot of things live on a golf course.
Grubs shouldn't be one of them.

(Or annual bluegrass weevils, billbugs and caterpillars.)



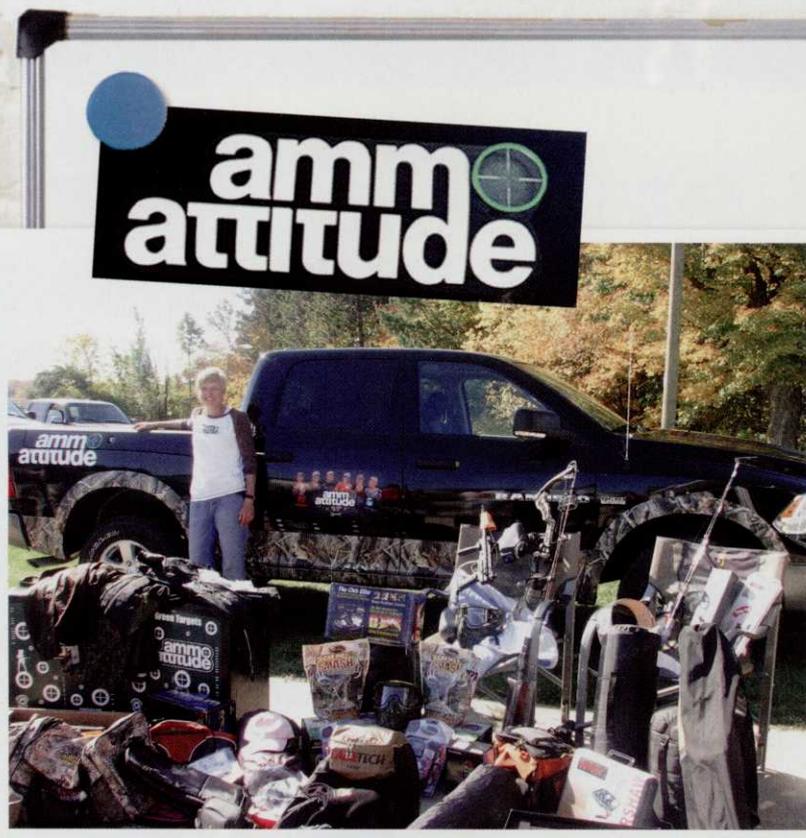
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SUPER WITH ATTITUDE

It was all stuff she'd done before.

At least, that's how Karen O'Dell saw it, after she had finished watching the first season of Ammo & Attitude on Versus last year. As the superintendent of Wawashkamo Golf Club on Mackinac Island, Mich., she had spent plenty of time with nature. She applied to be on the second season of the show, and was notified she made it in just before Christmas.

The actual filming of the outdoorswoman competition went from May 14 through 28, with an episode for each day.

"For the first little bit it wasn't bad, but as it got into week two, it started to wear on you," says O'Dell. "We got tired. You don't sleep very well away from home and you don't eat right, and at the end of it, we were exhausted both mentally and physically."

They competed in teams for the first few events, but when they broke into individual events, O'Dell started to really outshine her competitors. She's an experienced hunter and pulled top rank in the shooting challenge, but she liked taking on new obstacles as well.

"My favorite challenge was the heritage one, where it was roping, knife throwing and longbow," she says. "I got to learn something totally new. Every other challenge, I had done at

some point in my life."

As her star began to rise, she tried to keep from letting herself get caught up in the competition.

"I didn't want to get cocky and overconfident," she says. "It's always in the back of your mind, if you let it creep in there. But as soon as we went individual, I really started kicking it into overdrive and I won a couple things after that."

Ever the superintendent, O'Dell's secret weapon was research and preparation. Before the events ever started, she checked out the website for the next season of Ammo & Attitude, and made note of the sponsors.

"I put in a lot of homework before I went out there," she says. "I figured, if they're sponsoring, we're going to use their products. So if they had a signature product, I went and checked it out to make sure I was familiar with it and how to use it. The guys at my sportsman's club were so helpful just to throw every type of gun

in my hand to try out just in case it came up."

In the finale, she faced off against one other outdoorswoman in a turkey hunt and shooting challenge.

"In the finale, we did a walkthrough just before lunch and both of us, our nerves were just jangling," says O'Dell. "After I finished, the minute I got up and I had my gun cleaned, it was like the world had been lifted off my shoulders. Then after she finished, I knew I had cleaned my gun better, so it was just a matter of the time after that."

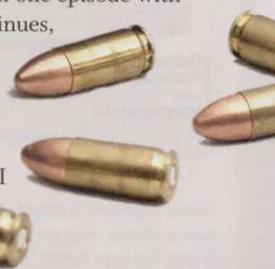
Going back to her studies, O'Dell had noticed that gun cleaning was a challenge in the previous season, so she had made sure she knew how to use the cleaning kit they would have on the show. It made the difference: Her opponent finished eight seconds sooner than O'Dell, but she had time penalties for her cleaning performance. O'Dell won the whole competition.

In the end, she cleaned up with five guns, two bows, two complete paintball sets, a bunch of clothing, deer cameras, shooting targets – oh, and a four-wheel drive, black 2012 Dodge Ram pickup complete with camo trim.

O'Dell will go back next season to film one episode with the new recruits, and if the series continues, maybe an all-stars episode.

"I felt like I grew a lot through it," she says. "You had to pull yourself through the hard times. It was hard to keep your spirits up, and I found some strength I didn't know I had."

KAREN O'DELL



Dispatches from Guangzhou

Justin Apel, Golf Course Builders Association of America's executive director, has been globe-trotting to see the development of the Asian golf industry. During his visit at the Chinese golf course industry show in Guangzhou and country-hopping throughout Asia, he's been forwarding us his impressions.

While the complete entries are available on the GCI website, here are a few excerpts:

DAY ONE:

The first day of the show began with the show partners assembling together. A group ribbon cutting with a ceremonial dragon dance and parade through the exhibit area...

With the show off and running I, along with Martin Moore with Flagstick Golf, Rhett Evans with GCSAA, and Arthur Yeo participated in a panel discussion on "Launch Right, insider tips to taking your facility from a construction site to an open facility that runs as planned from day one." After returning our booth was standing room only, filled with spectators from the panel discussion, local members that attended the show, and local companies interested in joining. The entire day was busy with show booth visits, interviews, and visiting our members and other booths from other area of the golf industry that are not construction.

What is very impressive is most tradeshow floors as the day draws to a close, however the people of this show will literally need to be thrown out, they are staying to the very end on the first day...

DAYS TWO AND THREE:

Congratulations to Reed, the PGA of America, and all of the exhibitors on a very successful show. GCBAA was pleased to take part and support our International members, meet some new friends, and share our members knowledge and experience in golf course construction across the globe. It was a great opportunity for us to meet some of existing International members that have never traveled to the U.S....

Members like Sam Sakocius and his knowledge of this market are a tremendous resource. GCBAA veterans like Dye Designs International, Toro, Rain Bird, Jacobsen, ITT Flowtronex, LASCO, Hunter, Atlas Turf, Leemco,

Paige Electric, Watertronics, CMF Global, Profile Products, Sternberg Golf Services, Builders like Hainan Shapemasters, Forward Management, Flagstick, and many others (apologizes to those that I have forgotten) shared their experiences and contacts and have established a network here. Also we were able to meet for the first time members like Alert Golf based in India, Country Golf, Rainbow, Yacon Golf, and others. I appreciate their support to the GCBAA and our trip. The experience was worthwhile and we have began plans for the spring China Golf Show and possibly the 2012 Asia Show again.



Apel has moved on through Hong Kong, Singapore and Kuala Lumpur, learning about the development of the golf industry throughout Asia. To follow his travels, check out the GCI website!

A different type of tour

Superintendent Dave Barber found at least one way to make sure his guests stayed on the cart path at Cranberry Highlands Golf Course in Cranberry Township, Pa. The township's annual fall hayride traveled through the course and local wood in October, bringing in more than 500 people.

"We originally started this to showcase the course," says Barber. "We had the golf course certified with Audobon in 2009, and we want to educate the people on the characteristics of the course. A lot of people think the course is just a pesticide dump. We try to educate them on our pesticide and fertilizer reduction, and how we benefit from not having to mow all the time."

Barber rode along with the groups, directing the tour and providing background and history about the course as well as pointing out wildlife special to the area.

"We have a narrative we use," he says. "We want to make sure we're hitting on all the things we're trying to accomplish

around here. We want to let them know there's a nature trail around here, and that the kids should get out and have fun."

Even playing golfers made way for the rambling truck as it went along the cart path, and one bearded golfer dressed in red played along as a vacationing Santa Claus. After the hayride made its way back to the clubhouse, the families got involved in other fall fun.

"They can get a pumpkin, a hot dog, a caramel apple and they can get a hayride," says Barber. "People can have a really good time here."



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Atlanta Athletic Club Par 3 - Johns Creek, GA
-No-Till conversion from bentgrass to CHAMPION

Barefoot Resort - Fazio - North Myrtle Beach, SC
-No-Till conversion from bentgrass to CHAMPION

Barefoot Resort - Norman - North Myrtle Beach, SC
-No-Till conversion from bentgrass to CHAMPION

Bear Creek Golf Club - Monroe, GA
-No-Till conversion from bentgrass to CHAMPION

Boca Dunes Golf & CC - Boca Raton, FL
-No-Till conversion from other bermudagrass to CHAMPION

Carthage Country Club - Carthage, TX
-No-Till conversion from other bermudagrass to CHAMPION

Castlewoods CC - The Bear - Brandon, MS
-No-Till conversion from other bermudagrass to CHAMPION

Celebration Golf Club - Celebration, FL
-No-Till conversion from other bermudagrass to CHAMPION

Cherokee Valley - Olive Branch, MS
-No-Till conversion from bentgrass to CHAMPION

Coffee Creek - Edmond, OK
-No-Till conversion from bentgrass to CHAMPION

Delaware Springs - Burnet, TX
-No-Till conversion from other bermudagrass to CHAMPION

Emerald Bay Club - Bullard, TX
-Greens renovation using EMERALD

Glenlakes Golf Club - Foley, AL
-No-Till conversion from other bermudagrass to CHAMPION

Harder Hall GC - Sebring, FL
-No-Till conversion from other bermudagrass to CHAMPION

Hedingham Golf Club - Raleigh, NC
-No-Till conversion from bentgrass to CHAMPION

Heritage Golf Club - Oneonta, AL
-No-Till conversion from bentgrass to CHAMPION

Highlands Ridge South - Avon Park, FL
-No-Till conversion from other bermudagrass to CHAMPION

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-Greens renovation using CHAMPION

Hope Valley Country Club - Durham, NC
-No-Till conversion from bentgrass to CHAMPION

Inverrary CC - East Course - Lauderhill, FL
-Greens renovation using CHAMPION

Knobbs Creek - Elizabeth City, NC
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Legends at Chateau Elan - Braselton, GA
-No-Till conversion from bentgrass to CHAMPION

Magnolia Greens Golf Plantation - Leland, NC
-No-Till conversion from bentgrass to CHAMPION

Memphis National - Legends - Collierville, TN
-No-Till conversion from bentgrass to CHAMPION

Mohawk - Pecan Valley - Tulsa, OK
-No-Till conversion from bentgrass to CHAMPION

Mount Airy CC - Mount Airy, NC
-No-Till conversion from bentgrass to CHAMPION

Myrtle Beach National - River Club - Pawleys Island, SC
-No-Till conversion from bentgrass to CHAMPION

Mystic Creek Golf Course - El Dorado, AR
-Newly constructed course using CHAMPION

Orange County National - Panther Lake - Winter Garden, FL
-No-Till conversion from other bermudagrass to CHAMPION

Pauls Valley Golf Course - Pauls Valley, OK
-No-Till conversion from bentgrass to CHAMPION

Pebblebrook Golf Club - Woodbury, GA
-No-Till conversion from other bermudagrass to CHAMPION

Pine Forest - White Course - Houston, TX
-Greens renovation using CHAMPION

Pine Valley Country Club - Wilmington, NC
-No-Till conversion from bentgrass to CHAMPION

Pinewood Country Club - Asheboro, NC
-No-Till conversion from bentgrass to CHAMPION

Pleasant Valley CC - Little Rock, AR
-Greens renovation using EMERALD

Providence Club - Monroe, GA
-No-Till conversion from bentgrass to CHAMPION

Red Stick Golf Club - Vero Beach, FL
-No-Till conversion from other bermudagrass to CHAMPION

River Bend Links - Tunica, MS
-Greens renovation using EMERALD

River Landing - Landing Course - Wallace, NC
-No-Till conversion from bentgrass to CHAMPION

Riverwood Golf Club - Clayton, NC
-No-Till conversion from bentgrass to CHAMPION

RTJ Trail at Capitol Hill - Senator Course - Prattville, AL
-No-Till conversion from bentgrass to CHAMPION

RTJ Trail at Grand National - Lake Course - Opelika, AL
-No-Till conversion from bentgrass to CHAMPION

RTJ Trail at Hampton Cove - River - Owens Crossroads, AL
-No-Till conversion from bentgrass to CHAMPION

RTJ Trail at Magnolia Grove - Short Course - Semmes, AL
-No-Till conversion from bentgrass to CHAMPION

RTJ Trail at Silver Lakes (36 holes) - Glencoe, AL
-No-Till conversion from bentgrass to CHAMPION

Sammons Golf Links - Temple, TX
-Greens renovation using EMERALD

Sewell's Point Golf Course - Norfolk, VA
-No-Till conversion from bentgrass to CHAMPION

Starmount Forest Country Club - Greensboro, NC
-No-Till conversion from bentgrass to CHAMPION

Stonebridge Golf Club - Lakeland, TN
-Greens renovation using CHAMPION

Stonebridge Golf Club - Rome, GA
-No-Till conversion from bentgrass to CHAMPION

Sun 'n Lake Golf Club - Deer Run - Sebring, FL
-Greens renovation using CHAMPION

Swan Lake Golf Club - Clarksville, TN
-No-Till conversion from bentgrass to CHAMPION

Tally Mountain Golf Course - Tallapoosa, GA
-No-Till conversion from bentgrass to CHAMPION

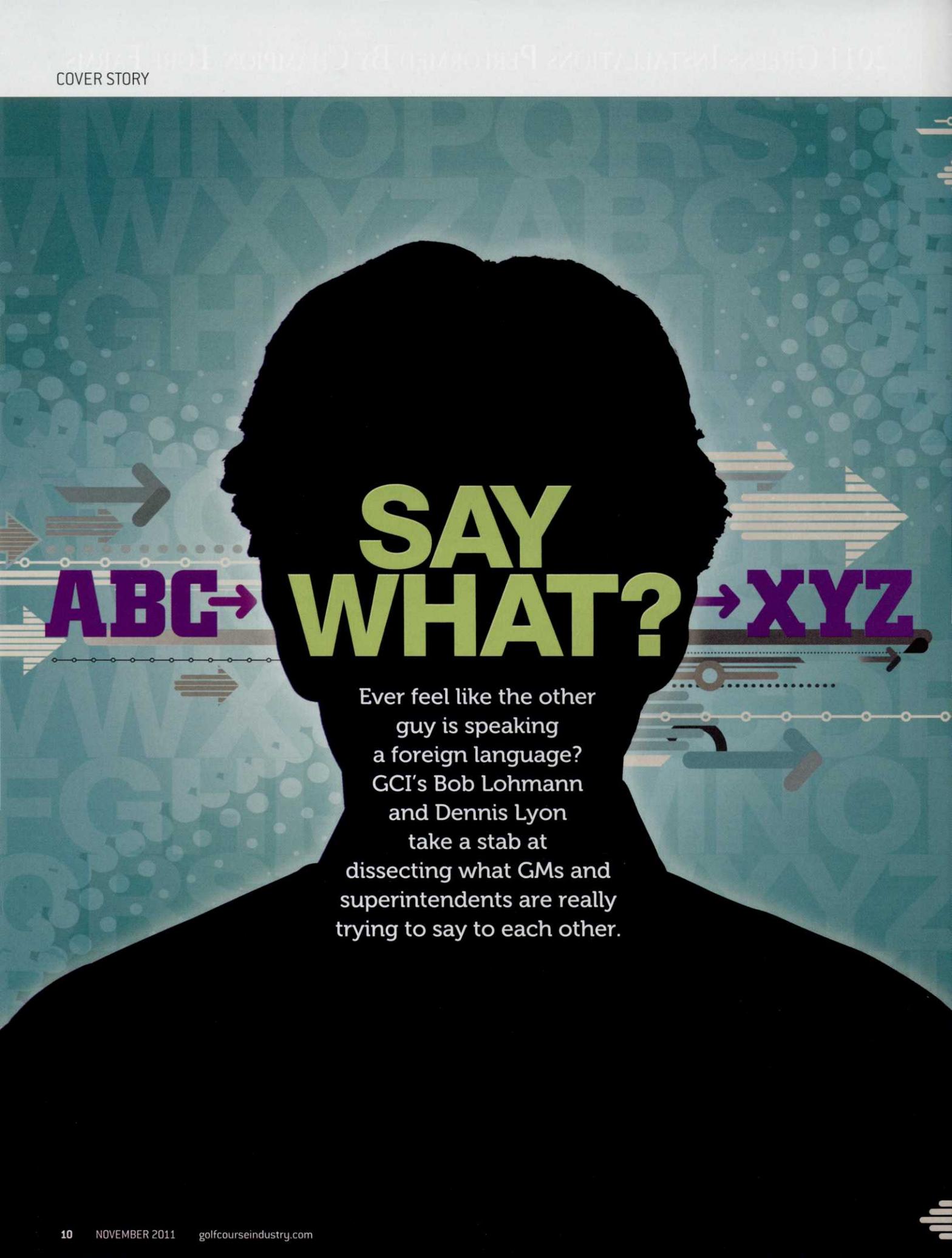
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Wexford Plantation - Hilton Head Island, SC
-Greens renovation using CHAMPION

Woodlands Country Club - Tamarac, FL
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SAY WHAT? → XYZ

Ever feel like the other
guy is speaking
a foreign language?
GCI's Bob Lohmann
and Dennis Lyon
take a stab at
dissecting what GMs and
superintendents are really
trying to say to each other.



By Bob Lohmann

A club manager's guide to superintendent speak

There's an advertisement running on national television from one of the telecommunications companies where a young man, presumably of Italian descent, has gone back to the old country to explore his roots. He's standing on the street in some small town trying to communicate with an older gentleman. He speaks into what looks like a phone, "My grandfather was born in this village," or something like that. The phone magically translates the sentence into Italian and the old fellow breaks into a big welcoming grin.

I have no idea if this technology actually exists, or if this ad just hints at some capability that phones will someday have. But it struck me and several of us here in the office as something that, with a little tweaking, could be really useful.

For example, what if the phone featured the capability to translate not just what we say, but what we really mean? This gizmo would have a million and one uses, with our sons for example (On prom night we'd say, "You be careful tonight," into the phone, which provides a translated version of what we really mean: "Don't get anyone pregnant!") – or maybe our spouses ("I can't believe we're getting into this again;" phone translation: "You're right, honey"). Now there's a smartphone we could use.

Board members, course owners, club managers and directors of golf could use them, too – perhaps to get a better understanding of what their superintendent is *really* trying to tell them.

We all know that superintendents look after the most important asset at any daily-fee facility or private club: the golf course itself. But the downside to this reality is, superintendents also preside over the most expensive asset, and, on occasion, they must argue for additions to what is already the largest budget item at any course facility.

This can make communication with the head pro, the owner or board, and the golfers themselves an extremely delicate exercise. Club managers and course owners want candor, but superintendents must be extremely politic in the way they handle certain issues. Speaking their minds might just put them in a real awkward position, might put the club in an awkward position.

I hope to dissect the communications issues we all encounter in trying to do our jobs, on and off the golf course. Let's assume that board members, course owners, club managers and directors of golf had one of these futuristic, translating smartphones for the superintendent to use – so that management types could understand what the super is *really* trying to tell them without having to actually say it.

SITUATION #1

Complaints about hole locations.

Longtime golfing members complain to the board that hole locations don't feature enough variety from week to week. They also hint that the greens seem slower than in years past. In turn, the general manager or the board goes to the superintendent with this grievance.

As architects, we see this situation all the time and, more often than not, a diplomatic superintendent will respond with something like this to the board, club manager or course owner: "Look, the greens are running as fast as they can – we're rolling and double-cutting because the members have made it clear they want them fast. But we have to be careful not to over-stress the greens, and we need to keep the pins where they are playable and where, eventually, the ball will stop rolling."

That's a reasonable response. But suppose the superintendent said this into one of these wonder phones. Here's the translation, what he really means: Listen, we're cutting these greens within a millimeter of their lives.

They're a ticking time bomb. At this rate, by mid-summer they'll roll like table tops because they'll be dead. And tell me how the greens can be slower when we're mowing at .08 of an inch? The greens aren't slower, we just have to use the flattest parts or you'll be 4-putting all day. If you want fast, consistent speeds and ample pin locations there's only one answer, that is to rebuild. Otherwise you better change your expectations.

Let's be real. That's a hard thing for a superintendent to say and it may not be what the higher-ups want to hear, but it's the truth. Basically, he's telling his superiors they've got to spend money or change their thinking to solve the problem – and it's a widespread problem we see all over the country.

This is part of the point I'm trying to make: Architects are uniquely qualified and positioned to serve as a superintendent's smartphone. We can say things more bluntly to management than they can, because our day-to-day survival doesn't depend on being quite so diplomatic. We've seen it all and, of course, we bring the perspective of having actually rebuilt and recontoured greens to accommodate modern green speeds.

SITUATION #2

The board takes a course maintenance tour and the superintendent gets grilled.

The board puts the superintendent on the spot about poor turf quality in an outer rough area, near the tree line. Here's how he responds, "Well, this is a popular place for carts to drive and soil around these trees is compacted. The turf also has to fight the tree roots for nutrients and drainage could be better. Maybe we can thin them out a bit and cut back the roots."

If he said this into the smartphone – hey, let's call it the Smarchitect Phone – here's what the translation would say: These trees

need to come down. It's a simple fact: You can't grow healthy turf without good sunlight or air circulation. The trees are compromising our maintenance standard, and quite frankly they ruin what could be a great hole. You have a thousand freakin' trees on this property, you won't even miss these, especially once the turf is healthy.

Okay, maybe we dial down the Smarchitect phone on the last part, but odds are 50-50 that these trees don't add a thing and do hurt the hole. Taking trees down is another expense, no doubt, and many golfers – especially private club golfers – have formed unnatural attachments to way too many trees. But the truth is, everyone – including the turf around said trees – would benefit from getting rid of them. If the super doesn't feel comfortable saying it, an architect can and will.

SITUATION #3 Golfers complain that the tees are beat up.

The superintendent is confronted with this complaint and says, "Well, we rotate the markers as much as we can in the given space, without going too far forward with the blue tees or too far back with the whites – and the senior men prefer to be back here, by the whites, rather than up by the reds. We've been trying to use the transition areas on off-days to give the main tee a rest without angering the members."

If the superintendent had been speaking into the Smarchitect phone, the translation could frankly go a number of ways: a) We need much larger tees and a dedicated set of senior tees; or b) Why the hell can't we put all the tees forward on certain days? What's wrong with some variety? Half the members who play the blues are way over their heads anyway, and isn't the PGA promoting "Play It Forward"? Why aren't we? or c) These tees are surrounded by trees 60 feet tall, they don't get sun till 1 p.m., and the trees block the use of the entire left half. Maybe the trees, not the tees, are the problem.

The politics of tee-marker placement is well known, especially in the private club sector. Golfers are creatures of habit, they get used to certain things and it's hard to introduce new ideas sometimes – like the simple movement forward of a tee to account for wind conditions on a given day, or the notion that money should be spent on tee expansion. We can understand why the superintendent is often reluctant to say so, especially in these trying economic times when every aspect of the day-to-day budget is being scrutinized.

But one way or another, these conversations have to take place. These wonder phones aren't on the market yet, so think about using a mediator like your friendly neighborhood golf course architect. Otherwise, maybe it's enough that board members, GMs and owners do a better job of listening to their superintendents – and reading better between the lines, especially in situations that sooner or later will require investment of some kind. Otherwise, it seems we're just kicking the can further down the road.

Bob Lohmann, ASGCA, is founder, president and principal architect of Lohmann Golf Designs and a regular columnist and contributor to GCI.



Improve your conversations

If you're having trouble communicating or getting your point across with coworkers, superiors or customers, business coach and author Sharon Saylor says your nonverbal cues could be blocking your message.

"True communication goes beyond words, and great communicators use every tool they have to deliver their message," says Saylor. "When you have control of your nonverbal language, you can communicate confidence with passion, persuasion, credibility, and candor—factors that will help you soar above your competition in the business world."

Saylor provides some useful tips:

Don't fill the air with um, uh and you know.

It's natural to pause when you speak. What's not natural is to fill the silent pause with sounds.

Use hand gestures systematically. When we use only words to convey our message, we make it necessary for our audience to pay very close attention to what we say. Using gestures systematically, especially when giving directions or teaching, makes your audience less dependent on the verbal part of the presentation.

Don't put your hands in your pockets. Thumbs hanging off the pockets and hands deep in both pockets both say, "Geez, I hope you like me." Hands deep in the pockets jingling change say "Geez, I'm nervous and hope you like me," or, "Geez, I'm so bored. Is this ever going to be over?" Break this habit by being comfortable with your hands straight down by your sides – after all it is the natural place for them to be.

Don't cross your arms.

This stance is most frequently understood to indicate upset or discomfort. Some interpret it as, "I am not open to discussion," or, "I am annoyed."

Know when to put your hands on your hips. This is a ready-to-take-action gesture—think gunfight. It makes most people appear bigger, because they are actually taking up more space. Yet, it is often given negative labels by others, such as meaning you are annoyed, closed, or won't listen, similar to placing your arms across your chest.

Remember, the eyes have it. The eyes are the most expressive and really are the window to thoughts and emotions. Little or no eye contact is often thought to be associated with lying, lack of self-esteem or interest.



A superintendent's guide to club manager speak



By Dennis Lyon, CGCS

I am sure we have all walked out of our boss's office, either not fully understanding what was just said, or thinking we understood the conversation only to find out later we had it wrong.

The truth is many of the problems a superintendent encounters on the job relate to a lack of effective communication.

For the sake of this article, let's assume we have access to a gizmo which will interpret what club managers really mean. Let's call this gizmo a boss-ilorator. Let's assume in the situations below the boss-ilorator will interpret Club Manager Speak (CMS) and describe what our club managers really mean when they communicate with us.

SITUATION #1 Budget study.

The superintendent is called into the club manager's office and informed by the manager the club has decided to do a benchmark study on the maintenance budgets of comparable courses. The purpose of the study is to ensure this club's budget is not out of line.

Club Manager Speak (CMS) translation: Someone with a measure of power feels the maintenance budget is too high. There is a good chance your budget will be cut next year using this benchmark data as justification.

SITUATION #2 Scheduling.

The club manager asks the superintendent if the rough mowing schedule can be adjusted on Ladies' Day so the ladies won't complain about the mowers interrupting their event.

CMS translation: I am getting very weary of the ladies complaining about the rough mowers on their event days. Make this problem go away!

SITUATION #3 Personal appearances.

The club manager comes up to the superintendent on the putting green and says the pro told him he has not seen him up at the golf shop in quite a while. The manager says he wants to make sure everything is OK between

the superintendent and the golf professional.

CMS translation: When you were hired as the superintendent I made it clear you were expected to maintain good communications with the golf professional. I am concerned you are falling short in this area.

SITUATION #4 Corporate outings.

The club manager informs the superintendent that club board member Mr. Smith is hosting his corporate outing next week and is hoping golf course staff can polish the course up a little for this event. The manager goes on to say, he will check on the superintendent's progress later in the week.

CMS translation: Mr. Smith wants the course in as close as possible to "member guest" conditions by next week. I will be monitoring your progress on getting the course ready. Preparing for this event needs to be priority number one.

SITUATION #5 Construction.

The club manager tells the superintendent the board would like to rebuild the front nine bunkers next year but funds are going to be very tight.

CMS translation: Plan on rebuilding the front nine bunkers next year, in-house, using existing staff with a minimum budget.

SITUATION #6 Positive feedback.

The club manager comes down to the maintenance building to find the superintendent. He tells the superintendent he has had a lot of positive feedback on course conditions the past several weeks and wants to pass along the good word.

CMS translation: I have had a lot of good feedback on course conditions and want to let you know. Sometimes our bosses tell us exactly what they mean, no translation required.

In the real world we know the boss-ilorator does not exist.

Our bosses, including club managers, may at times try to be politically correct or sugar-

coat the message because they do not want to hurt our feelings or want to avoid conflict. As a result, they may use Club Manager Speak which can stand in the way of effective communication. Wouldn't the superintendent in situation #3 have been better off, if the club manager had been more direct and said he had a concern with the way the superintendent and the golf professional were communicating? Or in situation #4, if the club manager had clearly stated his expectations from the beginning on the corporate outing, wouldn't the superintendent have had a better chance of meeting the manager's expectations?

So how can superintendents better deal with club manager speak? Based on my years of experience, here are what I believe to be the keys to success:

- Listen intently to what is being said. Ask as many questions as necessary to ensure you fully understand the message.
- Don't be afraid to ask the "next question." This could be the question or situation your boss may be trying to avoid.
- Create a relationship of trust and openness with your club manager. Work to make effective communication a mutual priority.
- Your manager will be more likely to avoid CMS if you can accept bad news without becoming defensive. The goal is to communicate and fully understand the message. How you and the club manager deal with the message is another issue.

• Listen with empathy. It may be easier to understand the message if you look at the situation from the club manager's perspective.

• Remember that maintaining effective communication with your club manager or boss is the best way to avoid being surprised down the road.

Hopefully by using this superintendent's guide to club manager speak we will be able to more fully understand what our club managers really mean when they communicate with us. **GCI**

Dennis Lyon, CGCS, is a GCSAA past president with more than three decades of experience and a columnist and contributor to GCI.



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

FALL: THE FICKLE SEASON

Fall has arrived. The weather is cooling, the leaves are falling and the days are shorter... still a great time for golf and golf courses. It's also the first opportunity many superintendents have had to reflect on the season's efforts and what could have been done differently or better during the season.

Chances are you're not the only one reflecting. With the club calendar opening up, this is likely when your board, membership, ownership, or whoever is responsible for your employment is also reviewing your efforts. This is when disgruntled golfers sit in the grill room and chirp about how the course "really sucked this year" or "our superintendent just doesn't get it" or "I don't understand his/her problem." With a single malt in one hand and a deck of cards in the other, they scheme how to find a better, younger or cheaper (or all three) groundskeeper. Meanwhile, you innocently press on.

It used to be that the "Three Ps" of the golf industry were to protect, promote and preserve the game. Today, a tough economy combined with the unrealistic demands of uneducated golfers have created three new "Ps" – pre-ordained, pre-planned and pre-destined – that can result in your unemployment. Often, you unknowingly aid in your own demise.

So consider the following factors. And if this is the first time you've thought about these things in the past 12 months, then it's possible they'll soon be using another "P" to describe you – past tense.

POLITICS. The secret to surviving club politics is knowing what's going on without being involved. Hard as it is, you must remain neutral, remembering that it's not your club, it's theirs. Don't get sucked in to their griping and machinations. Don't do anything other than be completely truthful about the course, and do the best job you can do while keeping your head down and mouth shut. Be friends with everyone but no more. Learn who the key players are, and keep listening and watching for signs that the tide may be shifting against you. An old sage once told me: Politics is best defined as "poli meaning many and tick being a blood-sucking insect."

YOUR AGE/LENGTH OF EMPLOYMENT. Long-time readers may want to search GCI's archives and

re-read my column on the "20/50 problem." What I said then continues to be true: those of us over 50 with 20 or more years in the same job at the same club are automatically equated with declining efforts, complacency, lack of communication and old-fashioned methods. While doing all you can to fight those negative assessments, be sure to avoid saying things like, "I'm getting too old for this s#&!." Trust me, someone will agree.

US VS. THEM. Being a superintendent is a wonderful way to earn a living: The course is our office, we're outdoors, working with and battling Mother Nature, motivating staff and creating spectacular conditions that bring pleasure to others. However, all too often I hear supers refer to "my course." Sorry, but unless you own it or have a piece of the

Want to get fired? Ignore what your membership is thinking about you.

action, it isn't yours, and thinking it is will only lead to problems. As a member of a top private club once told me in no uncertain terms, "If you don't pay dues, you don't have an opinion."

MANAGEMENT COMPANIES. Love 'em or hate 'em, management companies are part of the operational equation. With the game and the economy in decline, these organizations have become viable options for clubs in financial trouble. But they often save money by cutting staff and salaries, bringing in whoever can promise to do the job faster and cheaper. Which is why you should be on the lookout for unannounced visits by management company representatives or unidentified guests. Keep your ears and eyes open for member gossip about money issues (e.g., potential leasing, sell-offs), and be leery of innocent-sounding questions about your budget, staffing, equipment needs and the qualifications of your assistant. Go beyond your department's finances and budgets and if possible, become acquainted with the club's overall operating budget. Learn how the club operates. Don't be sneaky, just be aware.

(continued on page 57)

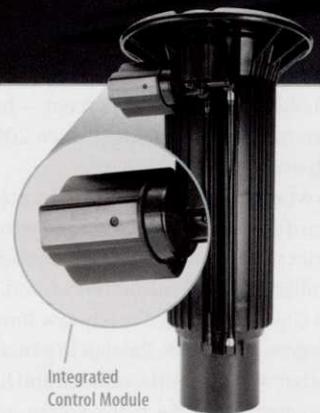
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RAIN  BIRD®

battle

At a time in golf where the sound of courses falling over keeps many industry people awake at night comes a skin-of-the-teeth escape for one mom-and-pop owner. A bankruptcy judge is yet to rule on every aspect of Fred Leonard's battle for survival at Taberna Country Club in New Bern, NC, but he was clear on the one that really mattered. Leonard – who, like many of his ilk, grinds it out for love as much as any living he makes – gets to keep his golf course.

The drawn-out legal battle has affected his health and his family. Leonard's wife, Gretchen, runs food and beverage operations at the golf course and a 13-year-old son works in his spare time in maintenance. Their daughter is a college junior. "When people threaten to sue you personally it can get pretty scary," Leonard says. "I've had some anxiety issues dealing with it all. Life's been a bit touchy around here for awhile."

At its simplest, the court ruling early July seems true to the principals of natural justice. In five years, Leonard had never missed a payment on his loan nor ever been late with a payment. Even today, in the murky backwash of the recession, he continues to keep the club's financial nose above the water line. Although, "it's a battle," he says, citing the nearly \$200,000 – or about 40 percent – he has cut from the golf course maintenance budget since 2005. "But then again it's tough everywhere."

So when the lender moved to foreclose in September, 2010 Leonard's earthy sense of right and wrong was deeply offended. The fact that his bank was one of the biggest in golf course lending rubbed further salt in the wound. If the lender was a Goliath, Leonard surely saw himself as David.

He grew up outside Raleigh in a small town where his father worked for the railroad and his mother was a schoolteacher. Like many young men in eastern North Carolina back then, he spent time toiling in tobacco fields. "There was a golf course right alongside where I worked and it didn't me take me long to decide life looked a lot more interesting over there," he says.

Leonard could play some and so headed down the path to



scars



Fred Leonard fought courageously for Taberna Country Club's survival. No matter what, no one was going to take his course away from him.

ISTOCK

By Trent Bouts

becoming a club professional. He completed the PGA's business schools and found his way to the pro shop, eventually serving as director of golf in the '80s. Leonard found the hours behind a desk and counter wearing on him. He preferred being outside and knew few people in the game spend more time on the course than the superintendent, so he switched. "Besides, I knew superintendents got to play a lot more golf than the golf pros," he laughs.

After several years in golf course maintenance, Leonard moved to Taberna Country Club and there the lure of ownership presented itself as the next step in his career progression. He recruited a small team of investors and paid \$4.7-million for the private club with 400-plus members within an 850-home development. Then the recession hit and the simple story became far more complex, as investment money dried up and lenders everywhere became spooked.

When Leonard's note for \$2.7 million became due in 2010, instead of a loan review, adjustment and renewal that had pretty much been the industry norm for years, the lender balked. "The lender I was dealing with was closing their golf course lending division," he says. "They had no interest in extending my loan for a length of time that would give the economy time to improve and allow me to secure alternative financing."

Leonard was not exactly shocked by the news. He wasn't blind to what was happening with the economy and so had already been knocking on doors. But try as he did, he couldn't find anyone willing to take on the loan in a golf economy in reverse. Then as Leonard threw his books wide open in an attempt to convince the existing lender to reconsider, an alarm bell went off. And this time he was shocked.

About a year earlier, one of the original investors had apparently confused investing with lending. He hadn't bought part of the business, he felt, but instead had lent Leonard the money to do so. He threatened to sue. To appease the "investor," Leonard consulted an attorney who drew up papers giving the investor a second lien. Problem solved, until the lender's legal team discovered the second lien and cried foul.

"They decided I was in default per my original documents,"



“The ‘bank’ we have been dealing with **didn’t care** about the 52 employees we employ, the 217 acres of green space we maintain or the community we’re in. Now, if the course **couldn’t service its debt any more**, that is one thing and completely understandable.” – Fred Leonard

Leonard says. “This was true, as it turned out, but in those 50-plus pages, I never saw the wording preventing any further lien, and my attorney at the time didn’t say anything about it. He should have known not to let me further encumber the property. I am a golf course superintendent for heaven’s sake, that’s why I hired an attorney to begin with.”

Not only was the lender now using the second lien against Leonard as a breach of contract, it also instituted penalty interest payments of an additional \$365 a day. All the while, on top of his existing duties, Leonard was wading through paperwork and working the phones looking for a solution.

“After some early negotiations, the lender was willing to extend my loan if I could give them a large sum of money and have the investor holding a second lien sign a subordination letter,” he says. “Well, I didn’t have the

money and the guy wouldn’t sign anyway.”

That wasn’t the first time Leonard felt like he was “dead in the water.” But the pressure became a full on punch when, in late February, a foreclosure notice was filed leaving Chapter 11 reorganization as the only hope. Such a step differs from bankruptcy which effectively says the well is dry and everyone loses out.

With Chapter 11, the courts oversee a restructuring of terms that provides for stakeholders to get their money back, but over a longer term. Leonard says, “That only works if you can show to creditors and/or a judge that, based on solid historical data, there’s enough income to survive, service debt, and function normally as well as continue being a positive business for the community in which you’re located.”

Leonard was able to do all of that but at significant cost, and

not all of it financial. Two visits to the witness stand – one for three hours and then for four and a half – were draining in and of themselves. But the almost daily mountains of legal documentation and hoops that had to be jumped through, on the back of hefty attorney’s fees, were most taxing.

Even now, with the judge’s ruling in Leonard’s favor on the record, opposing counsel continues to seek modifications to the outcome.

The experience has done nothing to taint Leonard’s love or devotion to the industry – he is current president of the Turfgrass Council of North Carolina and his left shoulder bears a tattoo incorporating the logos of the Golf Course Superintendents Association of America and the Carolinas Golf Course Superintendents Association. But it has soured his outlook.

“I think that in this ‘corporate’

lending world we live in, the days of the mom and pop businesses are numbered,” he says. “The ‘bank’ we have been dealing with didn’t care about the 52 employees we employ, the 217 acres of green space we maintain or the community we’re in. Now, if the course couldn’t service its debt any more, that is one thing and completely understandable.”

Instead, Leonard believes he is just one of too many single course operators who are being squeezed – “beat up on” – when they are most vulnerable paving the way for corporate or bank takeovers.

“If the course is still making its payments, chances are the people that work there have a lot of sweat equity and time invested in the facility,” he says. “It’s unfortunate that sweat equity can’t be put on a balance sheet somewhere. The operators of golf courses that are not corporate are generally doing it because they love the game, or the people, or the community. I can tell you, it’s not to get rich.”

They say what doesn’t kill you only makes you stronger but they might get an argument from Leonard just now.

Although he does admit he’s learned plenty over the past year. Asked to identify the single biggest lesson, he says aside from hiring the best attorneys you can possibly afford, prospective owners should, know all of your business, not just one aspect.

“I am a Class A golf course superintendent,” Leonard says. “I completed both PGA business schools and have been a director of golf for several years. My wife runs food and beverage as well as member relations but we both were unsure of some important things when it came down to it.” GCI

Trent Bouts is a freelance writer in Greer, S.C. and a frequent GCI contributor.

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A TOUGH YEAR IN TEXAS

“We live in the world’s most technically sophisticated society, yet we are now right back where we were three thousand years ago, praying for rain.” – Garrett Ward, Texas Drought 1997

The last year may have turned more Texans back to religion than an evangelist, with many praying for rain. In 2010, we were praying for less rain and fewer floods. Texas is known for its extreme weather, and we have proven it again. It’s hard to believe the heat wave of 1980 – in which I recall watching news clips of Texans frying eggs on the hood of cars while I was building a golf course in relatively cool Wisconsin, was cooler than this year. Or that the legendary “Dust Bowl” which inspired books and movies was less severe than this year.

Ninety-nine-point-nine percent of Texas experienced drought conditions, with 97 percent experiencing “severe drought.” The luckiest 0.83 percent of the state had it easy – they only experienced “moderate drought.” Crop and livestock losses total \$5.2 billion, with home and real estate losses also estimated in the billions. Parts of the Trinity Aquifer, running west of the DFW Metroplex and supplying much of our water, have fallen nearly 80 feet, also a modern record. Most golf courses are facing watering limits, either local or state mandated Stage 1 or 2 drought restrictions. Worst of all, some predict it will be a multi-year drought, worsening conditions.

Golf course superintendents here didn’t need to watch the news to know the severity of the situation. Most golf courses suffered. From a technical side, superintendents and conditions conspired to show us just how little water golf courses could survive on, even if few of us really wanted to know this in anything other than theory.

Golfers, surprisingly, accepted it as a part of nature. If brown wasn’t beautiful to them, at least brown golf was better than no golf, as long as the superintendent was able to keep at least greens and tees in decent shape. Slightly off color fairways were also accepted. This may end up being a great “teachable moment” to golfers convinced that green is the only acceptable color for golf.

Texas superintendents are also using it as a “teachable moment.” They have used their local

GCSAA chapters for public relations efforts, based in large part on programs developed by Georgia’s superintendents, who experienced similar conditions a few years back and launched a multi-pronged program to educate golfers in accepting current conditions, and with legislators to influence the future condition of golf. I foresee a watershed moment in the role of golf organizations to become more legislatively and less fraternally oriented. It’s not that we didn’t see it coming, but it takes memorable events like this drought to crystallize our direction.

Our “take away” from this year is that keeping courses viable will consist of a mix of many small details rather than one “pat” solution. Besides banding together at state and federal levels, it will also mean individual courses will accelerate all efforts to prepare water management and contingency plans, and to tune their golf course

This may end up being a great “teachable moment” to golfers convinced that green is the only acceptable color for golf.

designs, irrigations systems, maintenance practices for water savings whenever they can find them. Next month, I will share some specific tips irrigation designers and golf course architects have passed on to save water.

We had a tough Texas summer in another way. Former North Texas Golf Course Superintendents Association President (2004) and 2010 A.C. Bearden Superintendent of the Year Award recipient Stephen Best passed away on Oct. 16, 2011 after a long and exhausting battle with melanoma.

Bearden maintained an unbelievably upbeat and positive attitude and used his experience to motivate and inspire other Texas superintendents to take care of sun protection, which is a valuable reminder for all outdoor workers in golf, as well as golfers themselves.

He also reminded us often that health, spiritual and family aspects of life should take precedence over the problems you face every day in your profession. **GCI**

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By Randy Happel

River WILD

The Red River's scenic ambience comes at a price. Fargo Country Club's Aaron Porter has tried to tame the river and preserve his course.

The distinctive S-curve of the Red River that tightly hugs the southern and easterly boundaries of Fargo Country Club offers spectacular views along the picturesque fairways as golfers and fans make the trek toward manicured greens, in a quest to secure a birdie, or, on a very special day, the coveted all-elusive eagle. The river comes into play on six holes of North Dakota's first golf club, and has claimed more than a few Titleists, Calloways and Slazengers since the club constructed nine new holes back in 1963.

This scenic ambience of the Red River comes with a price, however. Nearly every year – or more often of late – when snowpack that has accumulated over the brutal North Dakota winter months finally succumbs to warming spring thaws and rains, the once hibernating, frozen river awakes in a torrent of water. During the three years since Aaron Porter has been superintendent at Fargo Country Club, the Red River has inflicted its wrath on the course a staggering nine times. But with each invasion, Porter, along with the most-capable assistance of his 23 dedicated grounds crew members, has spearheaded recovery efforts in amazing fashion.

"I arrived here in the fall of 2008, and was

on the job about a month when the first fall flood in Red River Valley history struck," Porter says. "It affected holes 1, 2, 14, 15, 17 and 18. Luckily, water receded fairly quickly so there was little damage. But the spring of 2009 was quite a different story. That was the all-time record flooding event here in Fargo. All the lower holes were under more than 22 feet of water. My first spring here was spent literally rebuilding the golf course."

The rebuilding process following the record flooding of 2009 took several months. With the rebuilt course looking good and scheduled to reopen on June 20 of '09, the unthinkable happened.

"As luck would have it, on June 19, an area to the south of Fargo received six inches of rain overnight," Porter recalls, "and I was looking at my third flood in less than a year. The river rose 25 feet overnight and again, the course was under water and pretty much everything was killed. We reseeded and opened the 2009 season on August 7. The club was in pretty good shape by then ... even better later in August, just in time for the 2009 North Dakota State Open."

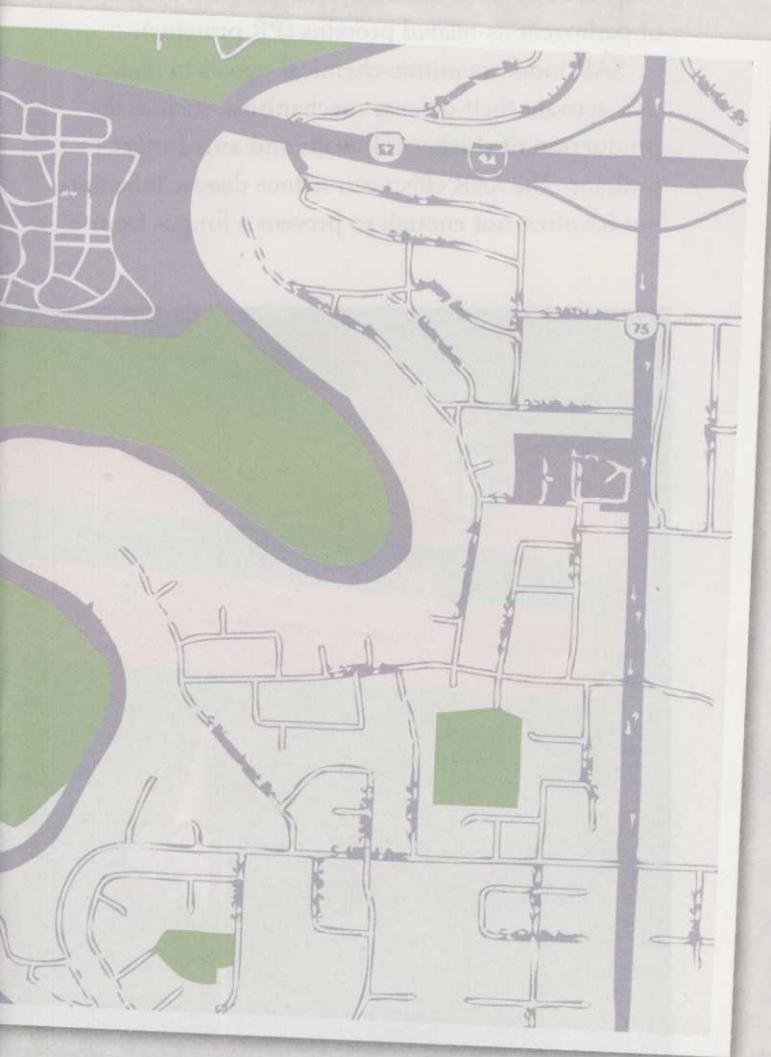
A native of Altoona, Iowa, Porter competed in just about every sport except golf while attending Southeast Polk High School. His

knowledge of turf and grass was limited to mowing the family yard and occasionally schlepping hoses with an attached sprinkler. Then, during his junior year, while attending Iowa State University in pursuit of a business degree, everything changed.

"My college roommate played golf at Iowa State and he got me interested in the game," Porter says. "I had never played golf until then. I had buddies who played in high school, but when my mom found out how much a set of golf clubs cost, I was relegated to remain with football, basketball and track. When I started to golf with my college roommate, the game came pretty natural for me."

That same year, an ad appeared in the Des Moines Register, placed by Wakonda Golf Club – rated the top course in Iowa at the time – in search of grounds crew help. Porter





This scenic ambience of the Red River comes with a price. Nearly every year when snowpack begins to thaw the river awakens in a torrent of water.

“I arrived here in the fall of 2008, and was on the job about a month when the first fall flood in Red River Valley history struck.” —Aaron Porter, Fargo Country Club

the 2009 Superintendent of the Year award. Prior to joining Fargo Country Club, Porter was head superintendent of the north course at Des Moines Golf and Country Club in West Des Moines, Iowa, and assistant superintendent at Stoneridge Golf Club, Stillwater, Minn.

RED RIVER RAGE & REPEATEDLY. Spring flooding has become a way of life for residents along the river; however, in recent years, Red River Valley dwellers have also dealt with summer and fall flooding. It goes without saying that these frequent floods can be frustrating. But just like the good folks of the Fargo community who deal with Red River rage repeatedly, Porter and his crew don't back away from challenges. “Restoring the course after a flood requires some effort,” he says. “But we have always been able to recover.”

The record flood of 2009 called for drastic measures to save the city of Fargo, and Fargo Country Club was selected as the site of a massive barrier construction project in efforts to stave off the rising waters. Assisted by National Guard troops, the Corps of Engineers installed HESCO Concertainer barriers at many locations on the course, using

viewed it as an opportunity to be out on the course, learn more about the game, and, of course, the free golf wasn't a bad perk either. Porter landed the grounds gig, and in less than a week of working outdoors, being on the course, mowing, fertilizing and tending to the greens, Porter knew his career calling was about to change.

“I didn't even realize there was a turf management major,” Porter says. “The superintendent at Wakonda told me Iowa State had one of the best turf programs in the country. And that's all it took. I just had one semester left to graduate with a business degree when I made the change to turf management. I continued working at Wakonda for 3 more years, and completed two internships there, all while studying to get a turf management degree. It took two additional years, but hey, now I am living my dream. Mom and my family thought I was sort of crazy but everything seems to have worked out.”

Porter has more than 10 years of experience as a grounds specialist for private golf and country clubs. He received a Bachelor of Science degree in horticulture and turf management from Iowa State University in 2000, is a member of the North Central Turfgrass Association, currently serving as vice president, and was a finalist for



The rebuilding process following the record flooding of 2009 took several months.

A Protein Boost to Awaken Turf's Defenses

In many respects, the turfgrass plant is no different than the human body. If you exercise, eat right and get enough sleep, chances are your immune system will be in a better position to ward off disease and handle the everyday stresses of life.

For turf, ever-changing weather conditions, the seasonal onslaught of various pathogens, and daily compaction from machinery and foot traffic can reduce overall quality and the ability to fight disease.

With Daconil Action™ fungicide from Syngenta, superintendents have a new tool to help manage stressful conditions on their turf.

In August 2011, Syngenta unveiled Daconil Action, a product that boosts the protein levels in turfgrass plants and, as a result, helps them resist fungus and other diseases. This product combines the proven disease control of Daconil® fungicide with a protein boost from Acibenzolar-S-methyl (also known as Acibenzolar).

Though many factors can contribute to overall turf health, it's a well-known fact that maintaining healthy protein levels is one of the key building blocks of disease resistance.

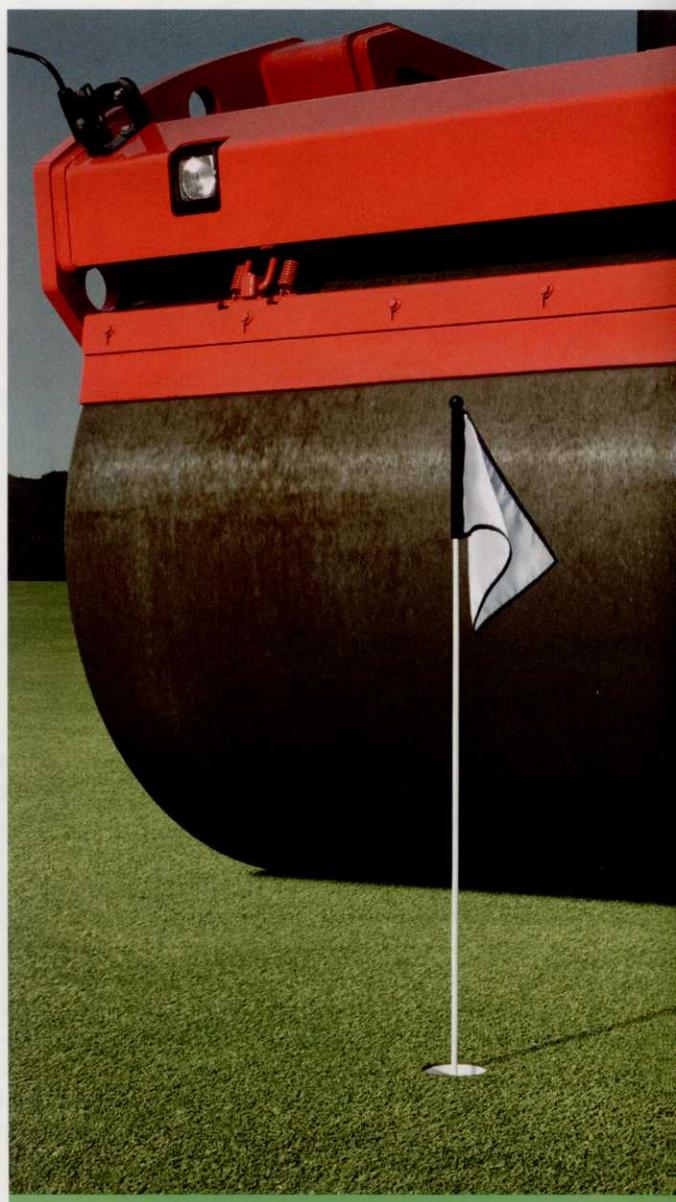
"The Acibenzolar in Daconil Action bridges the gap between genetic resistance and conventional disease control. Daconil Action has systemic properties that help to uniformly distribute it through the turfgrass plant to trigger natural disease defense mechanisms," said Mike Agnew, PhD, technical manager for Syngenta.

"The end result is turf that not only stands up to diseases and stress better, but it also provides a more durable playing surface. This is great news for superintendents and golfers alike," he added.

Acibenzolar is not a fungicide. It belongs to a

product category called Host Plant Defense Induction. Once absorbed by the turfgrass plant, Acibenzolar stimulates a natural defense response or the Systemic Acquired Resistance (SAR) by activating the production of pathogenesis-related proteins (PR proteins).

SAR inducers mimic chemical signals in plants that activate their defense mechanisms, such as the production of thicker cell walls and anti-fungal proteins. The SAR effect can reduce disease infection, but it's often not enough to prevent a fungus from



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getting the upper hand. That's where the protein boost comes into the picture.

The PR protein boost awakens the turfgrass plant's resistance to biotic and abiotic stresses like drought. This internal response within the plant increases photosynthetic capacity and enhances its own defense system against certain fungal and bacterial disease attacks like dollar spot, anthracnose, brown patch, gray leaf spot, stem rust, yellow patch, *Pythium* blight* and bacterial wilt*.

According to Agnew, "The bottom line is this: Countless superintendents have long trusted and relied on the effectiveness of Daconil to prevent and control turf diseases. Adding a protein boost to the mix helps give them some additional peace of mind that turf under their care will be healthier, more durable, and resistant to everyday stresses."

To learn more about Daconil Action fungicide, visit www.GreenCastOnline.com or call 1-866-SYNGENTA (796-4368).

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Turf leads a pretty stressed life. It has to withstand daily attacks by machines, UV rays, wildlife and extreme weather conditions. And if all that wasn't enough, there's always the constant threat of pathogens. New Daconil Action™ fungicide combines the power of Daconil® fungicide with a revolutionary Turf Protein Booster that helps turf activate its own natural production of PR proteins. The result is turf that is stronger, healthier and better able to defend itself against fungus and environmental stress like drought. Learn more at DaconilAction.com.

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Red River has inflicted damaging blows for Porter and his crew so often since he became the grounds superintendent he actually has to pause a bit to recall the details of each one.

more than 40 pieces of Bobcat equipment, including loaders and telehandler machines donated by Bobcat to the flood-prevention efforts. Every hole on the course was damaged; some underwater for more than six weeks and were left with more than 6 inches of silt after the water receded.

“The silt is like gum and takes a long time

to dry out,” Porter explains. “The club would have had to wait for the silt to dry out before removing it and planting new turf. We rented a Bobcat T864 compact track loader to push the silt off the course and back into the river. The tracks give the machine good flotation in wet and muddy work areas and saved us at least three weeks in the cleanup and re-

covery efforts ... time we should have spent waiting for the silt to dry. After that, the club bought one.”

Red River rage has inflicted damaging blows for Porter and his crew so often since he became the grounds superintendent that he actually has to pause a bit to recall the details of each one. “I get confused sometimes ... all the floods have started to run together,” Porter says, “especially those when the water receded more quickly.”

After a summer flood in 2006 caused extensive damage to what Porter refers to as the bottom holes – those lower in elevation and closer to the Red River, club officials decided something needed to be done.

They hired soil experts and a team of architects and engineers to provide a recommendation. The plan called for raising the elevation of holes 1 and 2, along with holes 14 through 18, in addition to building an alternate hole.

Porter was just coming on board when

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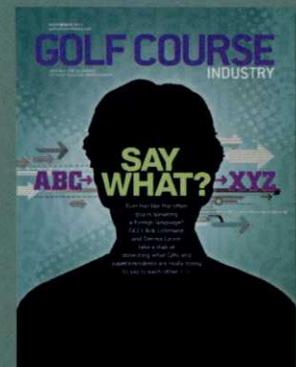
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the \$2.5 million renovation project began, a project of incredible scope that included – among raising several holes up to six feet in height (fairways included) to an elevation of 30 feet – building new cart paths, retooling all the bunkers and enhancing drainage and irrigation systems, all as components of the master plan.

“The club is very proactive,” Porter says. “The members embraced the 10-year capital assessment project because they knew something needed to be done. The Red River wasn’t going anywhere, but neither was the 113-year location of North Dakota’s first golf club.”

THE 2011 SETBACK & ANOTHER MIRACULOUS RECOVERY. The club reopened on July 7, 2010, after nearly a year of rebuilding. Much to the delight and relief of Porter, the Red River remained calm for the remainder of that summer. But the feisty river just couldn’t behave through another spring, and in March of 2011,

the rage of Red unleashed another post-winter fury – the fourth highest on record, with water levels rising to 38.6 feet, leaving portions of the course completely submerged for up to seven weeks.

“Raising holes 1, 2 and 10 really helped this spring, because the water didn’t remain on the fairways and greens for very long,” Porter says.

“The reseeded on those holes was minimal. But the bottom holes : 14, part of 12, and all of 15 through 18, were under water for 39 days,” he says. “When that water started receding in mid-May, we began the restoration process all over again, starting from scratch. We reopened the entire course ... once again ... on July 6. It probably goes without saying, but I haven’t really had a break. Along with the regular maintenance that it takes to maintain the 27 holes of the course, we’ve had to deal with additional, ongoing challenges here.”

Golfers and fans attending the 2011 Bobcat

North Dakota Open will be hard-pressed to find any evidence of Red River rage as they traverse the immaculate, scenic fairways and manicured greens of Fargo Country Club.

As you make your way down the tree-lined fairways and soak up the scenic ambiance that is Fargo Country Club, pause for a moment and visualize the same place, less than three months ago, submerged beneath 20 feet of water, floating logs and other miscellaneous debris. Then, join the members of Fargo Country Club in giving a special shout out to Porter and his crew.

They may not be swinging the golf clubs this week, but their mowers, trimmers and compact track loader will be out in full force, as Porter looks ahead to the next major event – most likely a flood. Perhaps there should be a trophy created especially for them. **GCI**

Randy Happel is a features writer at Two Rivers Marketing, which represents Bobcat.



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Brian Vinchesi, the 2009 EPA WaterSense Irrigation Partner of the Year, is president of Irrigation Consulting Inc., a golf course irrigation design and consulting firm headquartered in Pepperell, Mass., that designs irrigation systems throughout the world. He can be reached at bvinchesi@irrigationconsulting.com or 978/433-8972.

TERMINAL VELOCITY

When you discuss irrigation design it doesn't take long to focus on velocity.

Velocity is a very important component of irrigation design, but it is also an important consideration in irrigation-system operation. Rarely, though, do you hear it in the conversation about irrigation-system programming and operation.

Pertaining to irrigation, velocity is how fast the water is moving in the pipe. It is analogous to the speed of your car traveling down the highway. It is most commonly measured in feet per second (fps).

Velocity control is important in any irrigation system. Velocity becomes even more of a concern as the irrigation system and its associated piping gets larger. Uncontrolled velocities can reach havoc levels. High velocities cause surge pressure and undo wear on pipe and fittings, as well as other equipment. Velocity is calculated simply by determining how much water is going through a certain size pipe.

Industry standards dictate the velocity in a buried plastic irrigation pipe be kept below 5 fps. Some designers consider 5 fps to be too low, whereas others consider it too high. Certainly the larger the pipe the lower the velocity should be. For example, where a 6-inch pipe might be fine at 5 fps, a 14-inch pipe may be better with a velocity limit of 3 fps. Remember, it's not just about speed, but also weight. A large pipe carries more water weight, and therefore, more momentum.

Before central control systems, when these systems were mechanical, the designer could control and dictate how the system would operate and could control the velocities throughout the system. If you can dictate what comes on, where and when, then the pipes can be sized to always be below the 5 fps limit.

In the old days, the operator was not able to change the system design. If the design was correct, velocities would be controlled. It was common to have the operation of the system spread out throughout the 18 holes to minimize pipe sizes and keep system costs down.

With the implementation of central computerized control systems the operator has the ability to decide what goes on, where and when. If the operator wants a whole fairway to operate at once, then the control system can be programmed accordingly. The ability to design for a specific sequence of operation no longer existed.

Unfortunately, if you look at most golf course irrigation system databases you will find that the **flow database** is not filled out except for the pump station capacity.

In all the central computerized control systems there is the ability to flow manage the system. Each manufacturer does it a little differently and calls it by a different name.

These flow databases limit the amount of water theoretically allowed to flow through a given pipe. As part of the system programming the flow database needs to be filled out. It basically takes the piping design and then limits through the database the flow through each pipe and, therefore, the velocity.

Unfortunately, if you look at most irrigation system databases you will find that the flow database is not filled out except for the pump station capacity.

So examine your irrigation control system and take a look at what is in it. Is it filled out completely with mainline and lateral piping? Or, is it just a one of a couple of numbers? Is it just mainline, or is it a pump station

capacity – one number?

It is important to have a detailed database to keep from putting excessive wear and tear on the piping and control systems and to minimize water hammer.

It is also important to complete the database to allow higher velocities. Some people use higher velocities to lower their water window. However, you're asking for trouble as this will cause more fittings and other irrigation equipment to fail. Ask your original irrigation designer, distributor or other irrigation professional for assistance.

Although many only look at main-

line velocities, it is important to look at lateral lines, too. Valve-in-head sprinklers are very fast closing, and a fast-closing valve, in combination with high velocities, causes high surge pressures. So it is just as important to keep lateral velocities under 5 fps even though it is common to see them closer to 7 fps.

For example, on a 2-inch fairway lateral with three sprinklers, each using 32 gpm, there is a total of 96 gallons per minute. If one sprinkler is operating on the lateral the velocity is 2.88 fps, two operating 5.76 fps and all three operating 8.64 fps.

So the operator/programmer can decide whether to operate one, two or three sprinklers on the lateral can at a time. If you were to set the capacity of the 2 inch pipe in the database to 55 gpm, the velocity would be 4.95 fps, and operation would automatically be limited to one sprinkler on the lateral. **GCI**



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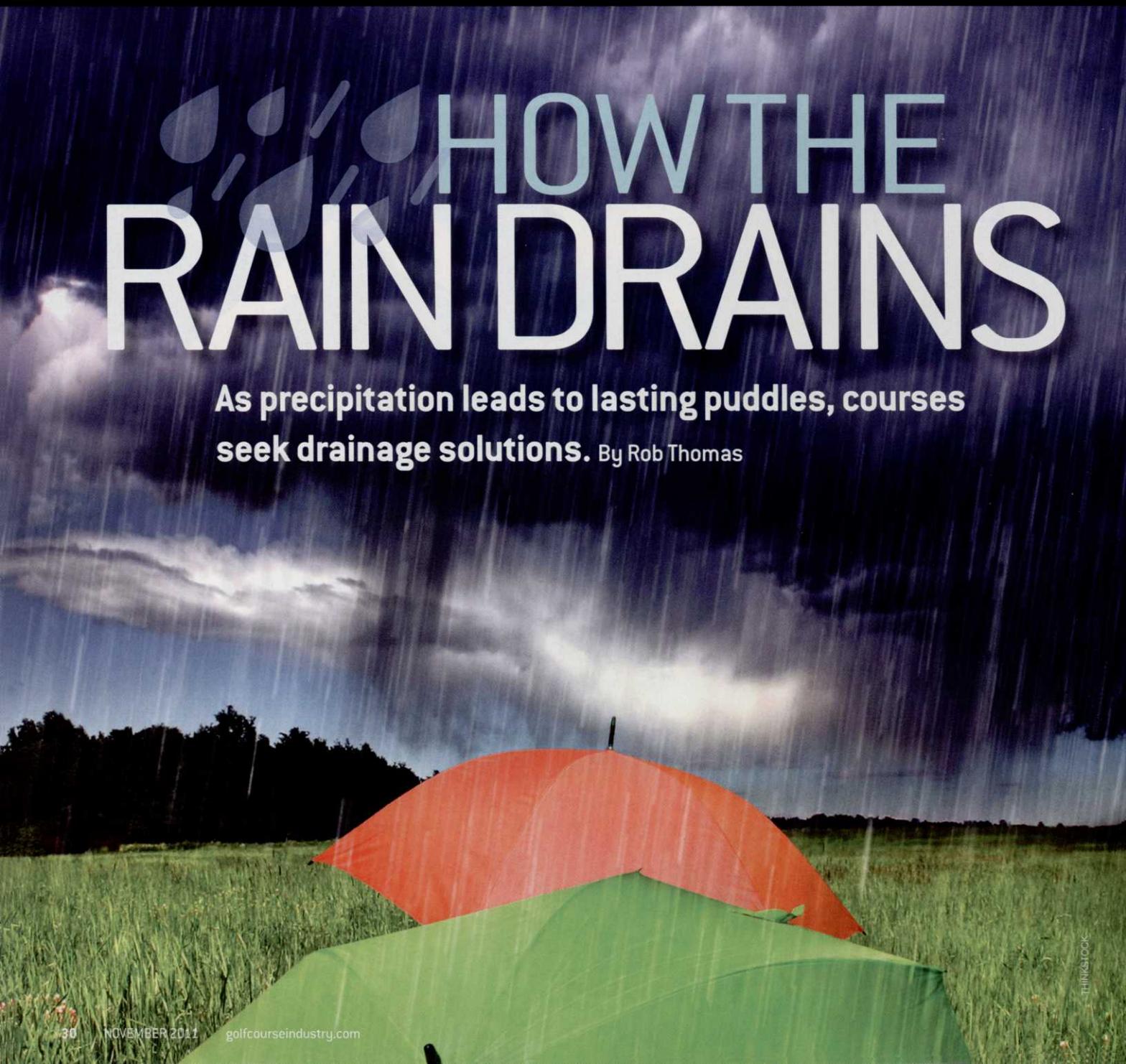
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Without the proper drainage, an otherwise perfect course can see plenty of downtime after a heavy rain.



HOW THE RAIN DRAINS

As precipitation leads to lasting puddles, courses seek drainage solutions. By Rob Thomas





“Every time the weather would zig, we’d zag.”

— Bob Pearsall, Salish Cliffs Golf Club



A championship golf course designed by a master architect, impeccably manicured fairways, smooth-rolling greens, the best bunker sand money can buy and a well-trained staff dedicated to its customer base – all are important keys to a successful operation.

In a perfect world, with these components working in harmony, an owner can sit back, watch one foursome after another head off the first tee and count the money at the end of the day. But what happens when Mother Nature rears her head and opens the skies for a morning of rain? A course with poor drainage is going to suffer that day, and possibly feel the ramifications far into the future.

Golfers are not going to pay to putt through puddles, search for plugged balls and avoid bunkers-

turned-water-hazards. And if they do, they will not be happy and quite likely won’t return, regardless of how beautiful the course looks or plays in ideal conditions.

Add excellent drainage to that list of keys.

Salish Cliffs Golf Club, the newest amenity of Little Creek Casino Resort in Shelton, Wash., received a lot of hype and notoriety in the months leading up to its scheduled unveiling. Owned and operated by the Squaxin Island Tribe, the grand opening of the Gene Bates design had to be pushed back several times due to an unrelenting spring of torrential rain.

In October 2010, the team at Salish Cliffs first discovered the existing drainage wasn’t sufficient for the western Washington rainfall, which annually comes

in at approximately 65 inches. Something had to be done.

According to Bob Pearsall, a 23-year veteran superintendent with the last 15 months spent at Salish Cliffs, the initial step was to consult an engineer to devise a plan to reroute the original drainage. Craig A. Peck and Associates of Tacoma was called upon for the design.

First things first, however. Considering November and December are traditionally the wettest months for Shelton, a temporary fix was put into place.

“We put drainage above ground to move the water off site, so as not to lose more sand ... keep erosion down,” Pearsall says. They also strategically positioned bales of hay and straw waddles where needed. “Every time the weather would zig, we’d zag.”

Work was done in-house as well as by George Travis Construction and Bar D Construction, which is owned by a tribal member. Considering the rave reviews being heaped upon Salish Cliffs, the team seems to have addressed all concerns.

“The finished product is great. The feedback has been extremely positive,” Pearsall says. Of the golfers: “They love both the playing conditions and the layout of the course.”

At the opposite end of the age spectrum is the Yale Golf Club in New Haven, Conn. Designed by esteemed architect and United States Golf Association co-founder Charles Blair Macdonald, and opened in 1926, the course has a long and glorious past, but also has fought drainage issues from the start.

According to Scott Ramsay,



who has been superintendent at Yale Golf Club for eight years – 25 years total in the profession – Yale is “an old course that was blasted out of ledge and the course is routed through the low areas. Surface runoff and side-hill seeps all end up draining to the playing surfaces.”

Also unlike Salish Cliffs, which only had drainage problems on a few holes, driving range and warm-up area, most of Yale Golf Club’s holes were negatively affected. Fortunately, golfers in the Northeast are a hearty lot and rounds lost were nominal, says Ramsay.

“We just route play around the areas and rarely close,” Ramsay says. “So we lose minimal rounds.”

Ramsay sought the help of turf-

drainage consulting engineers John Kelly and Steve Ami out of Pointe-Claire, Quebec, Canada, who, in addition to being recognized by the USGA, regularly teach a GCSAA seminar. They were charged with formulating a master plan and overseeing construction.

Once the design was submitted by Kelly-Ami, an open bid was put out for the installation.

“K/A can recommend contractors for bidding,” Ramsay says. “We also involved local excavating companies to bid. The smaller jobs, local companies can compete. As they get larger and more involved, regional outfits with previous experience typically win the bids.

“The materials used aren’t typical of drainage work usually



Water isn’t just a hazard for players. Proper drainage ensures that it stays in the feature and off the course.

undertaken by superintendents,” he adds. “K/A has highly specified styles of pipe and only uses sand as a drainage medium. And they are highly selective as to the sand type, too.”

According to Ramsay, they are roughly halfway through a 10-year drainage-overhaul process.

“Each hole takes between 10 and 14 days,” he says, adding cost

varies significantly. “At Yale Golf Club, it is between \$10,000 and \$80,000 per hole, depending on the severity of the issues.”

As for the impact on golf and golfers, of course there is disruption, but Ramsay says they get creative by closing the hole for short periods of time or make the hole a par 3 for the work day.

“We get an occasional com-

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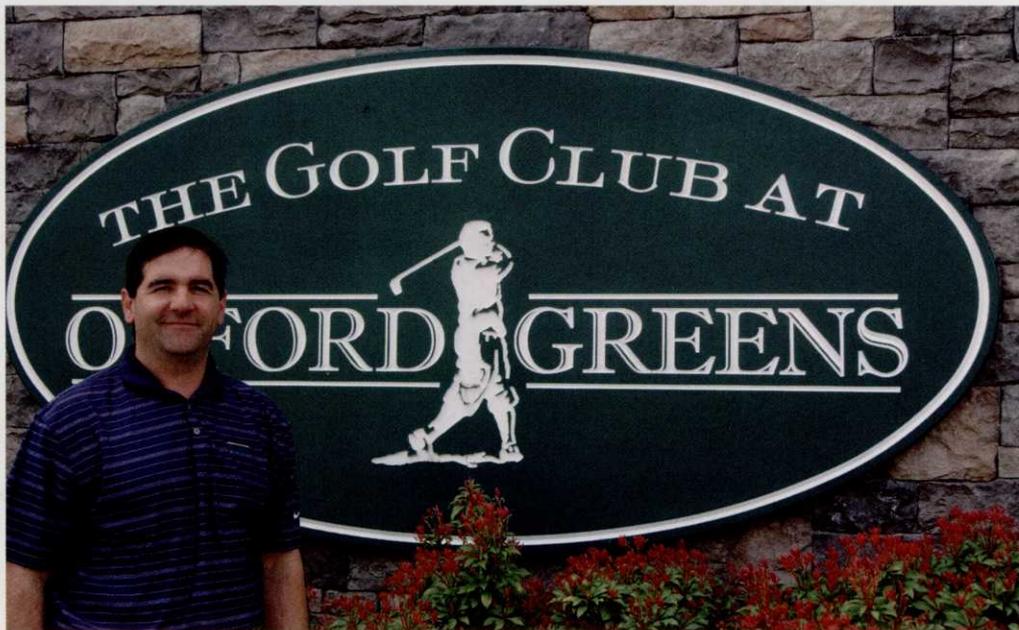
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Before superintendent Bryan Barrington took on the replacement of bunker drainage, he considered how much the work would disrupt play and what his possible labor and costs would be.

plaint," he says of his golfers, but nothing too bad. "Mostly we have informed everyone ahead of time so they understand. It is a huge difference once the drainage is completed."

While Yale Golf Club is in the midst of its decade-long project, just down the road in Oxford, Bryan Barrington and his team at The Golf Club at Oxford Greens took care of a developing drainage problem in under a week.

"This wasn't a big project, but was certainly one that was, at the end of the day, just as impactful," he says.

Barrington has been a superintendent for 12 years – the last seven at Oxford Greens – and places great importance on good drainage.

"I have built two golf courses in New England and there is no question that drainage is the most important aspect to a successful growing environment and playability," he says. "There is a wide window of why, how, how much and where to use drainage, what's the objective for the drain? Is it to capture surface water? Sub-surface ground water? Understanding the source and reasons

why drainage is needed will lead to a successful project."

For the current project, two areas on Oxford Greens were affected: the 10th fairway and bunkers on the second fairway.

"Our drainage issue was one that a fairway complex of bunkers was no longer draining like the others," he says. "This had occurred because of contamination over the years from washout. Really impacted for about half a season."

According to Barrington, no rounds were lost, rather, just some player annoyance if there had been a rain event and water was in the bunker.

The same held true during the drainage overhaul. The project lasted four days, with most of the time spent removing the sand, the old drain and stone.

Before any work was done however, Barrington weighed his options.

"How long would we be disrupting play?" he asks. "What are the labor and material costs?"

"I had already communicated the project to management," he adds. "I was looking at a relatively new drainage product, which was the ADS pipe wrapped in Styrofoam peanuts. This would allow me to not have to use peastone to surround the pipe, which would

lead to material and labor savings in the installation."

As is the case with many projects, the actual installation goes much differently in practice than as it's being done.

"To my surprise, the drain stopped in the bottom of the bunker and made two 90-degree turns before it exited the bunker," Barrington says. "We removed it and continued the bunker drain straight out."

This "straight-forward" project was affordable (\$1,000 for material; \$1,800 in labor; \$700 in new bunker sand) and has garnered rave reviews from the golfers, who, after seeing the results, want the club to renovate more of the bunkers. If they get their way, the actual construction may be slightly different, however.

"This was basically by the book, although I'm not sure I would use the wrapped drain pipe in a bunker again, just because it's round and you lose the surface of the trench due to the cylindrical shape versus the square trench," Barrington says.

Whether the course is new or old, problem minor or major, project extensive or minimal, proper drainage is certainly important from playability to aesthetics to the health of the turf. **GCI**

Rob Thomas is a freelance writer based in Cleveland.



Correct drainage is the most important aspect for a growing environment and playability, says Barrington.



Travels With Terry

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

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

TERRY'S REAL GENIUSES



Terry's traveled the world seeking out innovative course creations. Here are his Top 10.

All of the ideas used in my Travels with Terry column over the years have been fantastic, partly because these innovative ideas each proved to make their golf course maintenance staff more efficient and productive.

I was asked to choose the best of the best, and let me tell you, this was no easy task. Enclosed are my Top 10 great ideas from Travels with Terry from the past six years. – Terry Buchen

JULY, 2005

Bel-Air Country Club
Los Angeles, Calif.
Brian T. Sullivan, CGCS, MG
Ernie Hernandez, assistant
John Nachreiner, assistant

“Terry Says”

Sullivan and his assistants removed the front bumper from the Club Car utility vehicle, installed a steel plate with two pieces of 2-inch square tubing, welded some 1 ½-inch square tubing onto their Billy Goat push-type blower, drilled bolt holes in the square tubes, slid the blower-mounted square tubing into the vehicles square tubing and then bolted or lynched-pined it in place. No more pushing the blower or hand raking leaves with this simple but extremely effective and efficient way to make better use of their existing labor force. When not in use, the blower is removed, two pieces of 1 ½ x 1 ½-inch square tubing was installed on the inside of the bumper, which was then put back in place and held with bolts or lynch pins. All of the parts were in stock and it took about three hours to design and build.



MARCH 2006

Delaire Country Club
Delray Beach, Fla.
Brian Bowles, superintendent

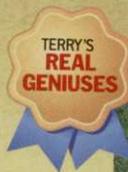
“Terry Says”

To rake the fairway bunkers real smooth without any rake furrows, Bowles uses a 36 x 76-inch corded rubber slotted drainage mat pulled behind a Toro Sand Pro riding bunker rake. The OEM rake teeth where removed from the riding bunker rake and the remaining five individual feathering rakes were left in place. The rubber mat was bolted on top of the rake mechanism and is rolled-up when transporting in-between bunkers. The three knobby OEM tires were replaced with smooth triplex greens mower tires to keep the bunker sand as smooth as possible. The rubber mat is available from www.mcmaster.com. The rubber mat cost about \$150 and it took about one hour to mount.



OCTOBER 2006

Salina Country Club
Salina, Kan.
Mike Hulteen, CGCS
Leland Davis, equipment mechanic



“Terry Says”

Why walk when you can ride in a good old-fashioned “sulky” behind a walk-behind greens mower. 1½-inch square metal tubing is used for the frame and supports, and ¾-inch flat steel is used for the seat post, which is bolted and welded to the frame. The pneumatic tires and wheels are replacement for wheelbarrows and the special U-shaped receiver intersects with a flat piece of steel with a hole drilled into it for a bolt to hook it up to the mower. Most of the materials were already in stock and it cost about \$100 in additional materials. It took about five hours to build.

JULY 2007

The Club at Admiral's Cove
Jupiter, Fla.
Bill Brousseau, director of golf course maintenance
Jim Matis, equipment manager



“Terry Says”

The engine on the Buffalo Blower had to be replaced and Matis used an old John Deere 2653 Utility Triplex Hydraulically Operated Reel Motor instead. The hydraulic motor was hooked-up to one 10-inch diameter and one 3-inch diameter pulley and the two hydraulic motor hoses were hooked up to a two-spool hydraulic coupler on the back of a John Deere Pro Gator. The engine battery is used to change the blower nozzle direction, as it is hooked up to the alternator on the tow vehicle with pig tails to keep the battery charged at all times. The blower RPM's are changed as needed by changing the ground speed of the tow vehicle with the throttle lock when desired. The blower is significantly quieter than when it had an engine and it saved the club over \$2,000 for a new engine. The used real motor cost \$65 and it took about eight hours to build.



SEPTEMBER 2008

The Silverleaf Club

Scottsdale, Ariz.

Jeff Prichard, CGCS, director of agronomy

Kent Coburn, superintendent

Bruce Leonard, equipment manager

“Terry Says”

The maintenance staff has to travel 1.7 miles to the first tee and over 2 miles to the farthest green from their turf care center. Coburn and Leonard came up with idea to transport their John Deere Aero-core 800 and Toro green's aerifiers to save valuable time and wear and tear on the machines. The square tubing, wire mesh, golf cart wheels and tires, axle kit, expanded metal and scrap metal cost about \$575 each and it took about 40 hours to build the first trailer and 20 hours each to build the second and third trailers.

TERRY'S
REAL
GENIUSES



Editor's Note: All superintendents and personnel reflect their respective positions at the time of the original publication.

DECEMBER 2008

Muirfield Village Golf Club

Dublin, Ohio

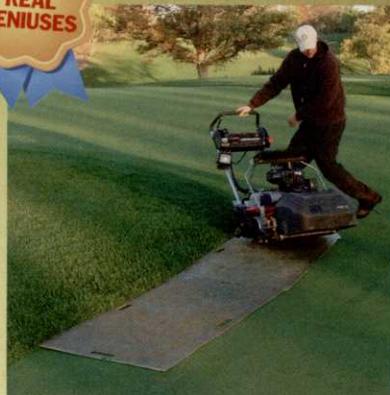
Paul B. Latshaw, MSN, CGCS, director of grounds operations

Jake Gargas, superintendent

“Terry Says”

To keep wear and tear from the walk-behind greens mowers turning on the collars, these 30 x 60 x ¼-inch HDPE plastic sheets placed end to end on the collars do a great job of protecting them. Four handles are cutout with an electric jigsaw so the operator can move all three easily from one end to the other as each green is being mowed. The plastic pieces cost less than \$50 each, they are available from kitchen countertop stores and the labor time is about 15 minutes each to cutout the four handles.

TERRY'S
REAL
GENIUSES



TERRY'S
REAL
GENIUSES

JUNE 2009

The Members Club at Grande Dunes

Myrtle Beach, S.C.

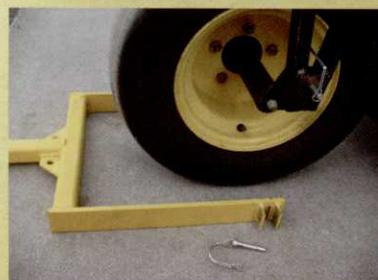
Scott Grumman, superintendent

Jon Stewart, assistant

Joe Corsetti, equipment manager

“Terry Says”

A great idea for towing a John Deere Aero-core 800 green's aerifier behind a turf vehicle to save the operator walking time in-between aerifying greens. The tow bar design uses tubular and flat steel welded together that is attached to the tow vehicle with a hitch and pin with a chain so the pin won't get lost. The other end is attached to the aerifier with a U-shaped metal bracket held in place with two lynch pins that connects/disconnects quite easily. This model aerifier has a neutral free-wheeling shift lever and it can be towed up to 10 MPH. The materials cost about \$65 and it took about 3.5 hours to build.



AUGUST 2009

Butterfield Trails Golf Club
El Paso, Texas
Joe Perez, head mechanic
Nick Guillen, assistant mechanic

“Terry Says”

To increase the life of the eight conventional-type street brooms on this John Deere TC 125 collection system, Perez and Guillen designed and built 1 x 1 inch thick pieces of oak wood “spacers” bolted to the top end of each broom to compensate for wear of the bristles. This great idea saves about \$100 per set of four brushes, \$200 total in replacement costs. The materials cost about \$15 and the total labor time was approximately one hour.



JANUARY 2010

Town & Country Club
Saint Paul, Minn.
William R. Larson, CGCS, superintendent
Ryan Browning, assistant



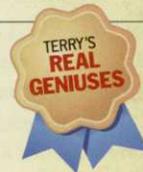
“Terry Says”

The first-ever Smart Board Interactive White Board in the golf industry was placed in the employee lunch room/meeting room. It is operated in conjunction with an LCD projector mounted from the ceiling and a dedicated computer equipped with the necessary software to allow the interactive white board and computer to communicate. Instead of using a “mouse,” the screen is operated with the touch of a finger, similar to interactive television boards used on CNN, etc. The Smart Board (www.smarttech.com) can do any function just like a computer monitor, it is totally interactive and it can operate exactly like a dry erase board on a conventional white board using four different colored electronic pens along with an electronic eraser pad. It is used as a daily job assignment board, for training videos, going onto the internet and doing any other computer function interactively. They range in size from 48 inches to 94 inches and Larson choose the 88-inch model costing about \$8,000, which includes installation and wiring. The dedicated computer & monitor cost extra.



OCTOBER 2010

South Hills Golf & Country Club
Fond du Lac, Wisc.
Jim VanHerwynen, CGCS, superintendent



“Terry Says”

A much easier way to eliminate hand raking of leaves and putting branches into piles where the idea actually came from a superintendent’s dream. The Hanheraker uses seven Union Tools plastic fan-type leaf rakes that are two feet wide with squared-off bottoms that are attached to the plywood (with muffler clamps) that has a 30-degree angle. Two large springs provide resistance when needed and one of VanHerwynen’s employees named the rake after him. Many of the parts/supplies are already in inventory. The rake heads and muffler clamps cost about \$80 and it took about four hours to assemble.





Henry DeLozier, a principal in the Global Golf Advisors consultancy. DeLozier joined Global Golf Advisors in 2008 after nine years as the vice president of golf of 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.

FIVE PROJECTION POINTS TO PONDER

There's a long-held financial precept pertaining to business models that has always made sense to me. It goes like this: "You can cut costs only to zero. After that, you must actually make money." We're rapidly reaching that point in the golf business. Operators, managers, superintendents and their staffs have cut costs until their pencils were worn to the nub. Now, with the annual budgeting process underway at many facilities, the focus must turn to revenues.

Planning for revenue growth is more difficult than expense reduction, even if it does not involve some of the agonizing decisions that come with cost-cutting. But as a number of clubs are proving, it's possible to grow revenues even in the current economic climate. In fact, the number of clubs and courses reporting revenue growth has increased from 7 percent in 2009 to more than 23 percent this year, according to a recent study by Global Golf Advisors. Revenue is growing by following five strategies that are right for our times:

PRIORITIZE REVENUES. While many facilities have not increased dues in several years, fearing a loss of members, others are creating organic growth. They're doing it by slightly increasing the price of incidentals such as club storage and lockers and high-volume consumables such as coffee, salads and draft beer. If you've fished all of the nickels and dimes from the sofas in the men's and ladies' locker rooms, it's time to get creative. Most clubs and courses offer a wide range of goods and services for sale. Ones you might not have considered include generational memberships, family-focused tee times and bundled packages for golf and entertainment. Top-performing management teams monitor all sources of revenue and constantly make adjustments to increase revenue without unfavorably impacting utilization. Just as it's not smart to increase prices too much or too often, it's equally ill-advised to ignore discreet price increases.

MONITOR UTILIZATION. This sounds like an expense-reduction strategy, but utilization also affects revenues. While many facilities cling to outdated and inefficient operating models that require staff even during low-demand periods, savvy operators and managers are monitoring utilization and comparing utilization rates to revenues generated. Where utilization is low, consider closure, right-sizing or other cost efficiencies. Better yet, look at ways to make the amenity or service more profitable. You could start by surveying members

and customers to find out what would make them want to take advantage of under-performing profit centers.

MAKE VALUE A NO-BRAINER. Once members start to question the club's or course's value – what they get for what they pay – the facility is on a slippery slope to nowhere. Every management team must objectively evaluate the value they offer, understanding that revenues can be easily increased only when value is widely acknowledged. In this scenario, value is a function of relevancy to as many segments of members and customers as possible. When executing this exercise, make women and families a top priority. Facilities today underestimate the importance of women's opinions relative to lifestyle value at their own peril.

Planning for revenue growth is more difficult than expense reduction, even if it does not involve some of the **agonizing decisions** that come with cost-cutting."

EVERYONE SELLS. Effective salesmanship is highly valued in tough economic cycles. Top-performing clubs have invested in sales training programs to help their staffs be more effective when asking for the order. When the golf pro or starter asks what time you want to book for next week, or when the retail sales team packages a souvenir cap with a right-priced golf shirt, revenue grows. Sales skills are important and require constant cultivation. Not everyone is a born salesperson, but everyone can improve with focused effort.

THINK DIFFERENTLY ABOUT MEMBERSHIPS. There are two aspects to club membership expense: the cost of joining – usually an initiation fee; and the cost of belonging – usually periodic dues. Clubs that have reinvigorated revenues have introduced new membership categories that offer fewer benefits as an offset against higher initiation fees. If you're debating reducing or waiving initiation fees as a membership incentive, think of it this way: An initiation fee is one-time revenue; dues are an annuity.

Before you submit a budget that projects another year of flat growth, consider ways to prime the revenue pump. Remember, you can't just keep cutting costs; eventually you have to make money in this business. **GCI**

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Giving MANAGEMENT COMPANIES a fair shake

A lot of myths surround working for management companies. GCI's Bruce Williams examines a few and you might be surprised by his findings.

by Bruce R. Williams, CGCS

Recent statistics have shown the steady growth of management companies in the golf business. There are a number of companies that have been around for decades, but there have been some newcomers in recent years, too. Management companies account for at least 15 percent of golf operations in the U.S.

Additionally, there are golf course maintenance companies and for our purposes the findings would be applicable to both groups. Some of the companies manage a few golf facilities while others have hundreds in their portfolio.

Management companies should be considered a major employer of golf course superintendents. Well over 1,000 superintendents are employed by management companies and the number is growing. While many myths and rumors exist about working for a management company, the best way to get a good look inside of management companies is to go straight to former and current superintendents who work for those companies.

After speaking to a dozen or more people it became clear that there was a constant refrain with a regard to the many positive benefits of working as a superintendent for a management company. It is my hope to share the top reasons why superintendents like working for management companies and why people might want to consider working for them.



STEADY EMPLOYMENT. Turnover is significantly lower with management companies. While superintendents may leave a specific course it is often due to an opportunity of advancement within the company. Most companies have a variety of golf courses including lower and higher budget facilities and everything in between. Superintendents can work their way up through the system and even into regional assignments over time. Most of the management companies hire from within and have good training programs and the ability to evaluate their personnel for future promotion.

The ability to move to other areas of the country is attractive with management companies. Often times we see cases of spouses being offered employment in other parts of the country or family needs requiring we move closer to our parents or other family members. A number of superintendents commented this was a huge plus with the management companies because they could still work for the same parent company while changing golf courses but not employers.

COMPENSATION. The average compensation for people working for management companies is comparable, or better, than the overall statistics for superintendents in general. Having spoken to management at several companies, they have indicated the market is competitive and they must keep pace with the industry to attract top talent. Competitive salary is also a sound strategy to retain these individuals, as well.

Typically, the compensation for superintendents at facilities run by management companies is reflective of the budget and condition of the golf course. Courses with higher budgets tend to have higher salaries for superintendents. Rarely do the salaries reach levels of the best golf courses in the country, but there are only a handful of those jobs to begin with. To move up into the upper 10 percent of compensation in the U.S. for all superintendents, it would normally require taking on multiple properties and regional superintendent assignments.

Most of the management companies employ agronomists who have come from the ranks of former superintendents. This is just one more example of room for advancement within these

organizations. Those positions are paid competitively with the better jobs in the country.

BENEFITS. The benefits provided by management companies are reported to be much better, on average, than those working for non-management company employers. The reason for this is fairly simple – management companies employ thousands of workers as compared to 30 to 150 at any one facility. There is power in numbers and the ability to negotiate health insurance and such is

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something that is attractive to employees of these companies.

Vacation pay is accrued over time and the total longevity of the employee will determine length of vacations. Since the average longevity of a superintendent is reported to be 6.5 years this normally means starting over again on the vacation ladder until you accrue enough time to maximize your vacation benefits. By working for a management company you may work at several different properties for that company but the benefits will be assigned for the period of time working for the company rather than the golf course.

Most of the management companies offered a variety of ancillary benefits including vehicles or vehicle allowance, association dues, attendance at local and national superintendent meetings, training, etc. Not all of the benefit packages were equal, but generally they were quite healthy as compared to the statistics in the GCSAA Employment and Compensation Survey.

RETIREMENT PROGRAMS. The people I interviewed indicated they were either pleased or extremely pleased with the retirement packages provided by the management companies. While the individual

companies differed in their offerings it was evident the programs were above average. Often there is a contribution of at least 2 percent of salary and there were also a variety of matching offers in which a superintendent could accrue a significant retirement portfolio over time.

the superintendents to meet the expectations of the facility and their employer.

Budget spreadsheets are developed professionally at the corporate level and analyzed to compare to industry standards for clubs with similar climate and standards. Processing of

people that I spoke to. It was not only the national company meetings but the connections via listserves, e-mail and phone were mentioned often.

CORPORATE PARTNERSHIPS. Early on the management companies developed healthy business re-

get. Training programs are formalized. Reporting mechanisms are standardized and constantly tweaked to provide optimal communication.

Working through a corporate structure affords the superintendent a steady system of feedback with much better continuity than green committees and boards that change annually. Once again, the superintendent can spend more time on the golf course. It also allows for development, implementation and progress on a long-range plan that is not encumbered by pet projects of various volunteer leaders.

INTERNAL RECOGNITION. Many of the management companies recognize their team members for their success. There were a lot of fellows who were very proud to have been named "Superintendent of the Year" by their specific companies. Management companies do a lot to deservedly gain PR, both internally and externally, for their properties and the golf course superintendents. While golf course conditions are a large part of that recognition it can also entail the creation of efficiencies, safety programs, training initiatives and adherence to budget.

The trend in our industry is more facilities being managed by these companies. Logic dictates that it is an area to consider when looking for career opportunities. As always, superintendents should do their research when looking at any employment opportunities. Not all management companies are equal but there are a lot of similarities. Do your homework and check out the specific job offerings and corporate structure. Several thousand golf course superintendents working for these management companies appear to be pleased with their employer choices. **GCI**



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Not all employers in our industry provide retirement benefits. Some golf facilities only pay the superintendent \$2,000 per year regardless of their salary level. It is for reasons like this that superintendents are attracted to management companies and their retention rates are high.

BUSINESS APPROACH. Management companies are business oriented. They are accustomed to working in a corporate type scenario with a great understanding of the golf business. Providing value for the price is paramount to success for these companies. No stone is left unturned in developing strategies to do things more efficiently, effectively, at a better cost, etc. All of this takes a strong business approach.

With multiple facilities there are often templates that are used to standardize operations at facilities under the umbrella of the specific management company. Most companies develop written standards for each facility that are agreed to by the company, facility and superintendent. This is extremely helpful in allowing

invoices, billing, payroll and human resource are done through the corporate office with the input of the superintendent. This expedites the process and allows the superintendent more time on the golf course.

AGRONOMIC SUPPORT. When you work for a management company you are not alone. There is substantial support provided by the agronomic team of each company. This support may be from the regional superintendent, agronomist or peers that work within the organization. Problem solving is fast tracked and the team's many years of experience provides a wealth of knowledge for the superintendent. This is especially attractive for the younger superintendent.

PEER CAMARADERIE. When you work for a parent company you have a vast network of peers. You are all working for the same employer and want that employer to prosper. Bouncing ideas off of your peers and having a lot in common is an intangible that was mentioned by several of the

relationships with any and all companies that sell products in the golf turf maintenance business. Volume buying provides discounts. Some of the management companies have exclusive deals in which they direct a high percentage or all of their purchases to a specific company.

The discounts you receive when buying as much as a \$100 million worth of equipment can be significant and important to allow management companies to be very competitive in the bids for agreements with courses. Consider the amount of money spent annually on equipment, chemicals and parts and even a few percentage points of savings adds up to a lot of money for the management companies, which they can pass on to clients or aid in the corporate overhead.

ORGANIZATION AND STRUCTURE. Management companies have a plethora of statistics in how to run operations efficiently. Time and motion studies are common with a thorough evaluation of the labor component which can be the biggest line item in any bud-

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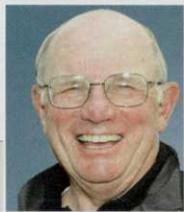
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Monroe Miller is a retired golf course superintendent. He spent 36 years as superintendent at Blackhawk Country Club in Madison, Wis. Miller can be reached at groots@charter.net.

NOT THAT MUCH HAS CHANGED

I just wrote a piece for Wisconsin Golfer magazine applauding the career of one of our long-term superintendents. Like others, I expected he'd continue for years to come, and viewed his retirement as another example of how circumstances change.

Financial markets and retirement planning are scary and the rules change rapidly. The climate is in flux, and physicists have some evidence of a particle – a neutrino – that moves faster than light, potentially making Einstein's theory obsolete. If confirmed, it would imply that a green could be cut before the mower leaves the shop. As the bumper sticker says, "What the heck is going on?"

Most of us have been a little scared by the changes of the past few years. We wonder when we will be comfortable with events again, events often out of our control. How do we make golf affordable and accessible when input costs are so high? What will environmentalists and regulators demand from us next? The list of concerns and worries and change goes on.

Near the end of *The Greater Journey*, David McCullough's narrative on the 1889 World's Fair in Paris, he describes the American display in the "Palais des Machines." American machinery and products of the day included 493 inventions and devices created by Thomas Edison, steam engines and pumps, typewriters, sewing machines and scores of other inventions. And it included lawnmowers.

That last one gave pause – lawnmowers? In 1889? A quick Google search revealed that at the gateway to the Machine Palace was an American lawnmower was the centerpiece, a Z-turn lawnmower at that.

Hmm, maybe not that much has changed. Likely it was a reel mower, not a sickle mower or a rotary mower. It was probably built on the basic de-

sign of Edwin Budding a few decades earlier. Americans created a new application to Budding's mechanical principle – home lawns. And a little later, lawnmowers replaced sheep and sickle mowers on courses.

Early in my career Dr. John Madison and other turf academics started looking at sand topdressing as a golf turf management practice. It seemed revolutionary, generating questions about nutrition and dull mowers and diseases, but a few supers took the lead and adopted it into their management plans. The rest of us followed, as did topdressing equipment manufacturers and sand suppliers.

Most of us working in golf have been a little scared by the changes we have experienced in the past few years. We wonder when we will be comfortable with events again, events often out of our control.

Do a little historical reading and you'll find Tom Morris of St. Andrews and his 1800s admonition to his assistant: "Mair sand, Honeymen." He spread it with a shovel while we use hydraulic dressers, but topdressing has a long history, a prime example that not much has changed in 150 years.

Sometimes comfort from today's worries comes from places important in our past. In my case, my hometown has grown a little and the trees are taller, but the water tower is still there, and the high school and football field look exactly the same as they did 50 years ago. The one-room school was sold as a home and moved, but the playground is the same. The sugar maple tree we tapped each spring remains healthy, and the hand pump that brought cold and fresh water is still there. Not that much has changed.

Or, better yet, walk or play the golf course that inspired your career. You may see changes – bunkers are built, remodeled or filled in, forward tees might have been added, greens have changed, trees have been removed and trees have been planted – along with any number of other improvements. But in my experience, the "trail" of the course remains the same. The route of holes you remember very likely will be where you remember them to be. In a sense, not that much has changed.

Other than big theoretical issues like the neutrino, change comes at the edges of basic principles. For superintendents, soil pH, water, pho-

tosynthesis and respiration, the liming equation and all we learned in college are fundamental. Changes come to us in politics and in society and in governmental regulation. Materials and machinery and technology are where we notice the real differences.

It is hard to argue against the old saw that nothing endures but change. We also know that times have always changed and our ancestors changed, too, just as we will. From my perspective, it is the pace of change that has quickened, and futurists have written that it is stressful when there is too much change in too short a time.

So when I feel a little uneasy about what is going on in golf, the economy or our country, I spend some time on the business end of a walking greensmower. It reminds me that not much has changed in my life.

It just seems like it. GCI

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NICE PACKAGE

Improvements in packaging have made the handling of turf chemicals safer and easier. By Jason Stahl

Glug-glug-glug. Most golf course superintendents are familiar with that sound... and no, it's not from the quaffing of an after-hours frosty beverage. Rather, it's the noise coming from a bottle of the liquid turf product of your choice as you pour it out. But it's not necessarily a good noise. After all, glug-glug-glug could result in splashback, and that's not good for anybody.

Advances in product design, not to mention labeling, have minimized "the glug" as well as provided many other benefits that make the use of these products safer, easier and more efficient.

Syngenta introduced a slant-neck 1-gallon bottle first in 2009 with Tenacity with the goal of making pouring easier, less fatiguing and safer.

"A lot of research went into that and figuring out how superintendents were using it," says Jason Monsees, global packaging engineer for Syngenta.

According to Monsees, the big, angled neck is more ergonomic and doesn't require the bottle to be turned over as far to be emptied.

With the 2-1/2-gallon bottle, a logo was added near the handle showing the proper way to hold it so as to eliminate plugging and splashback while pouring out the product. This is key, since Monsees says the research team found that turning the bottle upside down to get the product out was common among users.

Aside from the user benefits, coming out with such a product as this new bottle provides an ancillary benefit to Syngenta itself.

"It differentiates us in the marketplace," says Monsees. "No one else out there has a slant-neck bottle out there, so when a customer looks at it, they know it's a Syngenta product."

Package size is also an important advancement. Syngenta talks with customers to find out what package size is most appropriate for the way they use the product.

"In the golf market, smaller pack-

ages are more convenient at times, depending on the application," says Margaret Bell, senior marketing communications manager for Syngenta. "For example, there could be a spot treatment where you don't need a larger package size."

Becky Fong, packaging innovations manager for Valent USA Corporation, cites this "right sizing" of packaging – providing an appropriate unit dose to eliminate the need to measure, reseal and store opened packages – as a new trend.

"For example, water-soluble pouches that can be used one at a time as needed per application," says Fong. "Alternate palletization, meanwhile, helps to increase the stability and efficiency of pallet loads."

"Valent is constantly looking for new ways to make packaging easier and safer to use," says Fong. "That might mean adjusting the angle of a handle for greater ease of dispensing, improving label quality to ensure the label will stay with the product before, during and after use or adding a reseal mechanism to help avoid spills and promote easier and safer storage."

A color-coded cap system serves a purpose for Syngenta, with green for fungicide, red for growth inhibitor

and blue for herbicide.

"This helps the end user pull the right product off the shelf and not put an herbicide down when you want to put down a fungicide," says Monsees. "It's a small thing, but a big thing."

Proper storage is just as important as proper use. The biggest problem superintendent Justin Peloquin says exists in his region is heat.

"A storage container that houses the chemicals its basically just a metal shell sitting out there cooking in the heat," says Peloquin, who takes care of Tahquitz Creek Golf Resort in Palm Springs, CA. "If you don't have some type of ventilation inside of your bins, it gets too hot inside and you start having bottles explode. Even though we have ventilation, we're always going through containers and checking to make sure they aren't swelling or leaking."

Once a year, Peloquin conducts chemical training that covers handling, mixing, servicing equipment and first aid. He and his crew also follow the buddy system when it comes to the handling of these chemicals.

"When we have a guy mixing, we usually have a guy right around there with him to make sure things are getting mixed in the proper order and to

Storage facility

Mike Vogt, consultant with the McMahon Group, says they prefer to design chemical storage buildings with separate storage rooms for liquid and dry chemicals. They specify that they be constructed of concrete block, and that all floors and foundations have a water-stop installed.

"Also, we make a special effort to keep chemical storage buildings separate from the main building, at least 200 feet from other structures and at least 500 feet from the natural flow of drainage water across the site," says Vogt.

It's also a sound practice to install fire protection, and all lighting should be explosion-proof, Vogt adds.

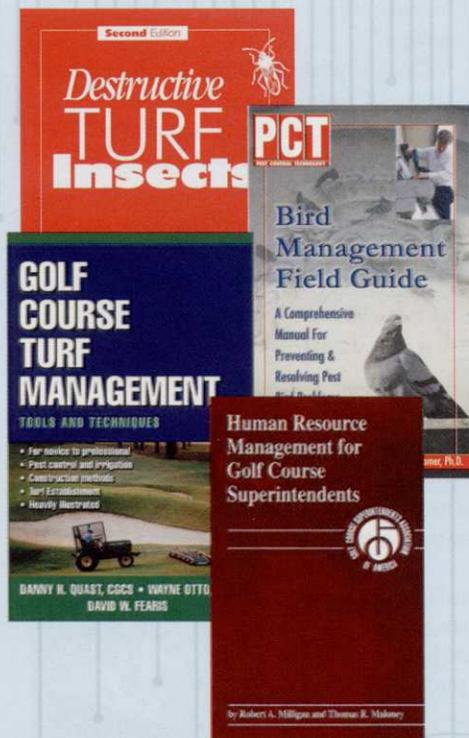


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OPERATIONS PROFILE

make sure there are no issues with the equipment,” says Peloquin. “We make sure safety-wise that everybody is covering one another.”

Tommy Witt, director of golf course operations for Northmoor Country Club in Highland Park, IL, recently upgraded his chemical storage room to avoid any potential problems.

“Several years ago, we constructed heavy duty ‘Home Depot’ type shelves, which provide us with the space to adequately and safely store our complete inventory of chemicals,” Witt says.

Lisa Clements, marketing manager of US Chemical Storage, says leaking is the most common problem when it comes to storing turf chemicals, which can lead to accidental contamination of grounds and groundwater.

“Our solution is a building that’s turn-key and enables golf course superintendents to house materials with spill containment built into the structure,” says Clements. “That way, when they’re storing and handling the materials, if something should spill or drip, it’s contained within the structure.”

The spill containment is an empty area below the floor, which is made of steel grating and is six inches above the bottom of the building. This area below the floor you stand on is sometimes called the “sump” area or “containment sump.”

Fong recommends that products be stored in a cool, dry place in their original containers – and that containers be kept closed when not in use.

“Also, resealable packaging helps eliminate spills and leaks in storage and is a factor that should be a consideration at the point of purchase,” she says. **GCI**

Jason Stahl is a freelance writer based in Cleveland.

Tips for Safe Chemical Storage

Accidents from poor storage techniques of chemicals are 100 percent preventable. So why do they still happen? Many times it’s because workers in areas with many chemicals are tempted to store chemicals alphabetically by common name to make them easy to find – but this is a very dangerous practice.

Here are a few more tips for safe chemical storage:

- Always store minimum quantities, as specified by OSHA. Purchase chemicals in smallest quantities needed.
- Inventory chemicals at least once a year.
- Do not store chemicals on bench tops.
- Keep MSDSs on file and available.
- Keep chemicals in storage except when in use.
- Label all chemical containers – even those with only water.
- Develop procedures to prevent and contain spills.
- Encourage orderly and tidy work practices.
- Provide adequate security to prevent access of hazardous materials by unauthorized personnel. – enviro.blr.com





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By Adam Fletcher

OPERATION SCARECROW

The team at Oakfield Golf Club mounts a multi-prong attack to deal with its goose problems.

Because golf is an outdoor game, and it requires a fair amount of space to play, there will always be a conflict between the flora and fauna and playability.

ALL PHOTOS COURTESY OF OAKFIELD GOLF CLUB



Oakfield Golf Club is located in Nova Scotia, along the east coast of Canada. Nova Scotia is known for its fresh water lakes and beautiful shore lines and with a total population of 940,000, the province is relatively undeveloped. Oakfield Golf and Country Club is fortunate to be surrounded by wooded areas and is adjacent to the province's largest freshwater lake.

As managers of the property we attempt to integrate our management program with the abundant wildlife in the area. While making decisions as turf managers, the consideration of the environment and wildlife around us often factors into achieving our goals, whether it be pesticide applications or clipping disposal. Because golf is an outdoor game, and it requires a fair amount of space to play, there will always be a conflict between the flora and fauna and playability.

One of the conflicts that we struggle with on a seasonal basis is the persistence at which Canadian Geese frequent the property. These migratory birds nest along the pond edges of the golf course

and remain there until the time comes to fly south. The birds mate for life and form broods that return to the same location to reproduce each year. The young birds, unable to fly, seek shelter in the long grass and open water at night from predators.

During the day the wide-open spaces of the course afford the geese the opportunity to see predators from a distance and the proximity of the ponds allow for easy escape. Add in the lush grass as a food supply and the shade of a willow to rest under, you have the perfect goose-producing environment.

Anyone who works a green space in Southern Canada or the Northern U.S. knows that Canada Geese can create several problems. We've seen turf turned over on the greens or tufts ripped out from their ever-present need for food.

They track through the freshly raked sand and ruin the work of the bunker squad. The adults are fearless in their protection of the young, honking and hissing at any perceived threat in the area and in some cases, physically attacking grown men with their wings and beaks.

Aside from the intimidation tactics and the reduction in level of playing conditions, the most significant problem caused by the geese is more about what they leave behind. An average goose can produce 1 to 2 pounds of droppings per day. At last count the geese at Oakfield numbered in the eighties, all congregating around two green sites by the water. In one week that adds up to 560 pounds of droppings, left distributed – in oddly well uniformed spacing – on every type of playing surface on the golf course. Like any fecal matter the droppings do have the potential to cause a health issues in humans, more so in environments where contact with the droppings are more likely. Beaches, parks and golf courses are good examples of the types of outdoor spaces where transfer is quite possible and the droppings pose the greatest health risk. In addition to the bacterial issues, the droppings can become dense enough to actually become slippery, an important point when discussing pond edges and tees.

We approached the goose problem like we would with any pest on the golf course; from a

cultural point of view. We spent some time gathering information from the Internet about the habits of the geese and how the golf course might look appealing from their point of view. We spoke with Canada Wildlife Service (CWS), a division of Environment Canada, which is the governing body in Canada responsible for gathering information pertaining to wildlife and maintaining wildlife regulations. It seemed as though there were as many schemes and gadgets to rid us of geese as there were geese.

A large portion of the suggestions involved a loud noise to startle the geese, these ranged from predatory sounds to simulated shotgun blasts. While these might work in a public park or beach, loud noises have a tendency to be frowned upon at the golf course.

At one point, I tried blowing a hockey whistle as hard as I could after wading into a group of geese on the 12th hole. They geese were not phased by the intrusion, only pausing briefly to raise their heads before returning to work. The failure was compounded by a golfer on the 13th tee playfully shouting "Offside!"





After much deliberation the "Goose Committee" decided on a three-stage defense and Operation Scarecrow was born.

After much deliberation the "Goose Committee" decided on a three-stage defense and Operation Scarecrow was born. Our first tactic would be to create a beach head by use of physical barriers at the most likely places of a water invasion. We purchased 600 feet of plastic snow fence that was four feet tall and cut it down to two feet. The fence was placed around the edge of the two ponds where we historically have the largest population of geese. The fence was as close to the edge of the pond as possible and wire-tied to survey stakes driven into the banks roughly four feet apart. The theory was that if the babies couldn't get over the fence then the mothers wouldn't leave them and the whole family would remain in the water. The fence was put in place as soon as the ground had thawed enough to hammer the stakes in.

The second stage would be to prevent an aerial attack. We purchased three eagle silhouettes and made other flags that were suggested to us from CWS. The eagle silhouettes were mounted

on 18 foot pole with a swivel that gave the appearing of "flying". The flags were made of black material – we used filter cloth – cut into strips 5 feet by 2 feet. Two T-bars are driven into the ground 2 feet apart and the strip of cloth is fastened to the poles using wire ties.

The remaining 3 feet of cloth is left to blow about in the wind. The idea is that from the air the flags look like predators to the geese and therefore not a safe place to land. Both the flags and eagle silhouettes were moved every two weeks so the geese would not get use to them being in the same position.

The final stage was to police the area and chase off any geese from behind the lines.

Everybody got involved. The maintenance staff, the marshals and the members, but the lion's shared was left to Abby, my golden retriever.

When the young were hatched and mobile we discovered we were fighting a losing battle. The snow fences were ineffectual at keeping the geese from getting

on shore. They would either go around the end of the 1,200-foot fence; look for a hole underneath or in one case a parent would simply sit on the fence and allow the young to climb over. We used many man hours constantly repairing sections of the snow fence or adding stakes trying to improve the barrier. Once inside the barrier, the geese would of course have a hard time getting out, in effect, corralling them exactly where we didn't want them. The flags and silhouettes did little to motivate the geese once the young were born.

The only aspect that worked on a constant basis was Abby chasing the geese off into the water. Unfortunately, Abby can only be at the course when I am so the geese became accustomed to my schedule, crowding on to the greens in the evenings.

As the geese grew bigger and began to practice flying, the fences did appear to disperse them about the golf course, but not enough to be effective.

After many man hours of chasing geese off the property and

cleaning up droppings – filling up 5-gallon pails three or four times a day – we began to look at more permanent solutions. Under federal law, Canadian Geese are protected as migratory birds. Any alterations to their life cycle, from egg shaking to a cull must be approved and permitted by Canada Wildlife Services. Prior to taking such measures the applicant must have completed a "goose plan" – you must prove that you have attempted to get rid of the geese using alternative methods.

Within days of applying, CWS granted Oakfield a permit to cull the existing flocks on the property. As it turns out the goose population in Canada has increased tenfold in the last 15 years.

In July of 2010, the population was large enough that CWS initiated an early hunt to reduce the numbers before any crop damage could occur, hence the rapid response to our request.

The permit came with a list of regulated methods for dispatching the birds and how to dispose of the carcasses. A detailed report listing the numbers, dates and the manner in which the carcasses were disposed, must be submitted within two weeks of the termination of the permit.

Although our permit allowed us to cull 100 birds, we felt that slowly reducing the population, at a rate of three or four birds a week, would not only reduce the numbers, but also drive the rest from the property.

In the end we successfully removed 17 birds from the property, and reduced the population by roughly 20 percent.

We intend to apply for the permit next year and hopefully continue to keep the numbers at a manageable level. **GCI**

Adam Fletcher is assistant superintendent at Oakfield Golf and Country Club in Oakfield, Nova Scotia, Canada



Air-induction nozzles contain an “inverted water balloon” with an air bubble inside a water droplet. That bubble actually helps with coverage by breaking the droplet apart better upon contact with the plant.

GETTING THE DRIFT

When it comes to being precise with an application, the right nozzle makes all the difference. By Kyle Brown



HOW DOES IT WORK?

The transformation of the nozzle to what they’re using today is huge. Today, you’re hitting the plants at different angles for better coverage. What we’ve seen is great drift control and very good coverage for the fungicides. The controlling factor is the nozzle: the finer the droplet, the more coverage.

A good compromise for that is the air-induction nozzle. The nozzle creates a kind of inverted water balloon, where water is the cover and air is on the inside. They’re still fairly large droplet sizes, but they’re able to splatter and cover the plant. Drift is a huge issue on golf courses: you don’t want to waste money when it drifts onto a non-target site, and golf courses are surrounded by communities. The air-induction helps keep it where it needs to go.

— Dr. Mike Agnew, Syngenta field technical manager



WHITSFORD COUNTRY CLUB

Kris Givens is a new convert to air-induction nozzles. As long as he’s been at the Whitsford Country Club in Exton, Pa., he’s used floodjet or raindrop nozzles to deliver his applications to the 30 acres of sprayable bentgrass fairways.

But recently he’s seen research that has pushed him to make a move.

“Last year I started looking at some of the research that had come out and seeing what other superintendents have been coming up with and I just thought, ‘Wow, those are some impressive numbers,’” says Givens. “Talking about the precision that these things have, getting the droplet to that size and getting even more coverage to hit the plant.”

Air-induction nozzles have been around for a while, but they’ve started to get more attention in the golf market because the technology promises good coverage with almost no drift. Being able to be more precise with fungicide and herbicide applications makes all the difference for a superintendent working with a limited budget and tools.

“The EPA is hitting hard on us,” says Givens. “They’re taking products away and not giving us replacements. Anytime I can lengthen the effectiveness of a product, I’m going to. They say it’s only two or three days, sure, but two or three days on an application, after a couple of applications it becomes six days or so in a month. After two months, that’s a whole application I’ve made up.”

Givens fights against anthracnose, summer patch and fairy ring, and uses mixes made to both combat those threats while providing for his turf. With the air-induction nozzles, he’s making the expensive chemical mixes more effective and specific in targeting around the course.

“I’m hopefully getting longevity out of those sprays,” says Givens.

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"I want to get rid of that fungal pathogen and save some money with these chemicals. When I talk to other superintendents, they're looking to be able to get a better handle on pathogens too. That's really what's driving me more than anything here. Once you make your selection of a chemical, that's pretty easy now. But it's all in how you apply it."

On top of being more precise, the air-induction nozzle provides a little more solid coverage in the form of an air bubble inside the medium-coarse droplet, which bursts upon contact with the plant. Givens has been watching the research, but he prefers to see it in action on the course.

"It's just math with the researchers, but it's practicality with superintendents. You've got to be able to apply it in the field," says Givens. "It's such a science, which is what makes it fun and interesting. It's getting that coverage with that droplet size with the precision to hit exactly the disease I'm dealing with."

BENT CREEK COUNTRY CLUB

Superintendent Jim Loke attributes his habit to volunteer parts of his course to being a frustrated superintendent and scientist, waiting to see if new technology lives up to its promise for the golf course industry. It gave him the chance to see air-induction nozzles in action when Dr. Mike Agnew, Syngenta field technical manager, and others tested their effectiveness on the course.

"Anytime I've had an opportunity to share with the industry in some capacity, I've put my foot forward and volunteered for whatever research is necessary," says Loke, of Bent Creek Country Club in Lititz, Pa. "About a year before the testing took place, Dr. George Hamilton did some spray pattern testing that really caught my eye. I didn't realize how efficient some nozzles were and others weren't for different jobs."

Loke went with a fairway that had seen its fair share of battles with dollar spot for testing, looking for relationships between the type of nozzle used and the control of dollar spot.

"We'd had tremendous bouts with dollar spot on this fairway," says Loke. "It's a very large bentgrass fairway, and we sprayed the daylight out of it."

They worked with TeeJet to run the tests, checking for changes between floodjet, rain-drop and air-induction nozzles, according to Mark DelSantoro, who was a territory rep for Syngenta at the time.

"The two objectives were really to look at drift and droplet size and how that affects the fungicide," says DelSantoro. "Covering the plant

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in an effective way and reducing drift were really the goals here.”

With different nozzles delivering the full range of droplet types, they were able to see which gave the best coverage for the dollar spot fungicide. The results showed that the nozzles he had been using might not be the best choice for the application.

“Many of us at the time were using rain-drop nozzles for dollar spot control,” says Loke. “Through this process, we discovered we were using the wrong nozzle. There are nozzles that have coarse droplets and nozzles that have fine droplets we had to find out which was the most effective nozzle for the chemical we were using.”

Chemicals are generally listed for a specific size of droplet meant to provide the best coverage with the least amount of drift from air movement. In this test, the other nozzles worked well, but the air-induction nozzle worked best overall, says DelSantoro.

“The air-induction was much better as far as droplet size,” he says. “In its ability to handle all situations, it was the best based on the research. The other nozzles might’ve done a little better, but that x-factor had to do with the wind. The AI was first considering all the varying conditions that a superintendent has to spray in.”

Because of the air bubble inside of the droplet, droplets from the air-induction nozzle gave a much more precise application, according to DelSantoro. The best setup gives the superintendent multiple nozzles to choose from depending on the chemical to be applied and the situation, but the air-induction nozzle gives solid coverage when dealing with wind.

“A superintendent today probably has two or three nozzles available to them,” he says.



“You rotate based on the environmental conditions and what you’re putting out. But drift is the biggest thing. If there’s any type of air movement, you’re going to want to use air-induction, which is going to get you good coverage and efficacy for the product.”

For Loke, the drift means more than getting the product exactly where it’s needed: it also means that he keeps it from going where it shouldn’t.

“We’ve got a golf course surrounded by homes, so we have pets and children to worry about,” he says. “The air-induction is good for that environment, when you want to put something down very accurately. It’s good for cost-efficiency, too. When you’re putting down the exact chemical on your exact target, you’re saving money in the long term and being environmentally responsible, too.” **GCI**

Above: Superintendents use nozzles like these TurboDrop DualFans to get precise coverage on the foliage from multiple angles. Below: Air-induction nozzles produce smaller droplets that handle drift well.



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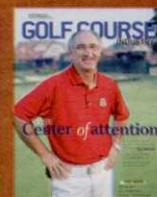
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(MORAGHAN continued from page 14)

LOVE THY MEMBERS. Treat every member the same. It's probably okay to become friendly with your employers, even have off-course relationships with people you've worked for over many years.

However, always keep your eyes and ears open for signs that the end is near:

- An eerie silence befalls the golf course and the friendly associations stop.
- You're no longer asked to attend board meetings, or your assistant is asked to join you.
- You sit alone in the grill-room.
- You begin hearing about minor issues regarding the course even from your most ardent supporters.
- Even your "friends" begin looking for second opinions.

SPECIAL PROJECTS. Arguably the greatest attribute of a superintendent is a never-say-die attitude. You should be trying to accom-

plish as much as possible with unrelenting enthusiasm.

However, be wary when the club, owner, or management group begins asking you to take on projects that don't fall within your area of expertise, jobs like resurfacing the parking lot, re-decking the patio around the pool, re-fencing around the tennis courts, repairing the clubhouse roof, even undertaking significant tree removal. These tasks will take you away from the golf course, and if course conditions decline, so will your job security.

Tom Landry, the legendary former Dallas Cowboys coach, said to me that being a successful football coach is just like being a successful golf course superintendent. In both cases, "you are only as good as your last day."

Want to get fired? Ignore what your membership is thinking about you. Instead, be smart and you'll be the one deciding when that last day comes. **GCI**

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b. Legitimate Paid and/or Requested Distribution (By Mail and Outside the Mail)		
(1) Individual Paid/Requested Mail Subscriptions Stated On PS Form 3541. (Include direct written request from recipient, telemarketing and internet requests from recipient, paid subscriptions including nominal rate subscriptions, advertiser's proof copies, and exchange copies)	26,565	25,983
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c. Total Paid and/or Requested Distribution (Sum of 15b (1), (2), (3), and (4))	26,628	26,054
d. Nonrequested Distribution (By Mail and Outside the Mail)		
(1) Nonrequested Copies Stated on PS Form 3541 (include Sample copies, Requests Over 3 years old, Requests induced by a Premium, Bulk Sales and Requests including Association Requests, Names obtained from Business Directories, Lists, and other sources)	682	651
(2) Nonrequested Copies Distributed Through the USPS by Other Classes of Mail (e.g. First-Class Mail, Nonrequester Copies mailed in excess of 10% Limit mail at Standard Mail or Package Services Rates)	0	0
(3) Nonrequested Copies Distributed Outside the Mail (Include Pickup Stands, Trade Shows, Showrooms and Other Sources)	177	0
e. Total Nonrequested Distribution (Sum of 15d (1), (2), (3))	859	651
f. Total Distribution (Sum of 15c and 15e)	27,487	26,705
g. Copies not Distributed	215	440
h. Total (Sum of 15f and g)	27,702	27,145
i. Percent Paid and/or Requested Circulation (15c divided by 15f times 100)	96.88%	97.56%
16. Signature of Statement of Ownership for a Requester Publication is required and will be printed in the issue of this publication.	November 2011	
17. Signature and Title of Editor, Publisher, Business Manager, or Owner	Date	
Melody Berendt, Director Circulation	9/30/2011	
I certify that all information furnished on this form is true and complete. I understand that anyone who furnishes false or misleading information on this form or who omits material or information requested on the form may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions (including civil penalties).		



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STEPHEN'S JOURNEY

Over the years, I've asked hundreds of superintendents why they stay in this crazy business. Oftentimes, the answer is, "I love to work outside in the sunshine."

But, we all know the cloudless sky we yearn for is a double-edged sword: the sun gives joy and growth and life... but it can also take it away.

Last month, it took the life of Stephen Best, a Texas golf course superintendent who adored his job, his wife Cheryl and his two young children. He cared about his profession and served as president of the North Texas GCSA. He was a community leader who was named Rotarian of the Year in his hometown of Keller. He was a man of faith for whom church involvement was a rewarding commitment. For fun, he ran marathons.

But he couldn't outrun skin cancer.

In 2007, Best had a cancerous mole removed from his back and thought he was "clean." He decided not to do the semi-annual melanoma checks his doctor had suggested. He regretted that. The cancer metastasized and in February 2010 a tumor attacked his brain. He was in a coma for two weeks. When he woke up, his world had changed forever.

For an amazing year and a half, his family, friends, superintendent buddies, church and the team at Sky Creek Ranch GC pulled together around him. Our wonderful pals at the Wee One Foundation helped financially. The support was remarkable and the chemo and radiation worked for a while, but cancer is a ruthless, relentless bastard. He died October 16.

Stephen was not the first in our business to fall victim to skin cancer... but I wish to God he'd be the last. He had the same wish and he spread the word among his North Texas col-

leagues and others around the nation. He wrote a tremendous article for his chapter publication describing his ordeal and gives wonderful specific information about skin cancer prevention and detection, but here – in his words – is his bottom-line advice:

"I recommend the following actions to take care of yourself and your family properly in the event of an unexpected medical emergency:

- Purchase life insurance as soon as you can, if you don't already have

Stephen was not the first in our business to fall victim to skin cancer... but I wish to God he'd be the last.

it. Once you are diagnosed with a life-threatening illness, you will not be able to obtain it. Get it done.

- Make a will or set up a trust. Don't leave the disposition of your assets to a court-appointed authority.

• Stay on top of your health. If it were not for my dedication to running, I would not be able to survive the rigors of my treatment.

- Get your annual physicals. I have skipped annual physicals in the past. Trust me, that attitude does not work. I want to know everything now so I have a better chance at survival.

- When you see a dermatologist make sure he's a skin cancer specialist.

"Skin cancer, if detected early, is very treatable. I encourage you to take my poor choices (lack of proper skin care in my early career and follow-up) and my good choices (faith, fellowship, and family) to heart. I am on a mission to spread the awareness of skin cancer not only to all of you but to a lot more. I am hoping to someday have a foundation that is as big as some of the others out there. It has

become personal to me and I hope you all take this seriously."

The foundation he mentions above hasn't been formalized yet, but his friend Brian Cloud, the GCSAA regional rep for the area, describes it this way: "Stephen and I talked about (it) before his death. We were going to work to install sunscreen stations in as many golf course break rooms as we possibly could. We were going to start in DFW, expand to Texas, and eventually work around the U.S. We

were going to put his photo next to them with a brief review of his story. He loved the idea and we were going to move forward together once he was well enough. Needless to say, we were never able to get started. But, I am going to honor my friend and get it going in 2012. I may only get a few stations going in 2012 but will eventually get enough installed to make a difference and create some awareness."

Why wait for Brian? If Stephen's story touches you, get started on your "Stephen Station" now. His life may have ended, but his spirit can live on with every case of skin cancer we prevent. Please, do it today.

Lastly, Stephen's entire article, "My Journey with Skin Cancer," along with more info about skin cancer and a video I shot with Stan Zontek of the USGA Green Section about his cancer experiences can be found on our website. There is also a downloadable PDF called "Stephen Best's Story" you can put near your new or existing sunscreen station. **GCI**

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