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Hole of the

Hole No. 18 | Traverse City Golf & Country Club | Traverse City, MI
Built in 1915, Traverse City Golf & Country Club played host to yesteryear's golfing ambassadors from Gene Sarazen to President Gerald Ford. As times changed, so did the course's need for a renovation that intensified play and rivaled current competition.

“Our club has always been a home away from home for local families and summer residents, but as tourism and golf in northern Michigan increased, so did the need to up our game," said superintendent, Steven Hammon, who's worked at Traverse City for 13 years.

For example, in 2006, the club transformed its aging driving range into a state-of-the-art practice facility equipped with seven game-like target greens, bunkers and fairways.

The practice facility will come in handy for golfers needing to careen their balls around a massive century-old tree on the par-4, 377-yard Hole 18. The oak obstacle sits slightly left of the middle fairway, challenging both short and long hitters. Short hitters should lay up along the right side of the fairway to avoid the tree with their second shot, but big hitters should power shots high to clear the tree top.

“Players often ask how much it would cost to have the tree struck by lightning,” Hammon said.

Hammon and his maintenance crew of 14 realize their limitations when it comes to controlling nature. They may not be able to summon lightning, but they have innovative tools when struck by turf disease. In June 2008, Hammon struggled with a serious brown ring patch (Waitea patch) outbreak.

“My 94-year-old annual bluegrass greens were getting hammered with irregular yellow rings,” he said.

Hammon applied Trinity® fungicide at a curative rate of 1.5 to 2.0 ounces per 1,000 square feet. “I was so pleased with the results that I've incorporated Trinity into my preventive program for all patch diseases," he said. “I trust Trinity to perform when I need it most.”

To learn more about Trinity® fungicide and BASF visit www.betterturf.com and www.basfturftalk.com.
GOOD FOR THE Environment,
AND GOOD FOR THE Golfers
By Christopher S. Gray Sr., Contributing Editor

IT ALL BEGAN WITH A CONVERSATION with the owner of my golf course during a late-night budget meeting.

“How much money did we actually save with all these environmental programs?” he asked.

“By my numbers, more than $250,000,” I replied.

He thought for a moment and said, “We should tell our golfers about this.”

I responded, “No sir, we should give some of the money back to them and then tell them about it.”

And that’s the beginnings of Marvel Golf Club’s “Affordable Golf from a Better Environment” initiative. In a nutshell, the initiative reduces the daily greens fees for the entire 2009 golfing season from $35 to $25 for an 18-hole round (with golf car) seven days a week. But the key to this program is why we’re able to do it: It’s because of the numerous environmental programs implemented throughout the golf course that have resulted in substantial maintenance budget savings. We’re providing a message that there are real and tangible benefits for implementing environmental programs on golf courses.

A wall in the clubhouse is dedicated to the “Affordable Golf from a Better Environment” initiative. On the wall hangs a 20-foot-by-30-foot poster frame that’s packed with information detailing the four major areas of environmental savings: native-area establishment, water management, fertility management and pesticide management.

Establishing and expanding native areas on the golf course, typically where golf balls shouldn’t go, has proved to be the largest savings contributor. Over the past three years, nearly 50 acres of maintained golf course land has been converted to native grass conservation areas. Through the techniques of timely glyphosate applications and selective controlled burns, the native seed bank was stimulated to germinate. Fortunately, in this geographic area (southern Kentucky), the predominant native species that prospered was broomsedge bluestem, which grows to about 3 feet and turns brown. After the broomsedge was established, no further maintenance practices were necessary in these areas.

The significant budget savings come in the form of associated mowing costs and reduced fertilizer applications. When you don’t need to mow 50 acres of land, you save labor, fuel and equipment expenses that go directly to your bottom line — not to mention the savings from not having to purchase and apply 50 acres of fertilizer. The cumulative savings from native-area establishment have added up to more than $150,000.

In terms of water management, it’s not simply a matter of reducing the actual amount of water used to irrigate the golf course. The secondary costs involved with irrigation add up more quickly when you examine the associated expense numbers.

Electricity used to transfer water into the retention pond or to operate the water source as well as run the irrigation pumps are the highest costs with irrigating the golf course. By capturing storm water and harvesting wastewater directly from the property using nothing more than gravity and pipes, we significantly reduced the amount of electrical energy needed to provide sufficient water for our irrigation cycles.

These programs have virtually eliminated drawing fresh water out of Kentucky Lake, which lies adjacent to

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the golf course — which has saved more than $40,000 in electrical costs.

To irrigate more efficiently, we employ a regimen of well-timed wetting agent applications. These wetting agents allow us to irrigate with less water, while maintaining proper and consistent levels of moisture throughout the soil profile. The cost of the wetting agents is more than offset by the reduction in irrigation cycles needed to provide a healthy playing surface for the golfers. In total, wetting agents have saved the maintenance budget about $10,000.

Marvel Golf Club was the first course in the United States to use transcontinental-seeded bermudagrass for tees and fairways. This seeded variety has many outstanding attributes, including being able to fertilize with smaller amounts than traditional nonseeded bermudagrass.

We fertilize our tees and fairways with a simple straight urea (46-0-0) at a rate of .70 pounds per-thousand square feet per month. Timely irrigation, immediately after application, reduces the volatility of the urea. These practices lead to a 30 percent reduction of fertilizer use for tees and fairways, saving more than $30,000.

For the greens, we developed a spoon-feeding program with water soluble, cost-effective Plant Marvel fertilizer. These applications provide the A1/A2 bentgrass with the proper levels of nutrients needed to survive in the hot Kentucky summers. We maximize the fertilizer uptake efficiency by applying less fertilizer more frequently, which minimizes potential loss by leaching. Comparatively, the spoon-feeding program saves about $7,500.

Regarding pesticide management, we established rather high threshold levels for each area of the golf course.
By spoon-feeding the greens, Marvel Golf Club saved about $7,500. The idea is to maximize the fertilizer uptake efficiency by applying smaller amounts of fertilizer more frequently.

This has also led to a considerable reduction of fungicides and herbicides. Additionally, with the assistance of a Tier 1 pesticide assessment model, we identified and approved only low-risk pesticides for use on the golf course. To date, there have been no insecticide applications made to the transcontinental tees and fairways, which has meant an enormous savings to the pesticide maintenance budget. In all, we have reduced the total number of necessary pesticide applications by about 20 percent, saving nearly $15,000.

For years, our industry has tried to publicize the various environmental benefits of golf courses to the average golfer, but unfortunately these efforts have largely fallen on deaf ears. The average golfer who plays a few times a week isn’t interested in the environment as much as he’s interested in how much he has to shell out for a round of golf, especially in these difficult economic times. That’s not to say he or she doesn’t care about the environment, only that he or she would rather focus on winning that $2 nassau among his golfing buddies.

It’s the casual golfer the initiative reaches by spelling out exactly how each environmental program has saved the golf course money, which in turn results in lower greens fees for the golfing season.

Message delivered and money saved. •

Christopher S. Gray Sr., a contributing editor for Golfdom, is golf course superintendent and general manager of the Marvel Golf Club in Benton, Ky.

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**When the school bell rings, don’t let your dog go back to school!** Many dogs will naturally follow kids — or will be encouraged to tag along. Many become lost, injured or cause a nuisance around the schoolyard. Keep your dog confined when children leave for school. If you drive, don’t take your dog with you. Animals learn quickly and can find their own way to school later on. Brief separations during the days just before the new school year will help those children and dogs that are especially close. And if your dog is missing, call the school first!

Higgins. His owner is Chris Cantrell, assistant superintendent at Chattanooga Golf & Country Club in Chattanooga, Tenn. (Photo by: Nicole Cantrell)
You've got enough things to worry about. But with Tower® herbicide, weeds aren't one of them. Featuring a new active ingredient for turf, Tower delivers broad-spectrum preemergent control of more than 50 broadleaf weeds, grasses and sedges, including goosegrass and yellow nutsedge. Plus, its liquid formulation makes it easy to apply. Say no to weeds. Try the herbicide that towers over the competition: Tower.

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BASF
The Chemical Company
Golfdom asked companies to expand on their environmental philosophies and practices as they pertain to the golf course industry. The vignettes from 24 companies follow:

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Biopesticide Use Increasing

Golf course management is transitioning toward better-rounded, agronomic-based, environmentally sound, management systems. This new approach places much more emphasis on soil and plant health, resource conservation and environmental impact. With these new management systems, biopesticides are relied upon heavily to replace synthetic chemicals.

Societal emphasis on environmental sensitivity, and preference for what is "green," is influencing golf course management's turning green. With certainty, chemical use will be severely restricted as time goes by. Already, throughout Europe, Canada and now small towns and school districts across the United States, bans are being enacted. Increasingly, superintendents, general managers and owners are concerned with the risks of liability associated with chemical use.

Progressive golf course superintendents, employing intensive IPM programs, are proving that chemical use can be reduced significantly. The result is a healthier, stronger golf course that meets the same quality standards as any traditionally managed course. These leading superintendents are reporting the course is actually easier to manage with the same or lower costs and with good turf quality. One superintendent likened his turf to a healthy person who eats right, gets enough rest, exercises regularly, takes vitamins, and who rarely gets sick or needs medicine.

RHAPSODY fungicide is the new EPA-registered microbial fungicide and is also listed by the Organic Materials Review Institute as organic. The product has been in research programs at 25 universities over the last six years. RHAPSODY helps superintendents lead their profession by being greener, and doing good. Using RHAPSODY demonstrates environmental stewardship, and earns the superintendent well-deserved recognition. Using RHAPSODY also fits well within the chemical-use reduction and water quality protection requirements of the Audubon International program.

Products, Partners for a Better World

At Agrium Advanced Technologies, we constantly look for ways to increase positive impacts on our stakeholders and the environment. Our slow- and controlled-release fertilizers are engineered with advanced-generation coatings and other proprietary technologies that increase nutrient uptake by plants and reduce losses to the environment.

Turfgrass professionals rely on our environmentally friendly fertilizer technologies to control nutrient release for improved plant growth and environmental performance. Agrium Advanced Technologies' earth-friendly turf product line includes slow- and controlled-release products – POLYON®, NITROFORM®, NUTRALENE®, XCU™, DURATION CR® and PRECISE®. PRECISE technology is the first to deliver long-term, controlled-release plant protection from an insecticide granule. Our products deliver nutrients or active ingredients to the soil gradually and consistently over a longer period of time, which ensures they stay in the root zone where they belong. This results in green, healthy turf and minimizes the chance of nutrient losses to the environment by leaching or volatilization.

Agrium Advanced Technologies is committed to purchasing only the highest quality inputs to manufacture our products, and we undertake actions that help to protect, sustain and improve the environment — today and in the future.

Agrium Advanced Technologies has also partnered with several environmental organizations as part of an ongoing initiative to become a leader in environmental stewardship and sustainability. One of our most notable affiliations is with the Environmental Institute for Golf, which is committed to strengthening the compatibility of the game of golf with the natural environment. Other key organizations that Agrium Advanced Technologies supports include Audubon International, PLANET, Project EverGreen, RISE and The Fertilizer Institute.

ANDREW MITTAG
President

Andrew Mittag