# Supers Under



BY LARRY AYLWARD, EDITOR IN CHIEF

T'S A GIVEN THAT golf courses are often labeled as water wasters by the non-golfing public — you know, the people who are disgusted at seeing an emerald-green golf course at the height of a sizzling summer while their lawns burn out like fizzling firecrackers on the Fourth of July.

But it's somewhat surprising when a big-name golfer, who has made millions playing the game, calls out golf courses for being too verdant. South African golfer Gary Player says too many American golf courses overwater to maintain the lush look.

"If you take the average amount of water that's put on a golf course in the United States and compare it to Scotland or anywhere in Britain, it's three times the amount," Player contends.

It's also somewhat surprising when a big-name golf course architect says golf courses have a lot of room to improve

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# Scrutiny

when it comes to irrigation efficiency. But Mike Hurdzan, principal of Hurdzan-Fry Environmental Golf Design in Columbus, Ohio, also believes that golf courses use too much water.

"We're irrigating too much of the golf course," Hurdzan says. "We're irrigating bunkers on many golf courses so somebody can have a perfect sand shot every time. Where does this madness end?"

Even though golf courses comprise only 1.5 percent of the fresh water dedicated to overall irrigation and 0.5 percent of the nation's total fresh water, the question of whether golf courses use too much water isn't going away anytime soon. And stuck in the middle of the debate are golf course superintendents. They're the ones flipping the switches on their courses' irrigation systems.

Alas, it's no surprise that superintendents feel scrutinized about their water use. They're looking over their shoulders, indeed.

Golfdom recently surveyed about 500 superintendents and asked the question: What's your biggest concern regarding the water you use for golf course irrigation? Thirty-seven percent — the biggest group — said "increased scrutiny of its use."

Twenty-nine percent said "decreasing availability" was their biggest concern. Eighteen percent said "increased cost" and 17 percent said "decreasing quality."

Think about it: More than twice the amount of superintendents are worried about being scrutinized for their water use than they are about its cost and quality.

"Unfortunately, superintendents are standing center stage with the white, hot spotlight on them," Hurdzan says. "People drive by golf courses in their cars and see how green and lush the courses are. But those people don't presume the people managing those golf courses are better water managers than they are. They presume they're just using too much water."

So what does this say about golf course irrigation in 2010? For one, it has become a highly political issue in addition to an environmental and economic matter.

In a related survey, *Golfdom* asked nearly 600 superintendents: What is your biggest professional concern? Twenty-one percent (the No.2 answer out of seven choices) answered, "Unrealistic expectations from golfers." Translation: Superintendents are worried about losing their jobs if they don't meet golfers' demands for quality conditions, which often translate into wall-to-wall green and lush turfgrass. And water, of course, is the main force behind establishing such conditions.

While this isn't a new phenomenon to the golf course maintenance industry, it's intensifying for several reasons and causing superintendents to feel more scrutiny.

First, the media attention to the impending freshwater crisis has magnified the past several years, thanks in part to the Internet. More and more people are seeing reports about water shortages, like the one issued by the U.S. Government Accountability Office that says at least 36 states in America face serious

freshwater shortages within the next five years. Meanwhile, those same people see sprinklers swirling on golf courses and assume that water is being wasted.

Second, the impending freshwater crisis is real for many golf courses. For instance, the California legislature passed a bill last year to reduce water use statewide by 20 percent by 2020, including on golf courses.

Third, even though reports of the freshwater crisis have intensified, golfers' expectations for near-perfect conditions haven't. Consider the U.S. Open at Pebble Beach Golf Links in June. Most golfers' eyes nearly popped out when they saw Pebble Beach's brown and blotchy *Poa annua* greens on TV. They thought the greens looked terrible. Golfers want green greens, and many want the same for tees, fairways and roughs.

#### Do they or don't they?

If you took 10 superintendents and asked them whether the golf industry uses too much water, there's a good chance that five would answer "yes" and five would answer "no." Their perceptions are based on many variables, including tenure, location and even political affiliation.

Mark Clark, the certified superintendent of Troon Country Club in Scottsdale, Ariz., believes the industry uses too much water. "We overwater, but we do it because the consumer wants it," he adds.

But Mark Jarrell, the certified superintendent of the Palm Beach National Golf and Country Club in

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Lake Worth, Fla., says most superintendents are responsible irrigators.

"I believe superintendents overall are diligent about being good stewards when it comes to water use," he says.

This is where the issue gets murky. What constitutes a good steward? Does a golf course have to be brown in order for it not to be labeled as a water waster?

Clark believes it's possible to have a green golf course that plays firm and fast without using too much water. In fact, that's what he strives to offer at Troon.

"You can come to my golf course tomorrow and you'll get firm, fast greens ... and it's green and looks great," Clark says. "We manage our water the absolute best we can."

Hurdzan also believes in the firm and fast philosophy. "We need to keep our tees and greens healthy with the right amount of water," Hurdzan says. "But why are we watering roughs?"

Incidentally, an estimated 31,877 acres of irrigated turfgrass were added to existing golf courses in the United States from 2001 to 2005, according to a study by the Golf Course Superintendents Association of America. The net gain in irrigated turfgrass is because of golf facilities converting non-irrigated rough to irrigated rough to meet golfers' demands.

Hurdzan says superintendents No. 1 priority with water should be to do more with less. And one of the keys to using less is to measure what you're using.

"There's an old saying, 'What gets measured, gets managed.' But if you can't measure it, then it's difficult to manage it," he adds.

Hurdzan says superintendents will always be scrutinized for their water use as long as their golf courses are green — and the people doing the scrutinizing live in houses with lesser-quality lawns.

"Those people will think superintendents have overwatered their courses," Hurdzan says. "But if superintendents have the numbers to prove they haven't used an excessive amount of water or

that the water they have used is within a reasonable amount, then scrutiny will be less of a factor."

Hurdzan is a major proponent of soil sensors, which measure soil moisture among other capabilities.

"There shouldn't be an irrigation system update that doesn't have soil sensors as part of the package," Hurdzan says, also noting that soil sensors can be simply installed even if a course isn't undergoing an irrigation renovation.

#### One bite at a time

Some things must change for superintendents to feel less scrutinized. While Clark doesn't expect the scrutiny to go away anytime soon, he stresses the golf industry needs to communicate to regulators and legislators that the water it uses goes in hand with the money it generates as a \$60 billion industry.

Clark also believes superintendents and the golf industry are succeeding in convincing environmental groups that healthy turfgrass is good for the environment. He credits the industry, specifically the GCSAA, for responding to reports that depict the entire golf industry in an unfair light regarding irrigation.

"It's a big elephant," Clark says. "You take one bite at a time. But eventually you're going to make some progress."

While Jarrell doesn't expect the scru-

### How Golf Courses are Saving Water

According to the GCSAA's "Golf Course Environmental Profile: Water Use and Conservation Practices on U.S. Golf Courses," many 18-hole golf facilities have incorporated several practices to conserve irrigation water. The top three practices are:

- Wetting agent use.
- Hand-watering.
- Keeping turfgrass drier.



tiny to go away, he believes it's directly related to superintendents' fears of decreased water availability, which could happen if regulators decide to impose restrictions on them.

"There may be decreased availability because people are scrutinizing and saying all those rich fat cats are just overwatering their golf courses," Jarrell says.

No doubt, there are similar relationships between golf courses and regulators in other regions throughout the country. Golf courses that say they use water efficiently must promote what they're doing. In South Florida, golf courses promote the fact they account for only 3 percent of the freshwater use in the region.

Jarrell believes We Are Golf, an initiative introduced early this year by the game's leading associations "to change the face of golf and to represent the economic, human and environmental benefits of the industry at federal, state and local levels of government," will help the industry's image regarding water use.

Founded by the GCSAA, Club Managers Association of America, National Golf Course Owners Association and The PGA of America, We Are Golf is a coalition to inform and educate the public on issues such as irrigation.

Jarrell aims to defend the industry



in response to any water-wasting allegations. If he were ever scrutinized on the spot for using too much water on his course, Jarrell wouldn't hesitate to educate the scrutinizer.

"I would say, "The bottom line is I collect, clean and recharge more water than I use," he says. "A golf course is doing a public service."

Hurdzan has also taken the matter into his own hands, literally. For instance, when he designed Erin Hills Golf Course in Wisconsin, site of the 2011 U.S. Open, he called for a doublerow irrigation system on most holes. A lot of people complained, calling a double-row system "ancient," but Hurdzan stuck to his point.

"The only reason we went to a tworow system is so you can't possibly apply any more water than that," he says.

Of course, what also must change is golfers' expectations for the greenest of green turf. That in turn will take pressure off some superintendents who may be overwatering for job security.

"Superintendents make a conservative effort to use the minimum amount of water necessary to meet what's expected of them," Hurdzan says. "But if they err, they're going to do so on the high side, not the low side. Their jobs An Environmentalist Who Understands a Superintendent's Dilemma

BY LARRY AYLWARD, EDITOR IN CHIEF

Brent Blackwelder is a hardcore environmental activist. The president emeritus for Friends of the Earth, a prolific Washington, D.C.-based environmental group, also happens to be an avid golfer who sports a single-digit handicap.

Many people in the golf course maintenance industry believe environmentalists like Blackwelder don't know a ball mark from a divot when it comes to what they do for a living. But Blackwelder, regarded as the most senior environmentalist in Washington, is an exception. He knows more about golf course maintenance and conditioning than most golfers. That said, Blackwelder believes golf courses use too much water.

But rather than just make such a sweeping statement and leave it at that, Blackwelder elaborates on the matter with a powerful anecdote.

He says he was playing golf recently with friends at a private club in Washington. One of the players launched a shot that landed five feet in front of the green and stopped cold – the ball buried in mud. By coincidence, the course's superintendent was driving by in his utility vehicle at the time, and the players called him over. After showing him the ball, they asked the superintendent if he thought there was too much water on the fringe of the green.

The superintendent replied, "If I don't irrigate enough around the green, the *Poa annua* will die from the heat. And the area will turn brown."

Blackwelder could see the superintendent was caught in a classic damned-if-you-do-and-damned-if-you-don't scenario. He understood his dilemma. Blackwelder understands that superintendents, especially those at private clubs, are under pressure from members and golfers to deliver excellent conditions daily. But he says it's time for golfers to stop pressuring superintendents for those conditions. Then, superintendents won't have to look over their shoulders if they reduce irrigation and let courses play harder and faster.

"Who needs balls getting covered in mud?" Blackwelder asks.

are on the line."

That said, superintendents must get out in front of the issue to help themselves, Hurdzan says. They should find and take the time to schedule meetings to teach golfers and other members in their communities about golf and the environment, including water use.

"How many superintendents have outreach programs?" Hurdzan asks. "There are some, God bless them, but I think they all should."

Player advocates more government regulations on golf courses to save fresh water. He says more golf courses should be required to irrigate with recycled water. (Currently, only 12 percent of 18-hole golf courses irrigate with effluent, according to the GCSAA.)

By 2025, the world will be 20 percent short of fresh water, Player claims, adding that no golf course in a populated area then should be allowed to operate unless it uses recycled water.

"Once a week those courses would be allowed to flush greens with fresh water — but just the greens," Player says.

Sooner or later, Player says American golfers may be forced to change their minds about accepting less green on golf courses because they just won't be able to water as much as they do now.

"Because the world is running out of water," Player adds. ■

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