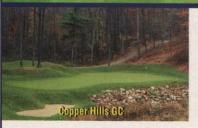


with Andrew Dalton



Andrew Dalton, like many turf professionals, is challenged to translate a tight budget into exceptional playing conditions. For the past three years, Andrew has been Superintendent at Copper Hills Golf and Country Club in Oxford, Michigan, where he is credited with making every budget dollar deliver dramatic improvements in turf health and quality.

Secrets to your success?

"Sticking to a program. I believe in building a program around proven products that work together to achieve results on the course as well as the bottom line."

Fertility philosophy?

"The nutrition-based, efficient organic fertility of Nature Safe gives me unbelievable results in terms of density, color and disease management. It's the foundation for my entire program."

How did you first learn about Nature Safe?

"Other superintendents told me about the incredible results. So, I talked to my distributor and reviewed the extensive research and product information. I was really impressed that every Nature Safe attribute is validated by independent research."

How has Nature Safe impacted your maintenance program?

"The longer you use the product, the better the results. Also, the added safety I get from Nature Safe gives me the flexibility and confidence to adjust my programs and be more aggressive in addressing the weaker areas on the course."



What about the impact on your budget?

"Nature Safe definitely gives me the most bang for my budget buck. I'm spending far less on various 'quick fix' products, which saves us time and money. In fact, just in the reduction of spray applications, I've saved over \$20,000 this year. The extra time and resources can be invested into rebuilding tees and cosmetically refining and improving the overall look of the course."

Professional Profile

Alma Mater: Ferris State University - Horticulture

Age: 29

Career Highlights:

- Superintendent Copper Hills GC, 1998-Present Oxford, MI
- Superintendent Brookwood GC, 1997-8 Rochester Hills, MI
- Assist. Superintendent Copper Hills GC, 1996-7 Oxford. MI
- Assist. Superintendent Brookwood GC, 1994-6 Rochester Hills, MI

Most rewarding professional experience:

"I've really enjoyed developing programs that put me in control of my turf conditions and expenses."



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Natural & Organic Fertilizers

Shades Of Green

OPINION

errorist attacks ravaged our country last year, and the omnipresent threat continues. Therefore, it's time to examine how secure your supplies are at your course.

After all, you certainly wouldn't want to become an unwitting accomplice to a tragedy. Let's start with a few questions.

How accessible is your maintenance area? Is it fenced in? Do you have an alarm system? Does a night watchman make rounds at your club facility? How secure is your diesel pump? Do you have a pallet of ammonium nitrate in your fertilizer storage area? Do you keep a large inventory of pesticides on hand?

Until now, I never considered golf course maintenance as a potential source for weapons of mass destruction, unless you counted weeds, fungal spores, nematodes or sod webworms as victims. On Sept. 11, 2001, however, a handful of misguided fanatics changed the way we must look at our daily routines.

We are being asked to be vigilant and protective of our fertilizer and pesticide stocks, often at maintenance facilities that were afterthoughts in the design and construction of our golf courses. We are asked to track the ordering and delivery of these products, and to report any overdue shipments. We are also asked to report any suspicious activity relating to these products — whatever that means.

We have known for some time that ammonium nitrate and diesel fuel can be combined to create a lethal truck bomb, but even the 1993 attack on the World Trade Center and the bombing of the Federal Building in Oklahoma City did not push us over the edge like the terrorist acts last September. Our good-natured, trusting and our often taken-for-granted attitudes toward freedom of choice, training, education and commerce were rudely rubbed in our faces. A new way of looking at our daily routines emerged out of necessity.

What can you do as citizen soldiers in the war on terrorism? Don't keep excessive inventories of fertilizers or pesticides. The products you do need to keep around should be stored in locked, secure locations. If your mainte-

How Secure Is Your Course?

BY JOEL JACKSON



WE ARE BEING ASKED TO BE VIGILANT AND PROTECTIVE OF OUR FERTILIZER AND PESTICIDE STOCKS nance compound isn't fenced, do it. Install an alarm system to deter intruders. Fueling stations also need to be as secure as possible so diesel fuel cannot be extracted easily.

I know this may sound like overreacting, but you should still go through the exercise of examining your safety precautions. You must ensure your course is doing its part to prevent access to everyday materials that can be converted to perverted uses against our people.

We shouldn't get paranoid, but we should be prepared. I still go to the mailbox every day without wearing rubber gloves to get my bundle of bills, junk mail and magazines, but I also wash my hands more often after handling the mail.

You might consider how you can alter your fertility program to avoid using high-nitrate fertilizers as often as before. In addition, you might order less of the products and apply them more often instead of keeping two or three applications on hand.

You should check with your state's agriculture department and make sure you have a hotline number posted so you can notify a law-enforcement division or the FBI of any irregularities in shipping and delivery or any incidents of tampering, theft or break-in.

After taking the physical security measures needed to make your supplies safer from theft and considering operational changes to your programs, the hardest challenge of all will be acknowledging that our way of life may be under attack for some time.

Our profession has evolved and survived for more than 200 years. This is just one more challenge we must face so we can do our part in the campaign for enduring freedom.

Joel Jackson, CGCS, retired from Disney's golf division in 1997 and is director of communications for the Florida GCSA.

THE BEST GREENS AREN'T BUILT. THEY'RE MAINTAINED.

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Gub of the

No. 17 Tournament Players Club at Sawgrass Ponte Vedra Beach, Fla.

1817

Month

Short and Not So Sweet

It's a wee 132 yards long, but the No. 17 hole of the Stadium Course at the Tournament Players Club at Sawgrass is arguably the shortesttoughest par 3 in golf – thanks to the famous (infamous?) island green. Golfers hit about 120,000 balls in the water annually.

Pete Dye, who designed the course in 1981, says No. 17 was never planned as an island green. But after Dye reaped large amounts of sand from the area where 17 was to be built to use on Nos. 15 and 15, the area was left with a big hole in the ground. Dye's wife and design pariner, Alice, suggested the island green. The rest, as they say, is history. Pete jokingly says he takes credit for the design, but only when someone hits the green.

Superintendent Fred Klauk Jr. says the hole presents few maintenance challenges. His staff treats the green like any other green in regard to

pesticide and fertilizer applications. Klauk says the green is watered less because of wicking from the lake. Of course, divers come in once a quarter to collect the lost golf balls.

Golfdom's Hole of the Month is presented in partnership with:

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doesn't end there. We supply you with the industry's best operator manuals, tech literature, and support hotline. We deliver quality parts 365 days a year, with a 99.5% fill-rate overnight. And we offer the JDC[™] MasterLease, the most cost-effective way to acquire golf and turf equipment. To see how John Deere can make a difference on your course, call your local John Deere distributor or 1-800-537-8233.





NOTHING RUNS LIKE A DEERE

Designs on Golf

inter provides the best time for reading, and rarely has there ever been such a diverse set of enjoyable books that involve golf

course design. Once thought of as a subject for only a select bibliophiles, publishers are offering a little something for everyone.

As an economic downturn forces the golf business to reflect on its present and future, members of the industry might want to gain a better understanding of its past — and there is no better place to start than A.W. Tillinghast's writings. *Gleanings From the Wayside* (available through *www.tillinghast.net*) is the final in a series of three books by TreeWolf Productions featuring all of Tillinghast's published articles.

Whether you like Tillinghast's courses or not, you can't help but enjoy his rambling thoughts and suggestions. Golfers who've heard their share of dreadful hole-by-hole stories will love Tillie's explanation of a concept called the "Tale of Woe Committee," which consists of three deaf men who listen to golfers tell all the terrible things that happened on their links. It's a classic.

For architecture junkies, *Gleanings* contains an incredible array of photos and drawings to study, including Tillinghast's renderings of courses throughout the country. Tillinghast's personal insights into the game as collected in this timeless series should make for great reading whenever you're in the mood to hear how one of golf's master architects approached the game.

Another must read for those hoping to gain a feel for old-time golf is a modern-day account of Dornoch, Scotland. Things haven't changed much at Dornoch over the years, and Lorne Rubenstein's, *A Season in Dornoch*, (Simon and Schuster) provides an enjoyable look at the community and golfers whose life is centered around one of the world's great links. Thankfully, Rubenstein did not turn his three months visiting there into another overly sentimental journey. Instead, he provides an insightful, enjoyable look at why Dornoch endures as perhaps the model golf community.

If you want to laugh at the way-too-serious PGA Tour and learn a little something about

An Opportune Time to Visit the Past

BY GEOFF SHACKELFORD



NEW GOLF DESIGN BOOKS OFFER AN ENCHANTING LOOK INTO THE GAME'S ELEGANT HISTORY architecture along the way, Dan Jenkins' *The Money-Whipped Steer-Job Three-Jack Give-Up Artist* is your best bet. If a politically correct celebration of PGA Tour life is your kind of read, stay away from this one because Jenkins and lead man Bobby Joe Grooves do not hold back — all in the name of fun, of course.

"Other than Ben Crenshaw, who lives in the past and wishes his balls were gutta-percha, nobody else on the tour can jack with me on golf history," proclaims Bobby Joe, who readers will recall was not a big fan of golf history when he last appeared in Jenkins' masterpiece, *You Gotta Play Hurt*. Light on plot and heavy on hilarious sarcasm, Jenkins actually turns this into an informative look at the general history of pro golf and course design while keeping things festive.

Returning to books with a more serious flair, Brad Klein's, *Discovering Donald Ross*, sets a new standard for architect biographies. Richly illustrated and carefully researched, Klein (doesn't he work for another industry magazine?) helps us understand what drove Ross to America and how he became such a prolific designer. Furthermore, he illustrates how to read a Ross design and provides an excellent blueprint for approaching a restoration program. The only hiccup is a reference to a silly spat between the Ross Society and architect Brian Silva, a forgettable affair that would have been best left on the editing room floor in favor of more Ross drawings.

Discovering Donald Ross makes a bold statement about the importance of researching and understanding golf's past — information everyone with an interest in golf's present and future should explore this winter.

Geoff Shackelford collaborated with artist Mike Miller on his latest book, The Art of Golf Design. He can be reached at geoffshackelford@aol.com.

The Politics of Market Ma Market Mark

Should superintendents irrigate for the lush, green look to keep golfers happy? Or should they decrease irrigation for the environment's sake and risk losing their jobs?

BY LARRY AYLWARD, EDITOR

t was an arid 2001 in upstate New York, with a desert-like dry spell that superintendent Rick Slattery won't soon forget. "It was one of the driest years we've had in a long time," says Slattery, superintendent of Locust Hill CC in Rochester, N.Y.

The parched period caused Slattery to experience something he's never encountered before in his more than 30-year career — a freshwater shortage so serious that several area golf courses ran out because irrigation lakes and creeks dried up. "A lot of superintendents were forced to purchase municipal water at huge costs to refill their ponds," Slattery says.

The situation reminded Slattery that fresh water — whether it comes from the ground, a river or a reservoir — is a precious commodity. It also made him realize the United States and the world may be on the verge of a serious potable and freshwater crisis the golf industry can't escape.

The world's pundits predict a dire water crisis in the next five to 20 years. If people don't begin conserving fresh water, they say, their lives will change for the worse. These authorities aren't just alarmists trying to create melodramatic headlines. Consider:

■ According to a 1998 report from The Johns Hopkins School of Public Health, demand for fresh water is soaring as the population grows and water use per person rises. By 2025, more than 2.8 billion people will live in 48 countries facing water stress or water scarcity. Forty of the countries are either in the Near East and North Africa or in sub-Saharan Africa.

The United States is experiencing freshwater problems, according to the report. Groundwater reserves are being depleted in many areas where the use rate is 25 percent greater than the replenishment rate. In the West, groundwater aquifers are being depleted at even faster rates, including the massive Ogallala aquifer, which lies under parts of six states.

■ In his 1998 book, *Tapped Out: The Coming World Water Crisis and What We Can Do About It*, former U.S. Senator Paul Simon says, "Within a few years, a freshwater crisis of catastrophic proportions will explode on us unless something happens to stop it." In a recent interview with *Golfdom*, Simon said the situation has deteriorated since he wrote the book (*see sidebar on page 32*). Simon says communities in many so-called "wet" states including Michi-



gan, Nebraska and Minnesota have already experienced water-shortage problems.

Ronny Duncan, professor of turf breeding at the University of Georgia, says the freshwater shortage in the United States will get worse in the next five to 10 years, and drinking-water prices will skyrocket.

"Fresh potable water for human consumption will become gold," Duncan says. "Freshwater demands are doubling every 20 years. Alternative water will become mandatory for use on turf."

Duncan's last statement doesn't surprise Slattery. "There's no doubt in my mind that water is going to be the most restricted resource for turfgrass management in the future," he says, the assuredness evident in his voice.

On the other side of the country in Scottsdale, Ariz., Mark Clark, who's accustomed to a dry climate year around, seconds Slattery's opinion. Clark, certified superintendent of Troon Golf & CC, predicts politicians will debate water issues for years to come. "This will make oil look like nothing," he says.

It's no secret that the golf industry uses its share of fresh and potable water. The problem is when superintendents irrigate their courses according to the criteria of the infamous "Augusta Syndrome." Golfers watch The Masters and other PGA tournaments on TV, see the glorious conditions of the courses and demand similar conditions at their clubs. Hence, some superintendents feel the pressure and cater to golfers' requests, which often means over-irrigating to keep the course the greenest green, even in the midst of drought.

While superintendents have heard the claims of a potential and critical freshwater shortage, some ignore the issue because of pressure from golfers, greens committees and owners to keep courses in choice condition. These superinten-*Continued on page 30* Rick Slattery, superintendent of Locust Hill CC in Rochester, N.Y., believes water will soon be the most restricted resource for turfgrass management.

The Politics of Water

Continued from page 29

dents are worried that if they cut back on water use — and allow their courses to turn brown — they'll be fired for their ineptitude.

While Slattery is sure most superintendents want to use water wisely, he says some won't hesitate to use more than they need to keep their courses as lush and green as their competitors' tracks. They know what will happen if they don't.

"It often comes down to job security," Slattery says. "If you have a family to support, you elect to worry about the water shortage later. If we lose grass, we lose our jobs."

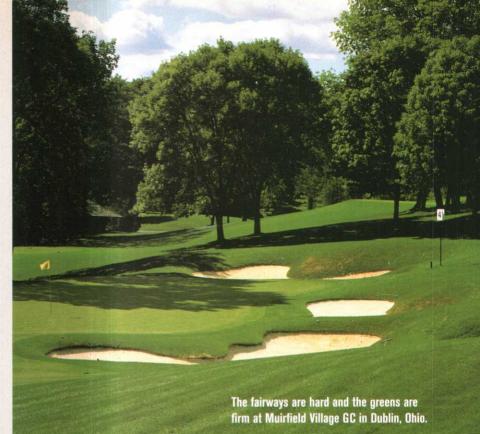
The industry — especially its researchers, educators and inventors - has reacted to the impending water crisis with a plethora of ideas to conserve water, including state-of-the-art irrigation systems, improved guidelines for water reuse and drought-resistant turfgrasses. These components are mainstays in the industry's aim to manage its water use better, but not the answer. Rather, an intangible — golfer education — is the key. Superintendents and others insist golfers must be taught that brown grass in late July is acceptable, especially so golf courses can conserve water. The problem, of course, is getting a golfer to believe that after he's paid \$150 to play a round.

ave you ever stood over declining turf?" Slattery asks.

Most superintendents know it's not a pretty sight, and they approach the problem with one of two solutions, Slattery says. They either irrigate the turf so it comes back quickly or they let it suffer and recover on its own. Slattery would prefer the latter, but he knows members wouldn't stand for brown turf on his course for any length of time.

That frustrates Slattery because he wants to do the right thing environmentally. "Golfers need to look inward at what their expectations of superintendents have become," Slattery insists.

Duncan says everyone in the golf in-



dustry — from superintendents to scratch golfers — needs to understand that a serious freshwater shortage is inevitable if people don't try to prevent it. Duncan believes frequent, clear communication between superintendents and golfers about superintendents' role in conserving water is the industry's best bet to combat the issue.

Paul Parker, executive vice president of the Center for Resource Management, a Salt Lake City-based environmental stewardship group, says many golfers have forgotten the philosophy that the game is supposed to be played in nature, not a setting that advocates wall-to-wall green. It should be superintendents' goals to educate golfers that not all courses need to be manicured like Augusta National, Parker says.

Former superintendent Ed Etchells, president of North Palm Beach, Fla.based Golfturf, a division of Golden Bear International, advises superintendents to be frank while educating golfers. Superintendents will only be getting themselves into trouble if they cut back their courses' irrigation cycles to conserve water and don't tell members about it.

"You have to be up-front about it," Etchells says. "You have to tell them you're going to stop watering roughs and are only going to water greens, tees and fairways."

Duncan says superintendents should take the issue to their golfers and greens committees through literature, such as a one-page pamphlet that explains the golf course is cutting back on irrigation to conserve water for the environment's sake.

"If you're willing to put it in writing and explain it at a level for people to understand, they're much more willing to accept your proposal," Duncan says. "You have to take a proactive stance and communicate your message at a level that members understand."

An outsider might think one of the world's great modern courses would soak up all the water it wants to keep it looking lush and green, but not at Muirfield Village GC in Dublin, Ohio. On a hot and dry August day, superintendent Mike McBride scans the turf, which is medium green with a hint of golden brown — just the way he and his boss Jack Nicklaus like it. McBride says Nicklaus, who designed and built Muirfield, believes golf courses should be kept dry for better playability.

Continued on page 32