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THE BULLHORN

Before last February’s GIS show, we decided to organize a “TweetUp” for our techie social media friends. The idea was to bring together supers and others who are using Twitter, Facebook, etc., to meet, greet and give some recognition. Fun idea... but predictably not as simple as it sounded.

You will not be surprised to learn the GC-SAA has strict rules about doing promotions or events on their show floor during their show. After much discussion with their wary but bemused staff, we decided the simplest thing to do was to go the “flash mob” route and do the thing in a way that didn’t violate their rules.

Since GCI is...well, GCI...I had a vision of standing on the back of a flatbed truck in the Las Vegas Convention Center parking lot doing a re-enactment of the scene from “Independence Day” where the president grabs a bullhorn, makes an impassioned speech and rallies the people of Earth to defeat the alien invaders. We would Tweet out the time and place and our friends would flock to us and spontaneously sing “Give Peace a Chance.” Hell, it might turn into a movement!

Well, the movement turned out to be about three dozen folks who gathered to witness our Super Social Media awards under the chilly, darkening Vegas skies. My hopes of a Woodstock-like crowd massed in front of me—old-school Zippo lighters raised in tribute—were a wee bit optimistic (although I think Justin Ruiz may have turned on his iPhone flashlight app and held it up at one point). In the final analysis, when given the option between shivering through an outdoor flash mob or heading to a casino, most folks will choose the latter. Lesson learned...but we’ll be back next year with another TweetUp because it’s still a cool idea.

But, it wasn’t a complete loss because I did get a bullhorn out of the deal. Yup, our marketing manager (the lovely, talented Irene Sweeney) found me one of those battery-powered megaphones to sate my “Independence Day” fantasy. It now sits in my office gathering dust waiting for my next boondoggle or an alien invasion, whichever comes first.

Yet, the dusty bullhorn serves a purpose. Its presence on the shelf next to me is a reminder that GCI has what used to be called a “bully pulpit.” By virtue of the fact that we print and mail 25,000 copies of this thing every month and some percentage of y'all accidentally read it, we are not dissimilar to the preachers of old who briefly command the interest of otherwise sleepy Sunday parishioners with fire-and-brimstone tirades. We have both the opportunity and the obligation to lead through our words and, hopefully, create change.

We try to lead on issues. Last month, every word of the entire issue screamed “It’s time to get serious about managing water resources.” We try to educate. I thought Gary Grigg’s June article on the 10 characteristics of great superintendents should be required reading for every turf student. We pick at the scabs of controversial problems like bacterial wilt. We’ve talked a lot about jobs and the plight of unemployed superintendents and the many qualified assistants who are “stuck” with no way to move up. We document what’s going on in the market with research like our State of the Industry report and the Rating the Industry study that ranked how supers view suppliers. We also shine a bright light on things that matter, like skin cancer, substance abuse, depression and—on a brighter note—awesome groups like the Wee One Foundation, Rounds4Research and the Wives of Turf.

This is the time when we figure out how to use the bullhorn for next year. We begin planning our 2013 editorial coverage by talking to a lot of you guys. Mike Zawacki and I reach out to supers and others who we know will give us the unvarnished truth about what we do well and what we can do better. During that process last month, Mike was talking story ideas with Tim Moraghan and Tim commented that we are at our best when we’re out ahead of the market and dealing with the big topics still bubbling under the surface. Sage advice, thought I.

So what’s your story? What’s bubbling under the surface of your world that you think we might be crazy enough to cover? What’s the next big thing that deserves attention now? Let me know. The bullhorn awaits. GCI
Get closer with the best mowers for undulating greens ever. The new 180 and 220 E-Cut Hybrid Walk Greens Mowers.

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So true
You continue to amaze with your great take on using the communications of today’s world (“Anti-Social Behavior,” April 2012). Love the last line, it’s so true: “If you don’t figure that out, the guy who takes your job certainly will.”

Half the people in a recent poll think Facebook will not be around forever, duh. But something new will keep coming out, and those who stay abreast will succeed. Great writing and great vision on the fact that people want “a little taste of everything.”

Jeff R. Wendel, CGCS
Executive Director
Iowa Turfgrass Institute

One more time
Thanks for posting Adam’s blog (“Plum Perfect,” June 2012). Many of us have said this to ourselves and our staffs. Sometimes we even listen to our own words. It’s a message that bears repeating over and over and over!

Dave Davies, CGCS
TPC Stonebrae
Hayward, Calif.

What a great article (“Plum Perfect,” June 2012) full of truth. I’m glad I had my first child 8 years after being a superintendent or I might not have had enough trials and tribulations to realize what is really important in my life. It’s not those 18 holes of golf I relentlessly tried to make picture perfect every day and every moment I was there.

I hope many people in our business read this article and realize the course will always be there, but our time with loved ones and family passes by us every day. That grass has no feelings or appreciation for what we do, and it never thanked me or told me I was the best like my wife and son do. So who really deserves the attention we, as superintendents, focus our energy and time on?

Scott Giles
Superintendent
Greencastle Golf Club
Greencastle, Pa.

Bullseye
Bob Lohmann’s article, “Design it forward” in the June issue of GCI was right on target. Let’s not get so caught up in the idea that moving tees and eliminating hazards will keep courses economically viable. A well-designed golf course with strategic features will keep golfers interested, challenged and, most importantly, playing. “Playability” does not mean bland.

We are in such a stressful economic time for most courses and, of course, we need to be cognizant of the “time” and “difficulty” issues...
that are a definite reality today. The worry, however, is that “the baby will be thrown out with the bath water”... reducing good courses to a shadow of what they once were. It is so important that a golf architect at least review design changes, as Bob states in his article, so that courses retain their strategic value.

That, coupled with the concept that women want shorter, easier courses is not, I believe, connected to a real understanding of how women think and what they want.

Victoria Martz, ASGCA
Victoria Martz Golf Design Inc.
Jacksonville, Fla.

Go West

Editor’s Note: The following article was written in response to GCs special July Water Issue, especially Bruce William’s piece, “An LA Story.” Enter bit.ly/MEqP9w into your Web browser to check out the July issue’s digital edition.

In the many of the Western states private parties can “own” water, both surface and ground. These waters can and quite often are separated from the land that they may be on. In the West, just like in the old cowboy movies, people fight over water rights. No one can take this property right that is owned by you based upon the greater good as perceived by another. Your use can be regulated based upon seniority and or appropriations, but I am unaware of any takings or condemnation of water rights in the West.

Now, each state has its own set of laws, rules and regulations. Here’s a wild one for you. If my memory serves me right, in the 1990s there were only eight adjudicated basins in California. If you were not in an adjudicated basin, you could drill a well for any use by paying a nominal fee. I think it was about $50 and there was no approval process. You just showed up at the county offices, paid your fee and left with a permit. There were some recording and reporting issues - location, drilling log, perforation detail, sealing the surface - and an inspection. Does this surprise you? It shocked the hell out of me... you couldn’t do that in most of the other states out here. I had just kind of assumed that California would be the most restrictive. Wrong.

I have a working knowledge of water rights based upon my time in the West and some development experience along with knowing some of the big private water “players.” These water guys are a lot like oil guys. They can make literally millions or possibly billions or they can go bust if they buy into a downturn. It’s really interesting.

Armen Suny
Owner
Suny Golf
Colorado Springs, Colo.

Editor’s Note — We made a slight faux pas in editing Jeff Brauer’s May column (“Design for maintenance,” page 70). In the subsection about greens surrounds, the wording should be “6 feet between the green and bunker for turning,” and not “6 inches...” We recognized too late that that would be one heck of a tight turn on a mower.
In every edition, six unrivaled columnists deliver timely and challenging opinions about the issues and ideas that matter to you.
If you're just looking for cut-and-paste online news consisting of a few headlines lifted from a half-assed Google search, don't look here. GCI's newly redesigned website and our new Firm & Fast e-newsletter ALWAYS contain original content like guest columns, bonus research features, snappy editorial videos and think pieces that put the news into perspective. Unlike others, our content always has that great new car smell.
A new tradition

GCI columnist and industry legend Dennis Lyon has been on the mend in recent months after suffering serious injuries as, while taking his faithful pooch Putter for a walk during the last holiday season, he was hit by a truck.

We’re thrilled that Dennis is expected to make a full recovery, even with the significant medical expenses that have built up. Fortunately, one of the perks of the golf industry is that a helping hand is never too far away.

As involved as Dennis has been with the Colorado Golf Association (as a past president, for starters), it’s no wonder they wanted to help him out. He, along with colleagues Ed Mate, director of the Colorado Golf Association; Gail Godbey, secretary and Bill Jewell, golf manager for the city of Lakewood, Colo., have run a “Tradition” tournament since 2004, in which some players wear turn-of-the-century golf attire and use a limited selection of clubs.

This year, the Tradition made a slight change, renamed in honor of Dennis Lyon, raising money to help him with medical expenses with a round at the Meadow Hills Golf Course in Aurora.

“We had 60 people participate,” says Anne Bley, director of finance for the CGA. “There were architects, superintendents – Dennis had touched us all in some way. He’s helped us so much over the years. He’s just the kind of guy you want to do something nice for.”

Besides just the players, his whole family showed up for the occasion, including his children and grandchildren. Dennis himself only played a few holes, since much of his time was spent catching up with people who had been cheering him on in his recovery.

“It was just wonderful to me,” he says. “There were so many colleagues and friends and family members that played.”

The tournament itself raised $5,000 in net proceeds, with an additional $5,000 provided by The Wee One Foundation. After the round, the players had lunch, including several of Dennis’s favorites like hamburgers and cole slaw, and visited.

“During lunch, some kind words were spoken by several people,” he says. “That just meant a lot to me.”

With this kind of backup, Dennis will be back to form in no time at all, we hope.

“I was so seriously injured, and people have just been so kind to me,” he says. “I know I’ll keep getting better.”

Sand swap at Muirfield

For the first time in its 121-year history, the Honourable Company of Edinburgh Golfers at Muirfield has sourced its bunker sand from outside the East Lothian grounds. In an historic move brought about by dwindling home-grown supplies, the club opted for a new, free-draining sand supplied by Hugh King & Co.

The venue began the significant sand-exchange program in March swapping materials in all 148 of its on-course bunkers and three practice bunkers.

“We have always used native sand,” said Colin Irvine, course manager at Muirfield. “Before we moved over to Hugh King’s sand, we quarried sand off the course but the supply was running out and we were beginning to get inconsistencies. It meant sand in some of the bunkers was blowing away while others weren’t draining as well as we liked, so we decided to do an exchange.”

The landmark swap was made 16 months ahead of the 16th running of the Open Championship at Muirfield. More importantly, the sand had to win over the support of the members of the renowned club.

“It had to be free-draining and it had to be the right colour,” Irvine explained. “We tried quite a few types of sand and worked with Hugh King to come up with a sand type that we liked and the members would like. In fact, a lot of people haven’t even noticed the change, which is great. As far as I am concerned, no news is good news.”
From THE FEED

The Lighter Side of Turf is an online Twitter gathering of golf course superintendents who both talk turf and have fun. Greg Shaffer, superintendent at Elcona Country Club, took home an Innovative Use of Twitter award from GCI’s 2012 Social Media Awards – but Andrew Hardy of Pheasant Run Golf Course is curious who all should get a piece of that prize.

Andrew Hardy @pheasantturf
Hey @gtshaffer you better rip that @GCIbusiness award and send it to @TWRyanHoward. He’s a co-founder.

MAO @spartygrad95
Umm, I may not have FOUNDED it but let’s all be honest... I AM THE AWARD.

Greg Shaffer @gtshaffer
Award was created to simply build your self esteem. Looks like it worked. champ

Join the conversation on Twitter @GCIbusiness!
GREENS SPEED? SLOW IT DOWN!

Trying to make your greens faster? Think twice before listening to those members who have a need for speed. Their desire could be your demise. What is it about fast greens that is directly related to manhood?

Nearly everywhere I go, no matter the geographic region, I meet supers who have been tasked by members to make the putting greens faster.

But the non-agronomic individual, typically a low-handicap player, doesn’t understand what he is asking of his superintendent, of himself, or of his golf course. Saying he wants the greens a foot faster, does he understand what it will mean to his game, let alone to lesser-skilled golfers? I doubt it.

And by trying to comply with this request, the superintendent could very well be his own worst enemy. Of course, you want to keep your job and please the members. But where do you draw the line?

I’m tired of seeing superintendents playing green-speed chicken, trying to outdo one another, with or without the resources and at the risk of losing turf. You know who you are. You’re not doing the rest of us any favors by swinging for the fences all the time.

Compare the superintendent who lives at the edge with the one who has been around for a while – and wants to stay around – who wants his customers/members to come back, play again, and enjoy themselves, and who doesn’t want to put any unnecessary stress on his course, especially in the hot summer months. Who do you want to be?

DESIGN. Green size, surface contours, pitch and slope – these design features affect green speed and the ability to set hole locations. Any pre-1960 golf course, built when green speed was not an issue, presents challenges due to undulations and the era’s construction methods.

There’s a big difference as to where holes can be placed on the green – depending on pitch and slope – when you go from 10.5 to 11.5 on the Stimpmeter.

Speeding up greens takes away good-quality hole locations. That makes the game easier for the better player since most holes will eventually end up near the middle of the green.

And while we’re talking about the Stimpmeter, just who is taking the readings? Does this person really know what he’s doing? I can speak with authority on this subject…as can my knees.

PLAYER ABILITY. Here’s something you’ve probably noticed about golfers: They think they’re much better than they really are. That self-delusion leads to an interesting fallacy about greens, that a “fast green” is more challenging. I don’t believe it.

On fast greens, you hardly need to tap the ball to get it moving, so you’re usually putting defensively. Slower greens require determining how hard to stroke the ball, how far will it roll, how much affect break will have – in short, the skills of putting. I don’t know about you, but I like to be responsible for my putting success (or failure), rather than be at the mercy of super-slick greens.

PACE OF PLAY. Faster greens mean slower rounds and a snail’s pace of play, particularly at daily-fee and resort courses. Even private clubs will notice slower rounds on busy days. Consider investing in some lights for night golf.

FIRMNESS AND MOISTURE. Maintaining firm, smooth conditions is definitely the healthier choice for turfgrass than keeping it wet and soft. But firm and fast requires patience and resources, and the firmer and faster you want it, the more time, material, and manpower you need.

Furthermore, the practices necessary to achieve and maintain these conditions are invasive – cultivation, coring, sand top dressing, regular heavy rolling – all need to be conducted when the turf is healthy and growing. So, the faster the greens, the longer and more often the course will be taken out of play. How will your low-handicappers like that?

One more point about resources: Maintaining firm, fast turf requires labor, equipment, and resources means more money. Enough said.

STRESSED SURFACES. Speedy surfaces are stressed surfaces, and it’s when turfgrass is stressed that some of the most common issues rear their ugly heads: nematodes, bacterial wilt/etiolation, and anthracnose. And don’t forget the other effects of stress: hair loss, lack of sleep, and unhappy families.

There was a popular expression when I was growing up that sums it all: Speed Kills. In our industry, it can get you fired.

So slow down your greens for healthier turf – and your sanity. GCI
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TO HOST OR NOT TO HOST?

by Tim Moraghan
GCI's Tim Moraghan breaks down the **pros and cons** of whether your club should host a big tournament.
The downside to all this feel-good emotional outpouring is you now must open your gates to the world.

Every golf course owner, club member, and golf professional who has watched a big golf event on TV or hiked the grounds during a Tour event or major championship has asked himself: "Can our club do this? What would it take? How do we get one?"

I worked at the USGA in tournament preparation for 21 years, during which time I helped review hundreds of golf courses as potential venues. Not surprisingly, I was frequently asked for my recommendations or insights on how to be selected to host a national championship, from the U.S. Women’s Mid-Am to the U.S. Open. Today, as an independent consultant, I'm still assessing golf courses and providing direction to clubs thinking of pursuing an event.

What’s the single most important lesson I’ve learned: Be careful what you wish for. Hosting a significant tournament is a very generous act and can be a terrific experience. However, it can also be a nightmare for everyone involved.

There is no definitive book or website on the subject, no magic formula to help you decide if hosting is a smart or stupid decision for your club/course. But let’s pretend we met at a cocktail party and you, Mr. or Mrs. Club Member, asked me if I thought it was a good idea for Immaculate Conception Country Club to throw its hat into the ring to host a USGA or PGA, LPGA, Nationwide, or other professional event. How would I respond?

I’d grab another Grey Goose and run down a list of questions that everyone at the club must ask themselves, the literal who, what, where, how, when, and most important, why! Answering “no” to one or more of the following indicates areas of potential concern or probable issues with your club, course, or membership/staff.

1. Is a majority of the membership in agreement with the “sub-committee” that advocates hosting an event?
2. Will you allow the host organization’s to alter your course or club facilities?
3. Are you willing to open your property to the public?
4. Is the club able to stand the intense scrutiny of media, social organizations, environmental agencies, and community politics? Do you want to?
5. Does the club have the financial resources to make design and structural changes to the golf course and property, and then keep them in place after the tournament is gone?
6. Will the membership be willing to give up use of its golf course and facilities for one to six months during the preparation, execution, and post-event clean-up?
7. If your club has another course, will the membership accept its probable destruction as it becomes parking lots, television compounds, tents, trailers, roadways, and vendor storage?
8. Does the club have the community reach and resources to attract enough volunteers to assist in holding the event?

But let’s pretend we met at a cocktail party and you, Mr. or Mrs. Club Member, asked me if I thought it was a good idea for Immaculate Conception Country Club to throw its hat into the ring to host a USGA or PGA, LPGA, Nationwide, or other professional event. How would I respond?
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If I’ve seen it once, I’ve seen it a thousand times: Clubs see hosting as a chance to reap a windfall that will keep them solvent for years to come.”

and dedicated members to give up their personal time for two to four years? If not, are you willing to hire those people?

Will your members/staff give up their family and personal time for countless meetings, site trips, and managing the event?

Is your staff professional enough, capable enough, and able to withstand the pressures and stresses of hosting an event? More on this later.

Is the membership willing to engage in a few years of tactical butt-kissing – of association higher-ups, association not-so-higher-ups, on-site staff, outside consultants, vendors, volunteers, and eventually even the players?

Those are just the questions I’d think of while chatting over hors d’oeuvres. I’m sure you can come up with others, many specific to your club, resort, or facility.

Now let’s say you’re leaning toward hosting. Good for you! Or is it? I’m not trying to dissuade you, but strongly suggest that you consider pros and cons in the following arenas.

Recognition and Visibility

**PRO** Hosting a national event brings with it prestige and many other positives for your club, its members, and guests. Hosting a major places your facility at the center of the golf universe from the moment its selection is announced until the last putt drops on the final day of play. Then there is the glow of international television and other media exposure.

The club will gain the support of local businesses and emergency services departments. Everyone associated with the club will gain hundreds of new best friends, especially if they want tickets. If you’re in a small market without other major sports franchises, your event will become the center of community attention and economic impact, a rallying point for local businesses from bagel shops to country inns. Neighboring towns will want to be part of the action, as well. It’s all pretty heady stuff.

**CON** The downside to all this feel-good emotional outpouring is you now must open your gates to the world. The media will look into your membership policies and financial solvency. Even small, local events should expect to draw investigation and inspection.

Clubs that used to host big events have taken themselves out of contention, preferring to be left alone: Cases in point include Cypress Point, Butler National, and Shoal Creek. I sometimes wonder why Augusta National continues to put up with the scrutiny.
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Golf Course Improvements

**PRO** Collaborating with a major golf organization can lead to terrific enhancements to your course. They may engage a world-famous architect to review your property, study its history, and make long-overdue and desired changes to its infrastructure. Club committees and staff likely will work side-by-side with experts in rules, set-up, operations, and agronomy who will raise the profile of your club and unearth the hidden gem that is your course.

**CON** It's often the case that great things happen to the host club but without anyone from the club having any real input. Disagreements can surface about what is architecturally correct or the original architect's intent. Outside staff moves in and takes over, ordering where to place tents, parking lots, and TV compounds, while issuing decrees on the expected agronomic conditioning—often without regard to local practices, environmental sensitivity, or the weather. (The staff is focused on one week; the rest of you have to think about the other 51.) Everything is fair game for change, from the front entrance to the type of turf on your greens.

Money

**PRO** If I've seen it once, I've seen it a thousand times: Clubs see hosting as a chance to reap a windfall that will keep them solvent for years to come. As a result, the shared sacrifice can inspire teamwork and harmony among a membership. The expected profits are earmarked for necessary repairs and upgrading, relieve pressure on members for dues increases and assessments.

**CON** Don't start spending too quickly: From signing a contract to seeing dime one can take years. And, if the event does make the club money, members may want to do it again as a way of making even more, which can become a dangerous - and not always prosperous - cycle. Furthermore, in this weak economy promised gains don't always materialize. Budgets shrink, sponsors don't buy in, attendance is weak... Your club may make a much smaller profit than anticipated, even if the host organization pays for requested changes and improvements. Can you afford the worst-case scenario?

(continued on page 52)
In the **Pythium Zone**?

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**Terrazole**
Turf and Ornamental Fungicide
I recently finished my 17th and final internship visit; a one-day trip to the West Coast where I spent more time on the plane than I did in California. These trips have been ongoing since mid-May and during this two-month period, I’ve been able to see first-hand some of the problems superintendents have been dealing with.

**EARLY IN THE SEASON.** My first trip took me south to North Carolina where things were really just getting going. The obvious diseases like spring dead spot and large patch were apparent. However, an unusual problem that was observed on at least one course was caused by an early spring green up of the warm-season grasses followed by a few hard frosts. The limited rooting caused some serious damage to the newly emerging roots and setback the turf into the season.

In many areas where cool-season grasses are grown, the spring was about 3 to 4 weeks ahead of schedule and the Poa jumped early making seedhead control difficult. As for diseases, red thread was as about as severe as I’ve ever seen it and many courses were dealing with it. In fact, some courses had it so badly significant damage to the fairways occurred. Dollar spot was also early and although it came on fast, it fizzled in many areas until later in the season.

**DISEASES HITTING THEIR STRIDE.** June was met with a screeching halt to disease activity. Trips around the Philadelphia, New York, New England, Canada and Chicago were, however, met with different biotic and abiotic challenges. Although several diseases like brown ring patch, dollar spot, anthracnose and that nagging red thread were causing some minor problems, Mother Nature was the big story.

On the East Coast, we were getting some decent rains, which seemed to come in a timely and appropriate manner. In the Midwest, however, the burnt and dried-out grass could be seen from the airplane’s window seat. These conditions were keeping diseases to a minimum, but keeping up with wilt and drought became difficult. Add the record-breaking heat and supers had their hands full.

**BACK ON THE HOMEFRONT.** During my routine absence from the Penn State campus (trust me, it was a good time to be away), diseases started to ramp up in our test plots. Anthracnose was a major problem, and although we have many options, one misplaced application – usually with a fungicide where resistance is an issue – and the control breaks down quickly. In addition to the usual suspects, summer spot was severe and thatch collapse, southern blight, and fairy ring made rare and/or impressive appearances.

What lies ahead? Don’t let your guard down. This is the perfect time to reflect on what actually happened this year in terms of pest pressure, what worked and what didn’t, and what changed in your program that may have influenced activity.

In reviewing pest-control programs, it is important to know the major problems at a particular golf course and even within specific areas of the course.

Now and into September is a good time to fill in the timeline of what happened at your course this season. Although I have been fortunate enough to see a wide range of problems, these issues aren’t the same for everyone.

Basic recordkeeping principles are an essential ingredient when it comes to planning for next year. In reviewing pest-control programs, it is important to know the major problems at a particular golf course and even within specific areas of the course.

Don’t rely on your memory when it comes to building next year’s program. Consider the specific issues dealt with this year, the conditions surrounding those issues, and past historical data to “fine tune” rather than radically change your program year after year. These small adjustments may be the difference between a successful season and one you wish you could forget.

**JOHNNY TURF NERD**

John E. Kaminski, Ph.D. is an assistant professor, Turfgrass Science, and director of the Golf Course Turfgrass Management Program at Penn State University. You can reach him at jek156@psu.edu.
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"One-hundred-plus acres can be difficult to manage with a skeleton crew, but through prioritization and planning a good superintendent can meet the facility's needs."
Everybody is looking for value today, and this is no different in the management hierarchy of golf course facilities. We all work for someone and that may be a general manager, green chairman, board of directors, owners and management companies. Thinking you are doing a great job for your employer is no longer relative, what matters is how to position yourself as the Most Valuable Person in the management and operation of the facility. In order to do that you need to understand what the employer values most.

Some employers may place greater value on one skill set than another, but consistently I have found several skills to be the major factors for hiring, advancement, compensation and retention.

**LEADERSHIP.** There are many moving parts to any golf facility. Yes, it takes a golf course in good condition to attract customers but there are a variety of other business activities that make a facility a success. Ownership has to deal with marketing, administration, cash flow, food and beverage and golf programs. There is little time left for employers to be highly involved in the day to day operations of the golf course.

Under normal circumstances a budget is approved prior to the start of the fiscal year. It is expected that the conditions of the golf course will match the financial support. This doesn't
happen in a vacuum and it takes leadership to make this a reality.

Most superintendents are given the task to hire their team and develop them into a cohesive unit that can effectively and efficiently provide great playing conditions daily. To do that, leadership skills are essential. Surrounding yourself with the right people and having a vision for the current and future condition and development of the golf course is imperative.

SKILLED MANAGER. Scheduling people to get tasks done is important but much more important is analyzing operations to ensure efficiency. One-hundred-plus acres can be difficult to manage with a skeleton crew, but through prioritization and planning a good superintendent can meet the facility’s needs.

Getting the most done while reducing costs is a major challenge. The ability to demonstrate the plan to do this and implementing such a plan brings tremendous value to the employer. For the most part the days of taking on a new job and seeing a budget increase are over. More often we see budget reductions, however, with increased expectations of conditioning and quality.

It takes a very skilled manager to pull all this off. Sell yourself based on the ability to do this and then be able to show progress that you can share at your annual reviews. If you can do this you will be given strong consideration for MVP.

DETAIL ORIENTED. Current trends show that to be considered a superstar in the business you have to do more with less. Many superintendents do not have the luxury of having ample staff to keep the golf course as detailed as they once did. This does not mean that you can’t have attention to detail. Instead, you just have to prioritize the time and cost to take care of such details and also communicate that message to the golfers so that they understand the changes.

My friends at Valley Crest Golf Course Maintenance like to use the term “from the middle out.” What they are referring to is the prioritization of maintenance. Certainly greens, tees and fairways are priorities. But if you were to paint an imaginary line down the center of each hole and then work outward from that line… is it really necessary to manicure every inch of the golf course daily?

Many facilities that formerly mowed rough twice a week are now opting for just a weekly mowing. Out of play areas that formerly were groomed are now turned into low maintenance areas. Mowing of tree bases may be done less often along with tasks like blowing clippings off of cart paths daily. Every bunker may not need to be raked daily and some are only raking 3-4 days per week with touchups in between regular raking.

Edging of cart paths is something that makes your golf course look neat and clean but in lean times it is not a necessity for good golf. Tough decisions need to be made to give up a few of the luxuries that budgets just 5 years ago provided for.

When details on the golf course are eliminated it is absolutely necessary to let the golfers and employers know the plan and how it affects them. Given the alternative of lesser quality greens vs. edging cart paths I am sure that all would agree that the greens have the priority. Communications should strongly say that the superintendent does not have less attention to detail but that he and his team are engaging in cost cutting measures to ensure the economic viability of the facility.

PROBLEM SOLVER. Years ago my friend, Roger Stewart, shared with me a sign that was hung on the wall behind his General Manager’s desk. It stated, “Bring Me Solutions, Don’t Bring Me Problems”. That philosophy has always stuck with me. Employers want you to be able to solve almost any problem that you are confronted with. If you have to go to them to get the solution to golf course problems then they may not feel you are bringing value to the workplace.

Nearly every problem has a solution. It is up to us to find the solution or bring in...
people that can help us to solve problems. To instill confidence we should always be able to quickly look at problems and answer some simple questions that will always come up. Be prepared, for example, that when you lose turf you will be asked these questions:

- What happened?
- What are you going to do about it?
- When is it going to be right?
- What will it cost?
- What can we do to prevent it from happening again?

Problem solvers should be able to build the confidence that their employer has in them if they can quickly communicate those things even before the questions are asked.

FINANCIALLY RESPONSIBLE. Zero-base budgeting is more common today than ever before. The days of increasing the annual golf course budget by the CPI are over. Some line items may increase by 20 percent while other line items may actually go down. If the facility is experiencing a reduction in play, dues, outside parties, etc. then the request of the employer may be to reduce the golf course maintenance budget.

As a sound manager it will be expected that the superintendent will develop a new plan to provide the best conditions with the budget they are provided.

Most employers do not want to get involved in the day to day operations of how to do that. Great value can be shown to the employer by being positive and a team player to accomplish the things that will make the facility successful over the long-term.

“Certainly greens, tees and fairways are priorities. But if you were to paint an imaginary line down the center of each hole and then work outward from that line, then is it really necessary to manicure every inch of the golf course daily?”

COMMUNICATOR. In the movie “Cool Hand Luke” there is a famous line that states, “What we have here is a failure to communicate.” A Most Valued Person would be someone that doesn’t wait to be asked what is happening. Instead, that individual has a method for communicating things in a strategic and timely fashion.

The use of weekly updates to the employer is imperative. Informal meetings can take place daily, but it is extremely important to set aside a half hour each week to share information with your employer.

Remember, don’t just bring problems to the meeting. Be sure to talk about your successes that week or month and that will elevate you in the eyes of your employer. Getting feedback from your employer is as important as filling him in on your activities. Listen carefully and be sure you take some notes. You will quickly learn what your employer’s priorities are. It is the ability to align yourself with the direction to accomplish these priorities that will earn you an MVP spot that employers are looking for.

THE TOTAL PACKAGE. Employers are looking for the person that will give them “the most bang for their buck.” Identifying the needs of the employer is imperative. Things have changed during the 40 years I have been in this industry. It used to be about keeping your golf course in good condition and staying within budget. No doubt those are still things that employers expect. But there is so much more to it today to create a long term value to the employer.

Build the skills that are necessary for success. If you don’t know what your employer is looking for in a valued employee then you need to ask them. Be sure to review those items throughout the year and see if you are working on their priorities and that you have mutually aligned goals for the facility.

Realize that consideration for MVP is each and every year. Never rest on your laurels. Work toward earning that designation in your 20th year as much as you did in your first year of employment. GCI

Bruce R. Williams, CGCS, is principal for both Bruce Williams Golf Consulting and Executive Golf Search. He is a frequent GCI contributor.
MONROE DOCTRINE

GEOFFREY CORNISH WAS ONE OF US

ne of the best friendships I have had in my life was the result of chance. Geoffrey Cornish had traveled from his home in Amherst, Mass., to Milwaukee to speak at our annual Wisconsin Golf Turf Symposium, and at the meeting’s end, he had the chair ask if anyone was going to Madison. I hustled to the speaker’s podium and offered him the passenger seat of my F-150. Mr. Cornish quickly accepted, noting, “It will cost me $50 to fly!”

Although at that moment I didn’t know, but by the time we reached our town one and a half hours later I realized what a lucky break had fallen my way. This guy was going to be a lifelong friend of mine. That was back in the mid-1980s.

Geoff wanted to go to Madison to visit close friends of his and Mrs. Cornish – Professor Ted Kozlowski. Kozlowski left UMass to accept a faculty position at Wisconsin, and Geoff didn’t want to miss a chance to see them. As it turned out, their home was close to my golf course, and I dropped Geoff at their front door.

There wasn’t a silent moment on our trip. My interest in genealogy had led me to New England any number of times, and that led to an annual leafpeekers trip each fall. Mr. Cornish had become the quintessential New Englander after spending his early years in his native Canada. He was so easy to talk to, and I later learned why. His early career was spent with Canadian architect Stanley Thompson and Geoff worked as an apprentice architect, a construction foreman and as a superintendent. He knew golf course management inside and out. And in 1940 he was the golf course superintendent at Winnipeg’s St. Charles CC.

We were both veterans; he was of the greatest generation. I never was able to draw much from him about his WWII experience other than his service was with the Canadian Army and he went into mainland Europe on the first day of D-Day. He fought his way across Europe and into Germany, leading troops as a Major. In my eyes, that service made him a real hero. Like American boys in WWII, his term of service in the military was the duration of the conflict; he was in the service from 1940 – 1945. He suffered an injury but would never give me any details about it. Like so many of that generation, he simply didn’t want to talk about it.

Geoff earned his undergrad degree in soil science from the University of British Columbia before the war, and a M.S. degree from UMass in agronomy.

“Many times I tried to get at “How many courses have you designed?” He never really gave an answer.”

I always disagreed! I had a chance to walk a piece of property under consideration for a golf course with Geoff. I had heard about his “quick pace” but I had no idea how fast that really was. And he was talking the whole time, leaving me behind and exhausted despite his 30-plus years my senior.

I love stories Rod Johnson tells from his time working with Geoff on a master plan for Pine Hills CC. Geoff was hesitant to tackle the job – he was busy in New England and Sheboygan was a long way from Amherst. Rod finally persuaded him by sending him a fresh air photo of his golf course and a premier gift box of Wisconsin cheese. Geoff’s response was typically brief – “You win.” Two other habits point to Mr. Cornish’s frugality – he painted dots rather than lines “to save paint.” And he would travel with only a duffel bag – “it has everything I need, including a sport coat for the board meeting.”

Ron Whitten and others have written about his disinterest in money, an unusual and refreshing attribute.

Many times I tried to get at “How many courses have you designed?” He never really gave an answer. But there were plenty – his partner and friend Mark Mungeam estimated it at 200 or so. Geoff never knew what to count – new designs, remodels, added nine, etc. – so he simply didn’t count. I am sure it didn’t really matter to him.

For years, his address was simply “Fiddlers Green, Amherst, Mass.” Later, the post office must have insisted on his street and number. His home faced a village green in an area of southeast Amherst. A church was on one end of the green and Geoff’s green shuttered white house was next to a comfortable library. My wife and I loved to stop in the fall; he always...
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Micro aerification proponents are battling a reactive mindset among superintendents. But they hope to see a shift once the industry understands the benefits.
Some might say it's human nature to be reactive rather than proactive. But a golf course superintendent being that way when it comes to slitting and venting greens is asking for trouble, says Michael Hileman, field and technical specialist at JRM Inc. Turf Technology.

"The solution to needle tining and non-disruptive aerification is to be proactive with it," says Hileman. "The guys we see have success open those greens up with core aerification in the spring and then repeat that in three-week intervals once the greens heal up."

The reason many superintendents tend to be reactive with micro aerification, says Hileman, is because of the fear of losing business due to unsightly greens.

"Guys are hesitant to needle tine greens more because they're trying to keep golfers in the door," he says. "Word of mouth is that they have great greens, so they're worried that the little holes on the surface will destroy their reputation."

The main focus, Hileman says, tends to be how the turfgrass looks on the outside, but the fact is that the only way to achieve a pleasing aesthetic look is through healthy roots.

"Roots grow because they're allowed to grow somewhere," says Hileman. "You can put nutrients in them on whatever program you follow, but they have to have somewhere to grow. So the more you stimulate roots early in the season in good growing weather, when the weather heats up, you'll have more underneath to protect yourself.

"There's a growth hormone in roots, and you want to get that hormone stimulated. One way to do that is to split the root, which is the same thing as pruning a red bud. The more and more you can work them, the more branching you'll have."

With the new technology out there, however, superintendents should fear not about pockmarking their pretty greens. There are machines now that allow superintendents to tighten up spacing from tine to tine, which allows them to put more holes per square foot. Stimulate roots early during good growing weather so when the weather heats up you'll have more underneath to protect yourself.
Ultra Dwarf TAKEOVER

Ultra dwarf turfgrasses have been taking over bentgrass greens in the south for a variety of reasons, but one thing superintendents have to watch for is thatch build-up, which can be aggressive in these turfgrasses. That’s why aerification is so important.

With the extended growing season of eight to 10 months in Central/South Florida, organic accumulation is a big concern, says John Foy, director of the USGA’s Florida Region. Therefore, core aeration is a big part of keeping that accumulation at a manageable level.

“The standard program that the vast majority of clubs in our region will do is three core aerations during summer,” says Foy. “We put it in terms of the total amount of surface area impacted by the aeration program. Based on what I’ve seen, the coring program needs to impact 20 to 25 percent of the total surface area through summer. So, depending on tine size and holes per square foot, you’re looking at three corings at least.”

Because superintendents in Central/South Florida are doing enough coring during the summer, a lot of them don’t do venting. But Foy recommends it.

“We absolutely encourage and push to get people to do venting during the fall, winter and spring when they’re not coring – that is, every two to four weeks,” says Foy. “Unlike coring, you can’t work any sand back in with venting, so you only get about three weeks of benefit from it.”

When ultra dwarf was first rolled out in the late 1990s, the recommendation was to minimize nitrogen due to its propensity to form thatch. But Bryan Unruh, professor and associate center director of the West Florida Research and Education Center at the University of Florida, says he believes that most people have determined that advice as faulty.

“[Ultra dwarf] is on the hungry side, so there’s a fine balance between feeding it and not allowing it to get out of control from a thatch build-up standpoint,” says Unruh.

One characteristic of ultra dwarf is that it tends to be very “stemmy,” says Unruh. The definition of thatch is an intermingled layer of living and non-living stem tissue, but with ultra dwarf, there is more living than non-living stem tissue.

“Consequently, that build-up of thatch tends to accelerate, so that’s why research has centered on not letting that thatch get ahead of you,” Unruh says.

When ultra dwarf first came out, Unruh says there was a strong recommendation to vertidrain it, but he believes very few superintendents are doing that now due to the aggressiveness of the machine.

“You want to prevent thatch accumulation from the get-go as opposed to trying to remunerate the problem once it’s there,” he says.

As far as aerifying ultra dwarf, the practices are the same for any other kind of turf. Unruh says in Florida that amounts to four times per year, which is no different than the old tifdwarf. The only difference, he says, has been to increase the surface area that’s impacted by punching more holes per unit area.

They can then aerify every three to four weeks and not worry about affecting ball roll.

Hileman is seeing this “proactive not reactive” philosophy starting to catch on with superintendents in the transition zone in the south, plus with anyone in the north who has bentgrass greens. He credits the big bentgrass loss a few years ago as one reason why guys are starting to get it.

“We go back to the same logic: I put a bag on your head, you won’t be able to breath. With turfgrass, it’s the same concept,” says Hileman. “It’s a living, breathing life form down there that needs air. People are starting to see that if they get out there and disrupt [the roots] every three to four weeks, they’ll be able to get through the heat and survive come summer.”

Hileman feels the weird weather this year has been a double-edged sword when it comes to micro aerification. On the one hand, good weather promotes aerification. On the other, some superintendents think that if they get good weather in the spring and the greens look great and the nighttime temperatures are down, they can skip the aerification process.

“I go back to being proactive,” says Hileman. “It is bound to heat up in summer, and if you have better growing weather for longer periods of time, that’s more of a reason to take advantage of and go after those hormones active in the plant with quarter-inch needle tines and bayonet tines and cross tines that won’t disrupt the roll of the ball.”

If how many times he aerates is any indication, Joe Wachter seems like he understands the importance of this cultivation practice. Although the superintendent of Glen Echo Country Club in St. Louis, Mo., doesn’t have a machine that will do any slicing or slitting, he employs a combination of hydrojetting and vertidraining with needle
Supers are trying to keep golfers in the door. Word of mouth is that they have great greens, so they're worried the little holes on the surface will destroy their reputation.

"If the holes do stay open, we explain what's going on to the members via our blog or an e-mail blast," says Wachter. "We have 80- to 100-year-old greens with no drainage, so if it's something we feel we need to do to help save the greens and keep them as healthy as possible, they're all for it."

If Wachter can't accomplish the task in one day, he tries to finish at least before the morning play comes around on Tuesday. However, he normally doesn't have a problem - with three hydrojet machines, his crews were recently able to cover 120,000 square feet and finish at 10 a.m. after starting at 5:30 a.m. They'll usually roll behind the machines to smooth everything down, then mow the next day. With the vertidrain unit, he has to be more careful due to it being slightly heavier.

"I generally won't mow till the second day after vertidraining because, in August, you don't want to scalp [the greens] after opening them up," says Wachter. "If the root structure isn't really strong, we'll give them an extra day of rest and members won't know any different."

Wachter generally opens up the greens every three to four weeks, stretching it further depending on if they're taking water or not.

He and his crews recently hydrojetted the greens on a 105-degree day with 15 percent humidity, and they took advantage of it and poured water on them with hoses because the greens were taking it. And, with the member-guest tournament three weeks away, the timing was perfect.

Two weeks after the tournament, Wachter will vertidrain because he can get 1½ to 2-inch spacing, but if the greens are too soft he'll favor hydrojetting even though it will mean eight to 10 hours of labor for his crew.

Jason Stahl is a Cleveland-based freelance writer and frequent GCI contributor.
TREE PLANTING — GOLF COURSE STYLE

In 2005, I wrote about golf course tree planting, and it's time to revisit both design — this month — and installation — next month — in time for the fall tree planting season.

While some golf courses are engaging in tree-reduction plans, in many cases, it's because the course planted them in the wrong quantities and locations over the years, demonstrating the need for a good long-term tree and landscape plan. Some clubs add trees by committee, others use landscape architects, and while talented and well intentioned, landscape architects often know as little about locating golf course trees as the members.

Ideally, a golf course tree planting plan should be prepared by a golf course architect — many of whom are also landscape architects — who can consider all aspects to your tree planting master plan, including golf, golf course maintenance, and club politics.

Some general thoughts I have used in golf course tree planting over the years.

IT'S A GOLF COURSE. Strategy and playability trump landscape beauty. That small tree planted on the inside corner of the dogleg eventually blocks shots or narrows the play corridor. Only golf course architects know where trees aid safety, frame or block views and control traffic.

IT'S NOT AN ARBORETUM. Turf health also trumps landscape beauty, making trees of secondary importance to shaded turf. I use light density, high branching trees (having once knocked myself off a gang mower by not noticing a low-hanging limb) and avoid trees with brittle limbs and short life spans — like Cottonwoods. The same goes for attractive, but high-maintenance trees, knowing how low trees are on the golf course maintenance totem pole.

IT'S NOT AN ARBORETUM, BUT... While I usually avoid the highly flowered Augusta National look, sometimes, landscape accent is required. I strive to limit ornamentals to where they will get multiple views, while avoiding slow play and lost golf balls. I once took a non-golfing, summer intern to a meeting for experience. Ignoring my instructions to remain silent, he suggested planting low branching pines in play areas to cause lost golf balls, which was exactly opposite of what the public golf course owners wanted to hear!

IT'S NOT A SOD FARM, EITHER, BUT... The agronomic needs of golf turf takes precedence over trees, which must be located to provide early morning sunlight at tees, greens and high-traffic, cart-use areas.

WATER CONSERVATION. Trees often require more irrigation than turf, so landscaping must fit in the context of your irrigation and water conservation plans. Landscape irrigation will move more to drip irrigation, which should force tree planting into tighter clusters. I favor this anyway, as the straight lines often planted on golf courses look artificial. In some areas, water quality affects tree foliage, also requiring drip irrigation.

I strive to limit ornamentals to where they will get multiple views, while avoiding slow play and lost golf balls.

LONG-TERM EFFECTS. If done as part of a long-term master plan, I consider not only where the greens and tees are now, but also where they will be at the completion of the master plan.

LONG-TERM EFFECTS, PART II. A tree management plan allows for aging and dying trees. Maintaining a healthy tree community requires annual replacement of 2 to 3 percent of your trees.

Long-term thinking also reduces the emphasis on currently popular — but unproven — trees... think Dutch Elm disease. I have seen young, wet-behind-the-ears landscape architects ignore hard-learned lessons in using borderline hardy trees in tough climates. Old timers know extreme conditions killed off similar trees well before the “young pup landscape architects” were even born.

CLUB POLITICS. Given the sensitivity towards tree issues at most courses, I find that golf course architects are more in tune with the course politics, and probably better at guiding the decisions through your political process.

In short, don’t forget your trees in long-term facility planning, and don’t forget that your golf course architect is probably the most conversant in how trees affect the golf experience. GCI
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Industry insiders take a look at encouraging new products and whether they’re final solutions for Poa problems.

by John Torsiello

A

weed is a plant we have not found a use for, says Robert Walker, professor of soils and agronomy at Auburn University. “There are a number of superintendents who have found a use for it and thus it is not a problem,” he says. “Most golfers have a mind-set of what a perfect turf is; uniform mono-stand with an excellent green color. Poa infestation is totally contrary to this mind-set; poor color, clumpy, disease susceptible, abundant flowers.” Hence, the ongoing efforts to eradicate Poa annua. The battle waged by superintendents against Poa goes back almost as long as there have been golf courses. Commonly found in both cool-season and warm-season regions where it attacks turfgrass, Poa is difficult to control and seems immune to almost everything the well-armed superintendent throws at it. Chemical and cultural techniques work to some degree, but the insidious plant seems to simply rebound despite what is done.

Significant help may be on the way. According to Walker, Moghu Research Co. of South Korea has launched a new herbicide in that country for selective Poa control on bentgrass putting greens. It is a post-emergence-applied herbicide with some pre-emergence activity. It controls both perennial and annual biotypes of Poa. The common name of this herbicide is methiozolin.

“I first tested it in March 2009 at Auburn’s turfgrass research facility for Poa control in Crenshaw bentgrass and continue to evaluate it,” says Walker. “Methiozolin will be marketed in the US under the trade name PoaCure. My results with methiozolin for Poa control in bentgrass has been outstanding. Four to six applications at 0.5 lb ai/A has provided 95 to 100 percent control of perennial Poa on bentgrass greens, which have shown to have unbelievable tolerance to methiozolin. Drs. Shawn Askew at Virginia Tech and Jim Baird at University of California, Riverside, have obtained the same results with similar programs.”

Walker claims PoaCure will “revolutionize” Poa control on bentgrass putting greens. Additionally, Bermuda grass, zoysiagrass, Kentucky bluegrass and other turfs have displayed excellent tolerance to methiozolin.

“I have also demonstrated excellent control on Bermuda putting greens of ALS resistant Poa. Bentgrass is the current emphasis, but as ALS resistance increases it will become a valuable tool for warm-season grass managers.” Moghu Research’s goal is to have US labeling in 2015.

“This year I saw a putting green go from 20 percent bentgrass to about 50 to 60 percent bentgrass in a period of six weeks (six weekly applications),” says Aaron Hathaway, a researcher assistant at Michigan State University’s Hancock Turfgrass Research Center. “I never saw any bentgrass injury. I’m not sure about safety on other cool season turf grasses or warm season turf grasses just yet.”

Askew says methiozolin can be “a game changer,” adding, “It will be used on putting greens and other turf sites. Exciting things are happening with this compound across the country.”

Matt Shaffer, superintendent at Merion Golf Club in Ardmore, Pa., has been testing PoaCure and reports the product to be “amazing.” He adds, “It takes the Poa out very slowly. This way the putting surfaces aren’t compromised while the bent grass grows over the spots. I have used everything and done some pretty risky things to eliminate Poa. It wasn’t frustrating some of the time it was frustrating all the time. Some chemistries work well but they become less effective the longer you use them and the rates get so high it is cost prohibitive.”

Shaffer adds he hopes PoaCure ends up being a long-term solution for Poa control.

Askew also pointed to another product a potential valuable tool in a superintendent’s arsenal in the war against Poa annua.

“Xonerate (amicarbazone (Arytsta)) just hit the market. I don’t recommend it for greens but it is showing promise for green surroundings and fairways. Turf injury is weather and turf maturity dependent, but the product
The cure for what ails you
TURF HEALTH

works well on Poa. It is best to get familiar with it before large scale use."

"Amicarbazone is a promising new postemergence herbicide that is labeled for use in cool and warm season turf," Hathaway says. "Amicarbazone is similar to other Poa-control products, like Velocity, in that it must be applied many times during the growing season and works best as application intervals are minimized (supply at seven-day intervals)."

Dr. Fred Yelverton, professor of crop science at North Carolina State University, points to products on the market and in the pipeline that can offer "some" help with Poa. But as with any new product, or one that a superintendent does not have experience with, he recommends that a product be tested on a nursery green or a practice green prior to taking it onto the golf course.

"The biggest issue going forward is going to be does a superintendent actually want to kill the Poa annua. This may sound odd but in my view this is a more important question than what product to use. We are at the point (or will be very shortly) where we can take out Poa annua in bentgrass. But the question is...do you really want that? If someone has 20 to 30 percent Poa annua in bentgrass, then the decision is easier and is more likely to be 'yes.' But if you have 70 to 80 percent Poa annua, then the answer is more likely 'no.'"

As for enhanced cultural practices, Hathaway says Poa competes well in wet, compacted, and highly trafficked areas. Limiting nitrogen and water — especially in the heat of the summer — can give the advantage to other turfgrasses (bentgrass or Bermuda grass) as Poa does do well in these situations.

"There is always an ebb and flow in the advantage of one turf species over Poa. Bentgrasses (especially certain cultivars, like Penncross), for example, out-competes Poa in high heat and dryer years, while Poa gains the upper hand in cooler weather and wet periods. The key is to hit Poa hard when it is vulnerable (Velocity works best in the hottest part of the year) and to minimize the rise of Poa in the cool weather of the spring and fall."

Traffic can't easily be limited, but superintendents can concentrate on certain things like making putting greens bigger and moving pin placements consistently.

Matthew Sousek, University of Nebraska, Lincoln, plant science research technologist, has several suggestions to control Poa annua through cultural practices. Superintendents may want to raise mowing heights; limit fall nitrogen applications; keep turf dry; aerify in summer when germination is not favorable; avoid any fungicides that control anthracnose or summer patch; and limit application phosphorus, which promotes rooting of young plants (Poa) and seed head production.

Walker opines, "It's all about preventing the introduction of seeds and/or preventing seed production. Anyone who has played golf when there is dew is on the grass has surely noticed Poa seeds clinging to the heels and soles of their shoes. As players move from course to course there is always a potential of introducing seeds."

In the South, seeds are probably introduced in Poa trivialis, bentgrass and perhaps perennial ryegrass seeds. Purchasing quality seeds is a good step towards prevention. The best seed prevention is to control Poa on fairways, roughs, surrounds and tees with a dense competitive turf and supplement this with effective herbicides.

Says Walker "Poa invades thin, weak turf readily. Herbicide choices are much better for all areas of the course than putting greens."

Says Sousek, "For some it is feasible to reduce Poa annua with the products on the market today, although it comes with a cost every year to prevent it from coming back. When stands of Poa annua are greater than 30 to 40 percent it may be best to do a complete renovation of the green and or live with the Poa and manage it to keep it alive. As of now it is impossible to completely eradicate the problem, rather we have to manage it so that it stays at acceptable levels at less than five to 10 percent, depending on the course's tolerance level."

Theoretically, having a Poa-free golf course will reduce the number and intensity of pesticide applications, hand-watering and other labor intensive efforts. The savings are balanced by the cost of Poa control, which is often substantial.

In climates where ice cover is a concern, having large percentages of Poa on the golf course could mean unplayable conditions and reestablishment of the turf if ice cover is more than 40 to 45 days. A Poa-free golf course will also allow for drier conditions since other grasses have deeper root systems and can tolerate surface dryness better than Poa.

Poa annua may be around forever. But the very near future may hold some exciting prospects for its control, if not eradication, when and where desired. GCI

John Torsiello is a Torrington, Conn.-based freelance writer and a frequent GCI contributor.
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THE ART OF STRATEGY

Steve Johnston, my colleague and the founder of Global Golf Advisors, says this about the importance of strategic planning: “The lack of a strategic plan may not be as dangerous as not having fire insurance, but it’s certainly playing with fire.” Evidently, based on the turnout last month for my first Golf Course Industry webinar, a number of people in our business agree. For anyone unfamiliar with strategic and business plans, here are five key points.

1. A strategic plan is different from a business plan. Strategic plans are owned by the board of directors. Boards manage strategy; management implements tactics. A strategic plan guides the business plan. What does the club plan to do? The answer to that question forms the essence of the strategic plan. Goals and objectives are clear and actionable, and milestones and measurements so management can tie actions, resources and schedules to the successful achievement of the goals.

2. The strategic plan guides the business plan. What does the club plan to do? The answer to that question forms the essence of the strategic plan. Goals and objectives show a strong understanding of the customers the business targets. They gain this understanding from market research.

There are numerous resources to help club management develop the marketing analysis section of an effective business plan. I suggest starting with the National Golf Foundation (ngf.org) for a broad understanding of market trends. The NGF and PGA of America have built a solid base of data stemming from the PGA Performance-Trak platform (pgalinks.com). The Sports and Leisure Research Group (sportsandleisureresearch.com) is informed and diligent in monitoring sports enthusiasts. You should occasionally check in with reliable futurists to keep a finger on the pulse of emerging trends that likely will trickle down to your club. Faith Popcorn (faithpopcorn.com) and Dr. William Frey (frey-demographer.org) are respected macro trend spotters. Use the information and insights gained through the research process to tailor your programs, offerings and messages to these segments.

3. The business plan begins with the customer. Every business – even non-profit clubs – has a customer. Most businesses have multiple audiences and segments. The best business plans thoroughly identify and show a strong understanding of the customers the business targets. They gain this understanding from market research.

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For the complete webinar, go to bit.ly/Mz9VCJ

4. The marketing plan is part of the business plan. Develop the marketing plan by engaging your target audience in a process of discovery. Regardless of age or social station, most people are eager for new experiences and new friends. Show that your club or facility offers both. People who are interested in joining a club or being part of a golf or recreational lifestyle are most interested in the platform for socialization that is created at clubs. You should emphasize the social aspects and benefits of your club using social media and online communications. Every club has a customer. Every business should emphasize the social aspects and benefits of your club using social media and online communications.

5. Align market wants and needs to operational priorities and tactics. Once thorough market research and careful marketing planning have been completed and reduced to key observations and critical action steps, align what the customer wants to what the club offers in programs and activities. Be efficient in telling the key audience segments about the club in terms of interest to each segment. Avoid jargon and clichés that emphasize the rules and history of the club. Those topics can sound dated and intimidating. Show the aspects of the club that are of interest to potentially incoming market segments.

What do people want at your club? Fun, friends, and fitness are proven essentials for attracting members and daily fee customers. A strategic plan backed up by a business plan is the first steps in helping them see that your facility is the destination they seek.
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Water Usage

What You Can Learn from California’s Supers

By Richard J. Skelly

No matter where in the U.S. or Canada your golf course is located, all superintendents at one time or another must deal with periods of little, less than anticipated or flat out no precipitation. Golf course superintendents in California have been grappling with all kinds of water restrictions on their sacred turf since the 1970’s. The labor costs of complying with local, county and state regulations regarding use of water on golf courses is significant. All of the superintendents we spoke with agreed golf courses are an easy target during times of drought, but in California at least, they’re pretty much left alone the rest of the time.

For the last two “rainy seasons,” all regions of California have had higher than normal rainfall averages, so for now, the heat is off from state legislators in Sacramento. Golf Course Industry spoke with Mike Swing, who is president of the California Golf Course Superintendents Association, as well as two of that group’s key legislative liaisons, Jim Ferrin, whose courses are located north of Sacramento in the northern end of the state, and Jim Alwine, who recently made a move from Stockton Country Club in the central valley to Bernardo Heights Golf Club in San Diego county, the extreme southern end of the state.

All three veterans had much to offer those in other states coping with water restrictions and periods of drought in general.

“The past few years we’ve had very heavy rainfalls so there’ve been almost no water restrictions at all,” reports GCSA president Mike Swing. Swing, superintendent at Visalia Country Club in Visalia, Calif., and president of the California Chapter of the GCSAA, hails from the state’s central valley, a region populated by large corporate farming operations and dozens of smaller farms. The history of water restrictions on irrigation practices in the state of California goes back to the 1970’s.

“The central valley is huge and almost all of it is farm, and ag is pretty big out here,” Swing reports, “and while this year there have been some water restrictions down south, there is a water use mandate by the state of California that says by 2010 you shall reduce your water use by 10 percent and by 2015 you shall reduce water use by 20 percent,” Swing reports of the latest possible legislative actions he knows about coming out of Sacramento.

“The law is there, it’s the enforcement of it and what level they’re going to enforce it at that are the issues,” Swing continued, freely admitting the state of California these days is looking everywhere for new sources of revenue. As of yet, however, there is no formula and there’s likely not going to be one blanket, across-the-board solution for all golf course superintendents in a state as big and varied as California. It’s well-known that southern California cities like Los Angeles and San Diego average far less in annual rainfall than do cities like Sacramento and points north in northern California.

“I’m sure they’re going to have to devise some sort of formula that works for each golf course,” Swing said of state water control authorities, “so that they can tell owners and supers, this is where you need to be and if you’re over it, this what you’re going to pay.”

To comply with new water restrictions, Swing offered by way of example his own club, Visalia. Built in 1922, the club’s irrigation system is 23 years old. “Instead of looking at a complete rebuild, we’re going to replace sprinkler heads and control stations to satisfy the 2010 10 percent water drop,” he said, “and our lakes leak pretty good, so for a second phase we’ll seal all our ponds up, and that’ll satisfy the 20 percent. And a lot of other clubs will be doing exactly the same thing.”

Swing predicted it will take time for the state regulatory authorities to come up with a formula that is flexible enough to be applied to every golf course in the state, and it will take many years for southern California, which draws much of its water from the Colorado River, to find solutions to its water use problems, not just for golf courses, but for businesses and growing populations in that region of the state.

“More and more golf courses are going to reclaimed water, especially in south California,” he said, because about two-thirds of the water is in northern Califor-
nia but two-thirds of the population is in south California. This is all par for the course since the 1970’s, when water rights came under the domain of lawyers, many of whom, of course, are also legislators, Swing said. In the central valley farming region where Visalia Country Club is situated, “ninety-eight percent of the water in this region is used by ag, and it’s a very small percentage that goes to businesses, homes and golf courses here. Golf courses are just more visible, even though we use our water very efficiently.”

“It’s hard to get past some of the perceptions of people that don’t really understand golf, they often have the opinion that golf courses do nothing but waste water,” Swing said, “but if you get these people to look at individual houses and the amount of water home irrigation systems put down, the amount that golf courses put down is far, far less.

The home owner can water heavily and just let it run down the street, and hey, we’ve all seen it, driving through housing developments, it’s raining outside and the lawn sprinkler system is on, watering the lawn.”

Rainfall in the central valley averages just nine to 12 inches a year, Swing points out, and that’s only during the rainy season, he notes, “we don’t get any during the summer.”

By way of advice to other superintendents in other parts of the country, Swing said continuing your education is a big part of the solution, “and it’s vital to be operating a golf course with newer irrigation tools, sprinkler heads and wetting agents have become very very good.” He adds that “supers can advise their boards, ‘Hey there are new technologies available, we can make a savings by implementing some of these new technologies.’”

As for the eventual implementation of water use mandates for golf courses in California, “we’re trying to keep an ear close to anything that’s going on with golf at the state level, especially if it concerns water,” Swing relates.

“We don’t know yet what the penalties are going to be, they’ve got the law, the mandates are there, but how you going to
enforce it and at what level," he said, "I think they're going to look at historical E.T. rates for each area of the state, they may work off of that, but once you've determined that, how are you going to make it compliant? That's what they have to figure out."

Jim Ferrin, a legislative liaison with the state superintendents' association oversees Timber Creek and Sierra Pines golf courses in Roseville, Calif., just north of Sacramento.

"They've been trying to regulate water use on golf courses in a bunch of different ways now for a number of decades," Ferrin said, agreeing with Swing that water restrictions will be more of a problem in the southern part of the state first.

Pressed for advice and suggestions for superintendents in other parts of the country who must deal with occasional, temporary droughts and resulting water use restrictions, Ferrin said a number of solutions are posted online.

"We have a great model done by golf course supers in Georgia," Ferrin notes, and it's posted online at the GCSA of America website.

"They're already been through horrific droughts over the last three years, and it's a best management practice program about how you go about dealing with things. I saw some good ideas in there. It's just a proactive way of dealing with regulatory effects," Ferrin adds.

Aside from using gray or reclaimed water, which so many golf courses in California are already doing, longer term, Ferrin predicts, "we have to be aware that the future is probably going to involve less water use. So the amount and type of your turf, the type of your soil, the computer systems, the type of sprinklers you're managing, the pump stations, all have to be looked at to be made as efficient as possible," he argues.

"And it's not just the water usage, it's also the power usage, the cost of the power, and the cost of that power and water varies from place to place."

So how does one justify irrigation methods and water use to state regulators who don't play golf?

"Many of us keep clear records of our daily usage and can show how we're using less water, we're adding turf areas and fertility factors to use less water, and there are products on the market like wetting agents that allow you to use less water," he says, "just having a record of your practices and the means with which we do so, you can show somebody who's a non-golfer how we're trying to conserve water."

Ferrin notes that members are ultimately the ones who have to be satisfied and are paying the superintendents' salaries, "so really, there's pressure in both places."

Ferrin advocates for golf courses that are less green but more play-able. "Every section of the golf course does not have to be perfectly green," he said.

"A lot of clubs are taking advantage of recycled water where they can, but there's not always that much recycled water available," Ferrin adds. "So as populations grow and demand for bottle water grows, golf courses are going to be under more pressure to use reclaimed water."

(continued on page 57)
ON Jan. 1, 2013 the FCC's new narrowband frequency require-ments go into effect. These regulations require old wideband radio frequencies (25 kHz wide channels) be reduced to 12.5 kHz). This applies to all UHF and VHF frequencies between 150-512 MHz (VHF) and 150-174 MHz (VHF). It also affects any repeaters you might have on your communication system. Lastly, it applies to SCADA systems, so if your system incorporates SCADA communication technology you will need to update that, as well. This is not new news as the FCC announced the requirement back in 1999, but as time gets closer you need to make sure you are compliant as radios are a big part of many golf courses irrigation systems communications.

You have probably already dealt with the narrowband frequency issue with your crew's radios, but did you look at the irrigation radios? Unfortunately, many superintendents during this process have discovered they have no FCC license for their radios. Remember UHF and VHF radios require a FCC license to operate. If your system is a 900 MHz system, then no license is required. So if you have no license, then it's time to get one and this can be expensive.

An alternative is to change your technology. Download a free app for your existing or to-be purchased iPad and use that as your remote control system instead of the radio. It is much less expensive than the license (updated or new) and new radios, not to mention a lot more fun. You can also change your system to 900 MHz radios which doesn't require a license.
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Blackstone Golf Club is a high-end daily-fee course my firm designed in the northern suburbs of Chicago.

So here's a question: What does a superintendent do when a golf course irrigation system was designed and built on the assumption that 40-50 percent of the water would come via effluent, from adjacent home lots, but only a fraction of those homes have been built?

We've recently been in touch with the ownership and management teams at Blackstone Golf Club, where we've all put our heads together to find solutions to this problem. Blackstone is a high-end, daily-fee course my firm designed in Chicago's northern suburbs. The golf portion of the venture has done extremely well, even in these tough times. But 95 lots were planned and only 13 have been built. So we've been strategizing this spring, in consultation with Blackstone, to determine alternative water resources and alternative design/grassing strategies to reduce the facility's overall thirst.

Blackstone opened for play in 2005, but the reality is course architects maintain a life-long
relationship with the courses they design and help build. While course owners and superintendents can and do change, the course designer is and always will be the course designer until such time that a layout is renovated. Even then, unless the routing is completely blown up and replaced with an entirely new design, the original architect remains attached in a way that is both unique and resourceful.

Superintendents inherit golf courses from the folks they've replaced, and they serve existing owners as stewards of the property. But in another important sense, superintendents inherit the course from the architect. Accordingly, when something isn't working, or something doesn't make sense, that architect should be put to work. Find him. Pick his brain. Get him out to your property so he might explain what the hell he was thinking when he put that bunker there, or preserved that line of trees, or contoured that green in such a way to prevent cupping on 25 percent of the putting surface.

We have always made a point of staying close to past clients, and we've found these relationships to be far more constructive than adversarial. We've developed a checklist of things to discuss with past clients, so we might better realize original design goals along with new goals based on modern influences. These ongoing relationships invariably result in improved efficiencies, playability and maintainability. We've also found that current superintendents, with our input, are better able to allocate money from less- or non-essential areas to essential ones. That's been the case at Blackstone, and here's that checklist:

- Analyze the impact of current equipment and maintenance technologies on the original design. What still works, what doesn't? Rare is the design that truly anticipates agronomic innovation, for example.
- Review those parts of the original design plan that were not built – due to budget or previous owner bias, etc. You wouldn't believe what gets sacrificed just to save a tree...
- Review design elements, i.e. green slopes relative to current green speeds, available pin placements; variety in teeing distances, on a hole by hole basis more so than overall; width of landing areas, i.e. where are people really landing the ball, what's really in play?
- Review pace of play, i.e. where are the pinch points? What's slowing golfers down?
- Review maintenance issues that have presented over time, i.e. excessive sand maintenance, drainage problems, material failures (greens mix, bunker sand), limited irrigation coverage, poor cart circulation, etc.
- Review efficiency of maintenance practices, i.e. effective use of cultural practices (top-dressing, aerating, etc.), hand-raking versus machine-raking, bunker face management (hand vs. machine), tree management, Poa annua management, water management, etc.
- Assess environmental and economic impacts, i.e. unused land for housing, stormwater management, water quality and water sources.
- Assess age and durability of specific features, mainly greens, tees and bunkers, with an eye toward eventual replacement, because they do wear out.

Be proactive regarding future regulations and restrictions, i.e. energy use, water use, etc.

This is stuff that supers and in-touch owners do every day, but rarely with the original architect. We're currently working through this process with Blackstone and, as per usual, it's

The golf course portion of the venture has done extremely well, even in these tough times. But 95 lots were planned and only 13 have been built. So we've been strategizing all this spring, in close consultation with Blackstone, to determine alternative water resources and alternative design/grassing strategies to reduce the facility's overall thirst.
Superintendents inherit the course from the architect. Accordingly, when something isn’t working, or something doesn’t make sense, that architect should be put to work.

Finding new sources of water is a big ask, admittedly. But we’re aiming to identify several acres that can be reasonably converted to non-irrigated areas. This “turf-reduction” we’re recommending involves the replacement of manicured turf with fescue plantings, and/or the re-grassing of areas with more drought-tolerant varieties.

We know the grassing plan at Blackstone because it’s our grassing plan. We know, better than anyone could, which areas can go non-irrigated, what aspects of the grassing plan were entirely aesthetic, and therefore can be sacrificed or repurposed. Those 82 units of housing aren’t going to be built anytime soon, meaning no new water sources, but we reckon the measures we’ve proposed will reduce the client’s water needs by 5 to 10 percent.

Understand that while architects like to stay in touch with past clients, it’s the clients who request and drive the process. We keep the door open, but the clients have to walk through it.

“There’s been good communication from the start but I do think I approached you guys,” Dan Weck, the owner at Blackstone, told me. “There was that big hump in the putting green. We didn’t think it was representative of the greens on the course and it was tough to maintain. I talked to you about that last fall, Bob, but that was a project we did in-house.

“Prior to that we had expanded a tee box on one of the par-3s, but it was the bunkers that really got us thinking. There are certain ones out there, just a couple, that just don’t come into play too much, so the cost of maintaining them was tough to swallow.”

We went from there. Some bunkers at Blackstone are indeed slated for removal, but not until we ensured those removals would have minimal impact on aesthetics and strategy, probably none at all. We’ve also proposed to the owners some additional design tweaks:

Expansion of the 5th green, which is the most complained-about putting surface on the course, apparently. (I don’t know why... Narrow and angled around a deep hollow – with a lovely Biarritz-like swale at the midpoint. It’s a beauty.) We’ve proposed filling in the hollow to create a lower tier, allowing the green to be hit in regulation more often, while still providing a stern, fun putting challenge.

Removal of a fairway bunker on the left side of No. 10 and expansion of the fairway, allowing better players to draw the ball around or carry a pond, thereby setting up the best angle into this par-5 green.

Opening up the green-entry on 14 by shrinking or moving a greenside bunker, providing a better opportunity to run it onto the green at this long par-4.

“That change on No. 5,” Dan explained, “will really improve the golfer experience on the hole. I think I initially brought up the idea [of expanding the green into the hollow] but an actual design solution? That needs an architect. I don’t know the height of that tier, what it should be, how it should transition... I’ll leave all those specifics to you guys.

“My goal is to make the course more enjoyable for the golfers. That’s the biggest part of it, and that’s why the relationship with the original designer needs to continue beyond opening. The whole operation here is driven by, ‘What can make the experience better at a certain price point?’ Because we want to improve, we want to be talking to the architect continually, to enhance the experience, but also to improve our maintenance situation from a conditions standpoint and a cost standpoint.”

It’s not clear when exactly all these design improvements will be implemented at Blackstone, but the new grassing plan and bunker reductions are definitely a priority. We’re hoping to mitigate a big problem for the club, and save it money.

As the original architect, it’s something that only our firm could have achieved; we visited the course but we could have done it without a visit – such is our knowledge of the property. That sort of familiarity is invaluable, and the original architect is the only one who has it.

Bob Lohmann is founder, president, and principal architect of Lohmann Golf Designs and a frequent GCI contributor.
Ron Dodson and Bill Love are the founders of Love & Dodson, LLC a firm that specializes in sustainable planning, design, construction and management of golf courses, recreational facilities and sanctuaries. www.loveanddodson.com

SUSTAINABLE COURSE MAKEOVER

The not-for-profit, Audubon Lifestyles is coordinating the project at the Scotland Yards Golf Club which is aimed at implementing a sustainable golf management demonstration project. With the economy still in the doldrums, a group of business and non-profit organizations have come together with an 18-hole course in Florida to demonstrate that embracing and embedding the tenets of sustainability, regardless of the size and budget of the golf course, will provide economic viability and serve as the foundation upon which to deliver environmental and social benefits.

Audubon Lifestyles is coordinating the project at the Scotland Yards Golf Club, which is located between the small citrus towns of Zephyrhills and Dade City, and within easy driving distance of both Orlando and Tampa. Florida has been one of the states most impacted by the economic downturn, so it made perfect sense to their team to prove the potential to doubters of sustainability by implementing sustainable management practices on a golf facility in a location that has been hardest hit with tough times.

David Rinaldo, general manager of Scotland Yards, says, “The past several years has been a real challenge to the entire golf industry, and our course certainly hasn’t been any exception.”

The Rinaldo family built and opened the course in the 1970’s and sold the course several years ago. But, as is often the case, that business transaction didn’t work out and the Rinaldo’s now found themselves reacquiring their old family course again.

“We certainly care about the environment, if we can’t maintain a financially viable business, we simply would not be able to continue to function,” Rinaldo says. “We were very excited to learn about the benefits of operating more sustainably, and couldn’t be happier to become involved as a demonstration project that showcases sustainability on golf courses.”

Eric Dodson, executive director of Audubon Lifestyles, has pulled together a small, but growing group of businesses that have agreed to contribute their time, expertise, products and services to the project. “We hope that we can prove to other golf facility owners who may be struggling in this economy that it doesn’t matter what how big or small your golf facility operating budget is – it just makes financial sense to embrace the sustainability opportunities that are available in the market right now.”

— Eric Dodson, Audubon Lifestyles

At present the organizations that have agreed to participate in the Sustainable Golf Management Demonstration Project at Scotland Yards Golf Club are: Audubon Lifestyles, serves as lead project coordinator; Love & Dodson, based in College Park, Md., will take the lead in the sustainable planning, design and development for the project; Turf Feeding Systems as a producer of fertigation systems based in Houston, Texas has agreed to donate a fertigation system, which was recently installed; The Dodson Group LLC will offer sustainability and environmental consulting, including mapping the entire course, and Trusty & Associates based in Council Bluffs, Iowa, will provide help with public relations.

FOR MORE INFORMATION...
If you, your business or organization is interested in joining the effort and become an active participant in the project at Scotland Yards please contact: Eric Dodson at: edodson@audubonlifestyles.org or 727-733-0762
The Chance to Plan

**PRO** Hosting can help bring about much needed changes to a course and facility. There will be immediate interest in providing the course with the best possible agronomic conditions so it can withstand the rigors of tournament preparation and execution. Clubs are selected three to five years in advance, during which time courses are prepped, repaired, and treated to the finest in turf grass playing conditions. Together with the host organization, the club will create a long-range plan to accommodate everything from rebuilding putting greens to adding course drainage, replacing bunker sand, and removing trees. This is the chance to make significant improvements to the course and club, and everything should be on the table for consideration.

**CON** The host club may receive little to no financial support from the host organization to meet its requirements, leaving the raising of funds to dues and assessments. Sadly, when major course-enhancement projects are left to the judgment of club officials few if any get accomplished. If they are pursued, it’s generally at the last minute, placing heavy burdens on a staff trying to manage new projects along with their regular duties.

Putting Your Best Foot Forward

**PRO** It’s fun to watch a golf course change personality, and to welcome players, celebrities, and fans. It’s very satisfying to see your course and the work of your staff/volunteers showcased on television and other media, and to accept the thanks of the golf world. There is no greater feeling than the collective sigh of relief that comes when the victor hoists the trophy and the event concludes without any major headaches.

**CON** No major headaches? Are you crazy? Weather can turn the perfect golf course into a mud hole in minutes. Scores are higher or lower than expected, leaving the course — and grounds crew — open to criticism from media, players, even the host organization. (High-definition television leaves the superintendent nowhere to hide.) And as with most parties, after the guests go home, the host is left to clean up. Did you leave enough money in the budget for the post-event work? If yours is a private club, the day after the circus has left town the members will want to get back on their course — but with the same conditions the pros had last week, of course!

Fifty years ago, the then-executive director of the USGA, Joe Dey, wrote, “and what is the club’s reward? Thousands upon thousands of man hours are expended by club committee members with no material compensation at all. There is really only one compensation — the same one which comes from any labor of love. For holding golf championship is a labor of love.”

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TOW VEHICLE HITCH

The 2012 Model 07273 Toro Workman MDX turf vehicle came equipped with a factory-mounted Category III Reese-type receiver without a hitch. An in-house hitch was built which extends outward approximately 16 inches and drops down 4 inches to keep the trailer level using 2 inch x 2 inch square tubing that slides into the receiver. The remaining fabricated flat steel pieces are also ¼ inch thick. A ¾-inch diameter hole was drilled into the hitch so that a Lynch pin could slide in to hold the hitch in place. The hitches were welded together and then painted with a primer and a “Toro red” spray enamel. The Rubbermaid Model 6WU47 Trailer (15 cubic yard) navigates short curves easily, does not “jackknife” or hit the tailgate in any way because the hitch is far enough away from the tow vehicle. The cost for each hitch was less than $30 after the R&D was completed and it took no more than 2 hours to build and paint each one. Brad Boyd, director of agronomy, Manuel Benitez, equipment manager, and Eliud Cruz, mechanic/fabricator, make up the team at the Dorado Beach Resort & Club in Dorado, Puerto Rico.

CART PATH EDGER

The Dorado Beach Resort & Club in Dorado, Puerto Rico, has a 2005 Toro Sand Pro that has a modified cart path edging wheel. Two maintenance staff used to take about four days to edge the cart paths on 72 holes with trimmers, where it now takes one person ½ days. The edging wheel blade can be raised, lowered & angled hydraulically, by using the lift handle that used to operate the rear rake mechanism, so that the proper position is achieved, especially when going around curves on the cart paths. Many of the hydraulic components where “cannibalized” from retired triplex mowers and the hoses & fittings are new that cost about $50. The R&D took about three weeks after many field trials for proper refinement. For example, the front length of the Sand Pro had to be reduced because of the variable turning radius of the machine vs. the cutting wheel itself. The engine was also rebuilt in-house. The total labor cost about $400. Brad Boyd is the director of agronomy; Eliud Cruz is the fabricator; and Manuel Benitez is the fleet manager. GCI
REPAINTING CUPS

The art of re-painting metal putting green regulation cups is done efficiently first by soaking them in carburetor cleaner for about an hour in a soaking basket that holds three cups at a time. After they are clean and dry, paper cut-out discs are placed at the bottom of the cups so they remain unpainted. A plastic parts bin is then used, which holds nine cups, where they are painted with a high-grade enamel spray paint in a portable can. The parts bins are stackable so they can be stored neatly in the parts room. Zinc cups are easier to paint than the aluminum cups and they will last a lifetime. Eric Kulaas, equipment manager, at the Renaissance Vinoy Resort & Golf Club, St. Petersburg, Fla., came up with this great idea. Kulaas also painted a complete set of cups pink in color for a breast cancer charity golf tournament. It takes about 6-7 hours for the entire process for 18 cups and it costs less than $50 for the carburetor cleaner and paint.

Have you innovated a new contraption in your shop?
Have you tinkered with equipment so it better meets your needs. Share your best ideas by emailing them to gsi@gie.net.

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DO YOU HAVE SOMETHING TO SAY?

LETTERS to the EDITOR

Want to sound off on something you saw in this issue? Have an idea that you think would be worth featuring in next month's Golf Course Industry? We want to know.

Call or e-mail Mike Zawacki at 330-523-5330 or mzawacki@gie.net.
Another legislative liaison for the superintendents' association in California is Jim Alwine, who moved in July to a new post from Stockton CC in the central valley to Bernardo Heights GC in San Diego County.

"We all know this across the board, 20 percent is not a very efficient way to conserve water," Alwine argues, "and most golf course supers in this state are already doing their job with drought resistant turf and wetting agents, so there's been a push to find more of a coefficient for Bermuda grass, ryegrass and how much water you should use for certain areas. Golf courses are very efficient irrigators and a 1 percent leak would create a wet spot on the golf course."

"I really hope the 20 percent reduction doesn't happen in 2015, but if it does, that's just poor management," he argues.

The state's water use policy as it applies to golf courses has been more reactive than proactive, Alwine continues, "it was a hot button issue three years ago when we were in a drought, but the last two years have been very good rain years so legislators are not looking at water 'cause water's not a problem right now."

Alwine urges superintendents in other parts of the country who face water use restrictions to have a drought contingency plan in place.

"You start picking areas you know you can do without, some of the out-of-play areas and native areas you can go completely off, like the driving range, out of play areas," he advises, "some of the out-of-play areas and native areas you can cut it completely off if you need to." Then, if need be, you can drop water use by 30 percent in rough areas and 20 percent in primary rough areas, and 15 percent in fairways.

"Greens you pretty much don't want to mess with, because of the cost of each green complex as well a host of diseases and other issues that can come into play" he adds.

"Tees, greens and approaches are what make a golf course, so they should be pretty much untouched in your drought plan," he adds.

"Another way to make sure you're using water as best you can is to use water meters to measure the soil, have a weather station so you know what the ET rate is for that day, and if you know those factors and what your turf can handle, tools like wetting agents can be extremely valuable," he argues.

Pressed for more advice, Alwine recalls advice he got from a superintendent he worked for many years ago; stronger turf ultimately needs less water, he points out.

"If you're not killing anything, you're not trying hard enough," Alwine continues, or, in other words let the weaker turf fade away and die and let the stronger turf survive, "some of the poa annua in your rough, let it be replaced by Bermuda or ryegrass. It's kind of a survival of the fittest mentality and you end up making a very strong turf system that way."

Richard J. Skelly writes about golf, music and finance and is a frequent GCI contributor.

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"I love stories Rod Johnson tells from his time working with Geoff on a master plan for Pine Hills CC."
PARTING SHOTS

**BACKFIRE**

S omeone once defined "proactivity" as climbing out of your foxhole to get a better look at the enemy. By attempting to get ahead of the game, you put yourself at risk of getting shot.

In three decades of participating in/covering the industry's attempts to communicate its environmental story I've seen plenty of examples of well-intentioned efforts backfiring.

Back in the late '80s, a bunch of Long Island courses volunteered to be a part of a groundwater study to see if chemicals were leaching into their sandy soils. The results showed only trace amounts - parts per billion - were detectable in the water table and they were well below EPA standards. Good news, right? Nope, the state's attorney general issued a scathing report called "Toxic Fairways" indicting us for poisoning the Empire State's drinking water.

Not long afterwards, we shot ourselves in the foot with the release of the infamous University of Iowa study of mortality among superintendents. The concept was good: use the association's insurance program - which paid a small death benefit to the widows and orphans of deceased members - to track whether any "pesticide-linked" cancers or conditions were higher than the rest of the population. The theory was we were the canaries in the coal mine and if we weren't dropping like flies, no one else should worry. Good plan until the research kind of, like flies, no one else should worry.

There have been dozens more "oops" moments since, but the latest was a Bloomberg news item from last month in which their cynical reporter decides to turn an environmentally positive press release from a golf management company ass-over-teakettle and chide us for not doing more. The whole thing is at bloom.bg/NtWIVQ, but here's his response to the positive statistics the release cited about golf:

"Now, if you squint, turn your head a bit, and look really hard, you might see this instead:

...no matter how well we tell our story, there are people who simply won't believe it...

- 23 percent of 18-hole golf facilities have taken no steps to conserve energy.
- 9 percent of acreage on an 18-hole golf course is not considered 'green space.'
- Almost 15 percent of golf courses tap municipal water facilities.
- "The most telling part of the announcement is what's missing: the lack of brag-worthy efforts to control fertilizer run-off at U.S. golf courses. It's not like nobody's aware of the problem."
- "Nitrogen and phosphorus runoff from fertilizer are a large-scale environmental problem in many parts of the U.S., and the world. Rivers carry these compounds to the ocean, or bays. Algae feast on the nutrients. Their populations bloom and crash, depleting oxygen and leaving 'dead zones.' The annual Gulf of Mexico dead zone, an oxygen-depleted, lifeless area that forms in spring and disappears in the fall, reached 6,765 square miles in area last year, fed mostly by Midwestern agriculture."
- "In the absence of gob-smacking accomplishments, maybe golf official-Mexico... and we're supposed to be educating Joe Homeowner about responsible weed-and-feed use. Egads! I feel sorry for the PR folks who sent that nice release and got a public ass-whoopin' for their trouble. Hey, I've been there, done that and got the scars across my posterior to prove it. Proactivity hurts sometimes."
- "That's why I worry any time GCSAA or other organizations do big studies to benchmark water, fertilizer or chemical usage. These studies are initiated with the best of intentions until you consider the guaranteed, automatic, every-single-friggin'-time response activists, government and media have to those studies: "Cool... thanks for the benchmark data. Now tell us how you're going to reduce those inputs by 50 percent within 10 years."
- "My point is that no matter how well we tell our story, there are people who simply won't believe it or will spin it in whichever way suits their agendas. That is the inherent danger of proactivity. Yet, it shouldn't stop us from trying. Just be prepared for the fact that there's always a bunch of guns pointed directly at our foxhole. GC\i"
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