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**JACOBSEN**

I've been around long enough to know that the elephant missing in the parade of support for the golf course industry has been the golfers themselves.

Many courses budget dues, education and travel for their superintendents, but that support shrivels up in hard times or with changing club management and committee chairs. Clubs that understand and support superintendent education and involvement “get it,” and the course conditions and maintenance department efficiency usually reflect that attitude.

How do we get golfers involved? Kudos to the Carolinas GCSA for developing and making the original Rounds 4 Research program such a huge fundraising success, so much so that chapters across the county clamored to get on board. The demand was such that the Carolinas group finally turned to the GCSAA to administer the program nationally, and the first year rollout is happening as I write this.

I like the program because it's a win-win way for clubs to donate rounds for online auctions and golfers to bid on them, with 80 percent of the proceeds going back to the chapters named on the donor forms.

And let's be realistic, it will be the more exclusive, hard-to-get-on clubs that will draw top-dollar bidding. But all courses need to participate.

The ball is in the superintendent's court to bring the program to his golf pro and general manager — and to get them to donate a round for the online auctions. Conversely, golfers must understand that turf management at all levels nationally is under attack by well-funded activists, and if the golf industry doesn't have adequate funding itself for research, education and advocacy, playing conditions can suffer.

Recent examples include EPA's Numeric Nutrient Criteria, the NPDES permit and Canada's banning pesticides for “aesthetic purposes.” Is a smooth rolling putting surface an aesthetic purpose? Turf health and performance go hand in hand with appearance, so the law doesn't make sound scientific sense. It's a radical reaction to pesticides. We all know that, but how do we make our case without adequate funding?

## Cheers to Rounds 4 Research

BY JOEL JACKSON



IT'S A WAY FOR  
ALL GOLFERS TO  
COMPETE FOR A TEE  
TIME ON A COURSE  
THEY MIGHT NOT  
OTHERWISE GET  
TO PLAY.

Chemical and fertilizer companies already spend a lot of money developing products that must pass rigorous EPA requirements for use on turf. Plus, they already financially support the GCSAA and state and local chapters with sponsorship and advertising funds. It's time for the end users — the professional golfers, elite amateur golfers and all golfers in general — to step up.

Rounds 4 Research is a voluntary way for all golfers to compete for a tee time on a course they might not otherwise get to play. And the slate of courses need not be all exclusive member-only facilities. Resorts and semi-private courses can toss their hats in the ring and donate rounds for the competitive auctions.

Please log on to [gcsaa.org](http://gcsaa.org) and download the information that contains tips and forms to use in signing up your course for this very worthwhile fundraising program.

Thanks to the Carolinas GCSA for developing such a great interactive fundraising vehicle. Please note that it was able to raise over \$320,000 for turf research and education efforts for North and South Carolina universities. Just imagine what your state and the GCSAA could accomplish with those kinds of funds on a national level.

I feel that funds should naturally go to state university projects, as well as to the GCSAA's EIFG program, which has blazed a bold path toward getting national recognition for Golf's Drive Toward Sustainability. And never forget GCSAA's presence in Washington; it's in constant contact with EPA and Congress on our behalf.

Get your course signed up today!

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*Certified superintendent Joel Jackson is Executive Director of the Florida GCSA.*

*Take a good look.  
You may never see it again.*



*{fig. w-42}  
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**R**ecently, the United States sent the rover Curiosity to Mars to see if there is life on this distant planet and determine if the Martian environment could be suitable for microbial life. The Curiosity joins the long-running rover Opportunity, which has been on the Red Planet since 2004. Yet another rover, Spirit, fell silent on Mars after getting stuck in one of all things what NASA calls a sand trap. I personally didn't even know there was a golf course on Mars.

If you read articles about the Curiosity and its mission, there is frequently a reference to the phrase "a look at what's ahead." That phrase leads me to the topic of this article. I'm not referring to Mars, but rather to Asia in general and China specifically.

In some readers' minds, the analogy between Mars and China is appropriate. Because, like Mars, China may as well be millions of miles away from here. In the minds of people in the golf industry, however, China creates immense curiosity, like the Mars rover.

We often hear conflicting stories about golf in China and whether or not there has been a moratorium placed on golf development. I'm not certain, and I don't think anyone else is, what the definition of a moratorium on China golf means.

But I can tell you in my many visits to China I have seen a large number of golf courses under construction or renovation. I was there for a month this past spring, and my Chinese golf industry friends mentioned to me there are nearly 100 golf courses under construction there, not to mention the courses under construction in the rest of Asia. This is why many golf course architects, management companies and golf course construction companies are devoting many of their resources to this part of the world.

By comparison, there may not even be a handful of new golf courses being built in the United States. So one would think there is, like that other rover, a great deal of opportunity in China. And if you're willing to make

# China: Curiosity and Opportunity

BY MARK WOODWARD



**"MY CHINESE GOLF INDUSTRY FRIENDS SAY THERE ARE NEARLY 100 COURSES UNDER CONSTRUCTION THERE."**

some sacrifices, there is opportunity.

First of all, like Mars, China is a long way from home. Secondly, even though China is a modern country in many respects, it still has its challenges. But if you have an open mind, enjoy Chinese food (there's a lot of it over there) and want to learn about a unique culture, you may want to consider looking into the many golf industry opportunities there.

For me, it's a balancing act. I'm intrigued by golf in China. I want to help the Chinese and contribute to the growth of golf there. But I don't want to live there full time. I am currently the consulting CEO of the golf course management company MasterStep Golf Group. I also teach classes at Jiao Tong University in Shanghai. Both of those positions provide me with a balance between the consulting and golf course renovation businesses I own here in the States.

Many people don't know this, but golf is a relatively new sport in China. The oldest golf course there is less than 30 years old. It's not as far away as Mars, but if you're curious and at a turning point in your life, I would encourage you to look at the opportunity in China and the rest of Asia.

One thing that I am sure of is, the Chinese people have a wonderful spirit and are truly excited about golf. They're interested in learning from Americans and others in the international golf community how to make golf a sustainable industry there.

Now, who is raking that sand trap on Mars? I guess that's a topic for another column.

---

*Mark Woodward is president of Mark Woodward and Associates, principal of DaMarCo Golf, CEO of MasterStep Golf Group and a contributing editor for Golfdom.*

# Healthier Turf is Stronger Turf.

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# IN

**Thanks to new tech,  
supers are getting  
a leg up on water  
management.**

**BY BETH GERACI  
SENIOR EDITOR**

# CONTROL

A NEW AGE IS DAWNING in the world of golf course maintenance, and it's hardly a stretch to say so. Yes, the days of hand watering and gauging moisture manually with soil probes still are alive, but they're not looking so well.

Some turf professionals imagine it's just a matter of time before manual water management becomes a thing of the past. In its place will be the world that is emerging now — an automated wonderland where water is distributed by computers, cell phones and wireless technology.

It's something superintendents just 10 years ago never saw coming. Today, it's happening.

## Number one

"Moisture meters are number one in terms of new technology," says Adam Moeller, agronomist with the USGA Green Section Northeast. "It seems that most folks visiting either have them or are going to try to get them soon."

Moisture meters, also called moisture sensors, enable superintendents to accurately measure soil moisture anywhere on the course. They are game changers for superintendents, because they reduce the guesswork involved in irrigating.

"In the past, watering was much more subjective," Moeller says. "Moisture meters make it more of an objective process, because you can really quantify how much moisture is in the soil."

Scott McBane, superintendent at Galloway National Golf Club in Galloway, N.J., has used moisture meters on his course for four years. "We first started using them just to see what they were all about," he says. "Now we're using them on greens, tees, fairways, everything."

McBane, who uses the FieldScout TDR 300 meter from Spectrum Technologies, says moisture meters are valuable tools for superintendents because they produce hard data on what the moisture level in the soil actually is.

"It has made a big difference," he says. "We can get in and monitor known areas that are dry and see the exact moisture in the soil. Rather than watching things wilt out and going to get it later, we can prevent it. It's really made what we do better."

Dan Hawkins, superintendent at The Club at Flying Horse in Colorado Springs, Colo., was sold on the TDR 300 at the 2012 GIS. "I highly recommend it," he says. "It gives us an idea of how long we can go before giving our greens a drink."

Superintendents still visually inspect the turf for wilt and use soil probes to see how moist the soil is, Moeller says, "but they're generally not pulling the core with a soil probe as often as they used to."

Moisture sensors aren't new. But within the past five years or so the cost of producing them has declined, so they're becoming more popular, Moeller says.

*Continued on page 18*

## The Players

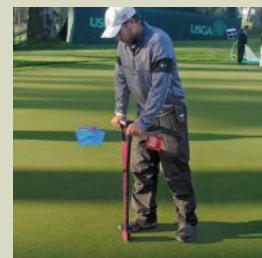


◀ Toro Turf Guard

Rain Bird IC system ▶



Spectrum FieldScout TDR 300 ▶



## Tech Immersion

At Merion Golf Club, Rain Bird's IC system and UgMo moisture sensors keep turf healthy and allow crews to focus on things other than water management.



*Continued from page 17*

### Taking it underground

Unlike Spectrum Technologies' portable meters, wireless moisture sensors, such as UgMo's and Toro's Turf Guard, are installed underground.

Matt Shaffer, superintendent at Merion Golf Club, had 65 UgMo sensors on his course until recently, when he removed them for aerification. He says he'll reinstall them before the 2013 U.S. Open, which Merion is hosting.

Sensors are "playing a huge role" in the way superintendents irrigate today, he says. "We use them on greens, fairways, roughs, tees and bunker faces. It's crazy the difference we've seen on the course as a result... It's just fantastic technology."

Shaffer began using moisture sensors in 2005, when they were just emerging in the golf world. As intuitive as meters are, though, Shaffer says they've been slow to catch on because superintendents are hesitant to experiment with expensive technology they've never used.

Mike Swing, CGCS at Visalia Country Club in Visalia, Calif., says that's unfortu-

nate, because superintendents willing to try new technology reap the benefits and assist in product development.

"You've got to take a step," asserts Swing, who's worked as a superintendent for 40 years. "You have to be daring enough to try something. It may not work out, but how else are you going to get a product to the market if you don't try it out? (Manufacturers) might come back and develop a better product."

Swing has experimented with everything from seeders to algae control products and solved problems on his course as a result. And since California has man-

dated that by 2020 courses must reduce their water consumption by 20 percent, this spring Visalia will replace its 23-year-old sprinkler heads and install Toro Turf Guard moisture sensors. Doing so, Swing says, not only will save water, it will make him a better irrigator and give him more control over turf conditions.

"Moisture sensors take the pressure off," he says. "By managing water you have a better plant. Moisture sensors are just another tool in water management."

McBane saw the benefits of his moisture meters this summer during the heart

*Continued on page 20*



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— JOEL KACHMAREK, SUPERINTENDENT, TACOMA GOLF & COUNTRY CLUB





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*Continued from page 18*

of the drought. “We’re towards the end of the summer right now and I would say we’ve had our best year ever, in a difficult, difficult July,” he says.

“The turf just looks healthy,” he continues, “and I think a lot of it is keeping up with things, and a lot of it is our use of the moisture meters. At Galloway, I do think these moisture meters are changing the way we take care of the place.”

Pat Gross, Southwest Director of the USGA Green Section, says both portable and in-ground moisture meters are popular in his region, where water conservation is a way of life.

The USGA first began working with Spectrum Technologies’ meters for the 2008 U.S. Open at Torrey Pines. “It went fantastic,” Gross recalls, “and we learn more about it every year. The biggest impact is on greens for champion-

he opines about everything from fat flagsticks and healthy turf to bunker rake placement and equipment.

But today, he’s sharing his excitement about something else — the Toro Lynx software on his central computer system. The Lynx control system adjusts water output to accommodate exactly how much water Kachmarek wants dispersed on a specific area of his course.

“You can give it a threshold and tell your Lynx, ‘OK, when the moisture level hits 20 percent, I want the sprinkler to turn off. So it’ll water (your turf) exactly the amount you want to give it. The control is so much better. It’s just amazing.”

Smart irrigation is critical in his region and to his job, says Kachmarek, whose course has 1,200 sprinkler heads. Kachmarek acquired the Lynx software in February and spent three months inputting all of his course-related informa-

a slope.’ You can attach terms to each sprinkler, such as sunny, sloped, sandy — so the sprinkler is being adjusted by seven or eight variables you’re giving it. And you can add a different parameter to the program every day.”

Because setting Lynx up takes time and patience, many superintendents will resist it, Kachmarek asserts. “But it’s worth it,” he emphasizes. “It’s the most intuitive software I’ve ever seen.”

In tandem with it, Kachmarek also uses Toro’s new Web-based Lynx Mobile, which enables him to manage his irrigation system from anywhere on the course through his iPhone and iPad.

As sophisticated as controlling irrigation systems from smartphones is, Moeller says simply being able to communicate on smartphones at all has changed the way superintendents work.

“Use of smartphones and being able to communicate very quickly with the membership through email and Facebook has been a big benefit to superintendents, because communication is everything,” he says. “Things like, ‘Hey, we just got a lot of rain and the greens are wet today.’ That’s benefitted the golf course maintenance industry.”

Shaffer and his counterpart up the road at The Philadelphia Cricket Club, Dan Meersman, turn to Rain Bird’s integrated control (IC) system for their irrigation needs. It connects central control directly to each sprinkler rotor or valve on the course, enabling superintendents to control each of their sprinkler heads remotely.

Shaffer installed the subterranean IC system in 2009 and estimates it’s reduced his water output by 25 percent. Meanwhile, The Philadelphia Cricket Club, a 45-hole, two-campus facility, is in the midst of synchronizing all three of its courses with Rain Bird’s IC system.

“There’s memory at each sprinkler head,” Meersman says, adding that’s partly why he chose it. “It’s built toward the future. Basically, you’re communicating from the computer to the



**“YOU’VE GOT TO TAKE A STEP. YOU HAVE TO BE DARING ENOUGH TO TRY SOMETHING. IT MAY NOT WORK OUT, BUT HOW ELSE ARE YOU GOING TO GET A PRODUCT TO THE MARKET IF YOU DON’T TRY IT OUT?”**

— MIKE SWING, CGCS AT VISALIA COUNTRY CLUB, VISALIA, CALIF.

ships, but I’ve seen more courses use them for daily operations. And I believe it’s the best training tool out there, because you get direct feedback — you get a number.”

### The whole package

Joel Kachmarek, superintendent at Tacoma Country & Golf Club in Lakewood, Wash., is, in his own words, “big into blogging.” On his blog, Tacoma Turf,

tion. Although that was laborious, the more data about your course you input into the system, the better Lynx works, Kachmarek says.

“You can say, ‘Shady sprinklers, I want you to turn off for two days then come back on, because Joel wants to dry out all the shady areas,’” Kachmarek says. “Or you can say, ‘I want the sprinkler to run three minutes when it’s on