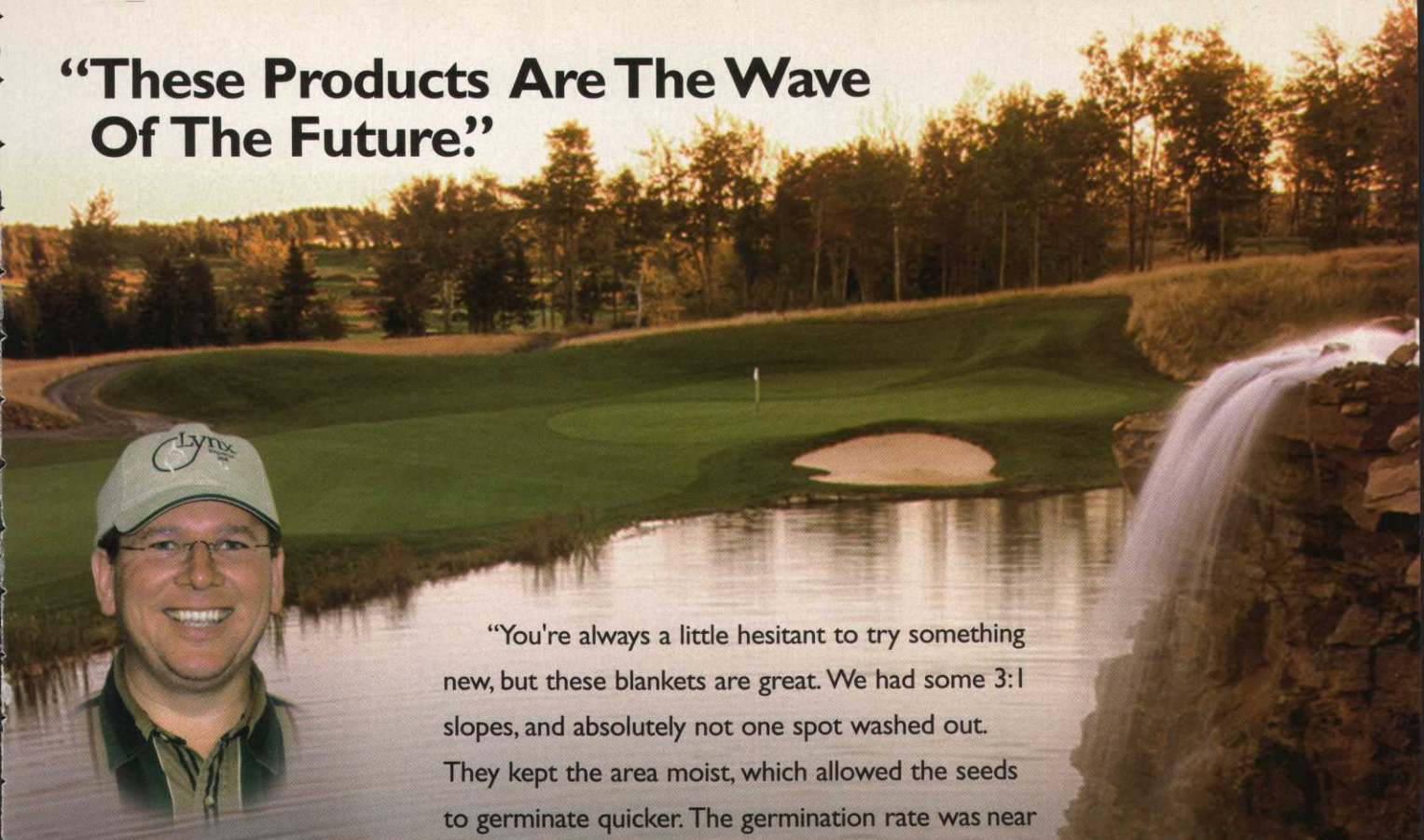
"These Products Are The Wave Of The Future."



"You're always a little hesitant to try something new, but these blankets are great. We had some 3:1 slopes, and absolutely not one spot washed out. They kept the area moist, which allowed the seeds to germinate quicker. The germination rate was near 100%, and we were cutting grass 9 days later! I really believe these products are the wave of the future."

Greg McLinton
The Lynx at Kingswood Park
Fredericton, N.B. Canada

After using sod and experiencing serious thatch and weed problems, course superintendent Greg McLinton chose to seed the entire course when an additional nine holes were added. Areas of high risk for erosion were covered with GreenSP® DS75 erosion control blankets. In addition to providing erosion control, the blankets dramatically reduced finished job costs.

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Ken Brown, a Gulph Mills GC worker, takes a rest after taking the tarps off the course's greens after fumigation. It's hard work, and superintendents should level with their crew members about the amount of effort it will take.

Continued from page 60

operators are required to apply methyl bromide, superintendents aren't responsible for calibrating the machines.)

Some other tips for your regrassing projects:

■ Make sure you don't reintroduce weed seeds by bringing in the soil you're going to use for the regrassing and letting it sit too long at your course, where it can be reinfected by weed seeds.

■ Consider using a growth regulator after a nonselective herbicide application. Whatever grass seed is left from the old fairways will be controlled while allowing the newly seeded varieties to build root systems.

■ Read and follow all the label instructions, no matter what method you use.

■ Decide how quickly you want the golf course back in play before you begin.

■ Have the new seed tested before reseeding to make sure it doesn't contain weed seeds. Otherwise, the whole sterilization project will be a waste. ■

You can reach Andorka, the author of this story, at fandorka@advanstar.com.

The Scoop on Methyl Bromide

The EPA targeted methyl bromide, one of the most common soil fumigants on the market, for elimination in 1991. This year, the agency has mandated a 70-percent reduction on its way to a 100-percent reduction by 2005. It was originally targeted because the EPA's scientists determined that using methyl bromide reduces the ozone layer, thus contributing to global warming.

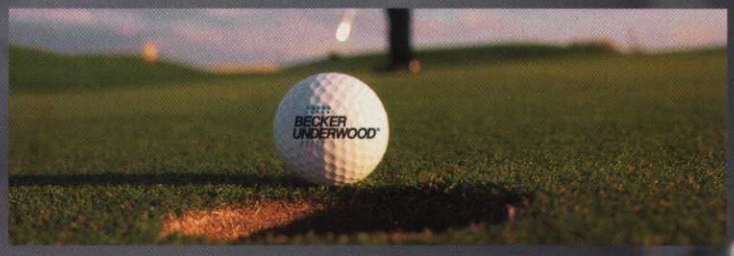
In June, the agency held five seminars around the country to explain the phase-out process and ask for feedback on its critical-use exemptions to superintendents and other end-users. It is also working with universities and companies to explore alternatives to the gas.

The EPA has posted 30 case studies describing the use of alternatives to the gas on a Web page (*www.epa.gov/spdpublc/mbr/casestudies/index.html*). They are free and can be ordered by calling 800-296-1996.

– F.H.A. Jr., Source: EPA

always thinking ahead.

The truth about biostimulants from the company you trust.



Let's cut through all the hype about biostimulants. Fact is, many products marketed as "biostimulants" are little more than expensive, liquid fertilizers, and we've got analyses to prove it. They may make your turf look healthier for a short time, but they aren't going to improve its condition in the long run.

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Put on the Map

Idaho superintendent discovers how beneficial it was to chart his course by GPS. Oh yeah, it wasn't as complex and expensive as he thought it would be either

BY LARRY AYLWARD, EDITOR

Clink! Clang!

"That's not supposed to be there," Gerald Flaherty said to himself and anyone else within earshot.

The scene was the first hole of a wide-scale renovation at Crane Creek CC in Boise, Idaho, last September. Flaherty, superintendent of the course, had just watched a backhoe strike a main irrigation line by mistake.

According to the course's "as-built" map, the irrigation line was supposed to be about 20 feet south from where the backhoe was digging. But there the pipe was, right in front of the befuddled superintendent's face.

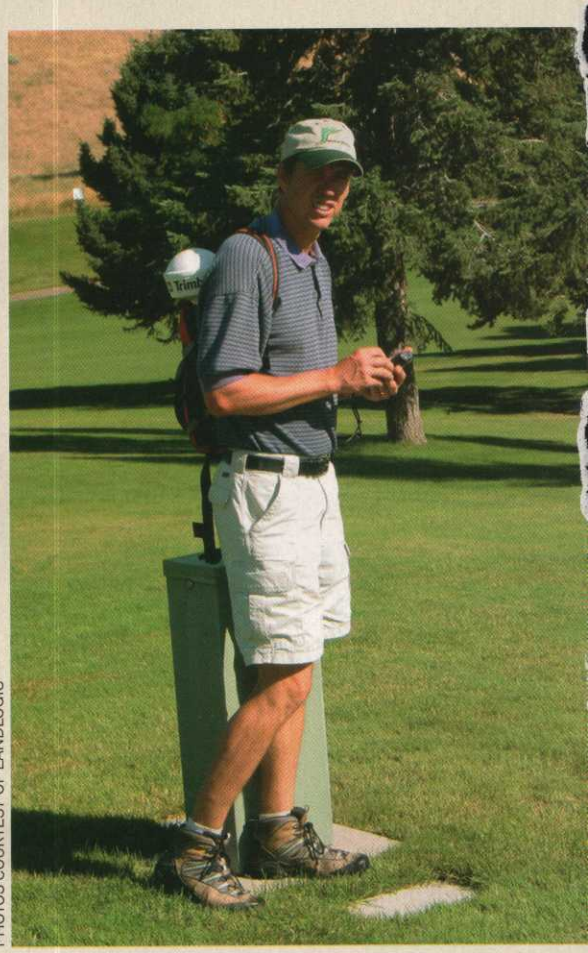
The renovation was a typical modernization of a 40-year-old golf course, consisting of adding cart paths, expanding greens, reworking tees, rebuilding bunkers, and subtracting and adding trees. But problems ensued on the first hole when construction equipment encountered — make that hit — items such as irrigation pipe lines and power lines that weren't on the course's original 1953 map.

"We started finding things in the ground that we thought were many feet away from where we thought they were," Flaherty says.

Being only the first hole, Flaherty didn't have much confidence left in the old map. He knew he needed a new map. He knew the course needed to be mapped according to the Global Positioning System (GPS), something he had been wanting to do. (The GPS is a web of 24 government-run satellites in 12-hour orbits.)

"It became an easy sell [to the course's decision makers] once we started finding things in the ground that weren't supposed to be there," Flaherty says.

And once the decision was made to map the course, Flaherty recognized it made sense to map it twice, before and after the renovation.



PHOTOS COURTESY OF LANDLOGIC

Gerald Flaherty collects the location of an irrigation controller while mapping his course.

Problem

This is a classic case of a superintendent not "knowing" his course when he and his crew set out on a renovation. But it wasn't the superintendent's fault. The course's 1953 "as-built" map didn't provide much direction as to where items were located.

Solution

To create a better and more informative map before and after the renovation, the superintendent mapped his course according to GPS.

'It was cake'

Flaherty studied several companies to perform the mapping but settled on LandLogic in Boise. Flaherty had heard good things about LandLogic from fellow superintendent Kevin Hicks of Hillcrest CC in Boise. Hicks

had helped LandLogic creator, Larry Robinson, test his mapping system and software.

Robinson began LandLogic out of his love for golf and his desire to help superintendents use the technological advancements of GPS in mapping of their golf courses. When he started the company in the mid-1990s, his goal was to present superintendents with a GPS mapping program that was simple and affordable. Robinson spent more than three years testing three prototypes. He introduced his system in late 2000.

Flaherty says LandLogic's price for its mapping services was substantially lower than the other companies he researched. It costs less because LandLogic's philosophy is to let superintendents map their courses rather than pay the high cost of labor to have mapping experts do it for them. "All we do is provide the equipment and mapping expertise," Robinson says, adding that LandLogic's price for mapping is about $7,000.

Robinson says there's a perception that GPS mapping is the sole domain of engineers, hydrologists and geologists. While that's hardly the case, it's still difficult to get superintendents to believe they can map their own courses, he says.

The 42-year-old Flaherty was a perfect example. He half-jokingly says he's not sure now to turn a computer off, so he was skeptical that he could consult a satellite to map his golf course. But as it turned out, Flaherty says mapping his course was "a walk in the park."

"I'm not a computer guy at all, and I was nervous about this. But it was cake," he says. "[Robinson] spent about 10 minutes explaining the procedure to me. I couldn't mess it up if I tried."

While the mapping equipment consists of sophisticated computer software, superintendents need not be intimidated, Robinson says. All they need to do is wear the equipment as a backpack and walk the course with a hand-held personal digital assistant (PDA). The PDA provides simple and explicit directions ("Here's how to map this bunker"), communicates with a satellite and stores the information.

It takes several hours to map the course, but that's to be expected. Areas to be mapped include fairways, greens, tees, irrigation heads, bunkers, trees, ponds and even manholes.

Flaherty says it makes sense for a superintendent — not a hired hand — to map his or her own course because it's a great way to view the track. It took about five days to map Crane Creek. "You notice things you might not have noticed if you weren't the person mapping it," he says.

After the mapping was completed, Flaherty sent the equipment — and all of the recorded data — back to Robinson, who organized the data and formulated an accurate map of the golf course from it. The data was then loaded onto a laptop computer along with LandLogic's course management and map maintenance software.

"A superintendent can use the software to view and edit his course map, and to access a myriad of other functions like head triangulation, perimeter measurements and irrigation site codes," says Robinson, noting that the software is also provided on a pocket computer that a superintendent can wear on his belt.

A superintendent can use the software to access functions such as irrigation head triangulation.

Old and new

The first time Flaherty performed the procedure last September, he walked all over his course — mapping everything from bunkers and trees to valve boxes and sprinkler heads. Flaherty called representatives from local power and utility companies and had them come out to the course and mark their lines. Then he mapped them.

If he wouldn't have done that, Flaherty is sure he and his crew would have run into even more trouble during the renovation. "We avoided hitting a fiber optic line which would have been ungodly expensive to repair," he says.

After the renovation was complete, LandLogic sent the equipment back to Flaherty so he could conduct a second mapping to update the course with the renovations. The second mapping is included in the $7,000 fee.

It's great to have a comparison of the "new" and "old" courses on computer to show to

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Read another Real-Life Solutions on page 72

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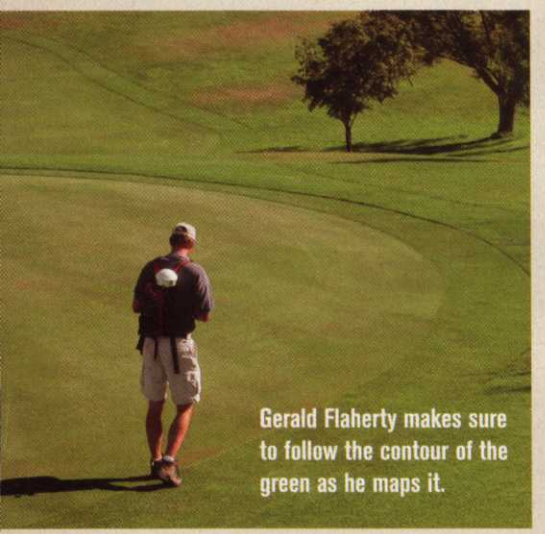
green committee members and other decision makers, Flaherty says, especially when it comes to forming a budget.

"We can show them that our bunkers doubled in size, our tees increased by 30 percent, and our greens increased by 10 percent," he says. "We can show them that we took down more than 'a couple' of trees."



Gerald Flaherty makes sure to follow the contour of the green as he maps it.

Because the system can store vital information about maintenance procedures, such as square footage and labor rates, superintendents can provide their bosses with thorough reports on how much was spent on tasks such as fertilizer applications and fairway mowing. Robinson says the information collected for the map is accurate from 4 inches to 6 inches of the exact measurements.

Attaining accuracy

Mapping a course continues to be beneficial in subsequent years, Robinson says. That's when superintendents can access records to see what maintenance procedures they performed on a particular green the season before and how the turf responded to the procedures. They can also check to see what the weather was when they performed certain tasks. They can use all the information gathered previously to make real-time decisions.

Flaherty says the new map is already playing an important role in his operation. In June, he and his crew installed 300 feet of new drainage. "Because we knew where the drain lines were, we could dig with confidence," Flaherty says.

Mapping is also important if superintendents are planning renovations with outside contractors. That way, they can work with contractors to define the square footage of the areas to be renovated accurately.

While GPS mapping is a proven tool to improve a golf course's maintenance operations, it's still not in demand because it's regarded as complex and expensive, two labels LandLogic has strived to combat. "The biggest issues are education, education and education," Robinson says. ■

PENNINGTON RYE.

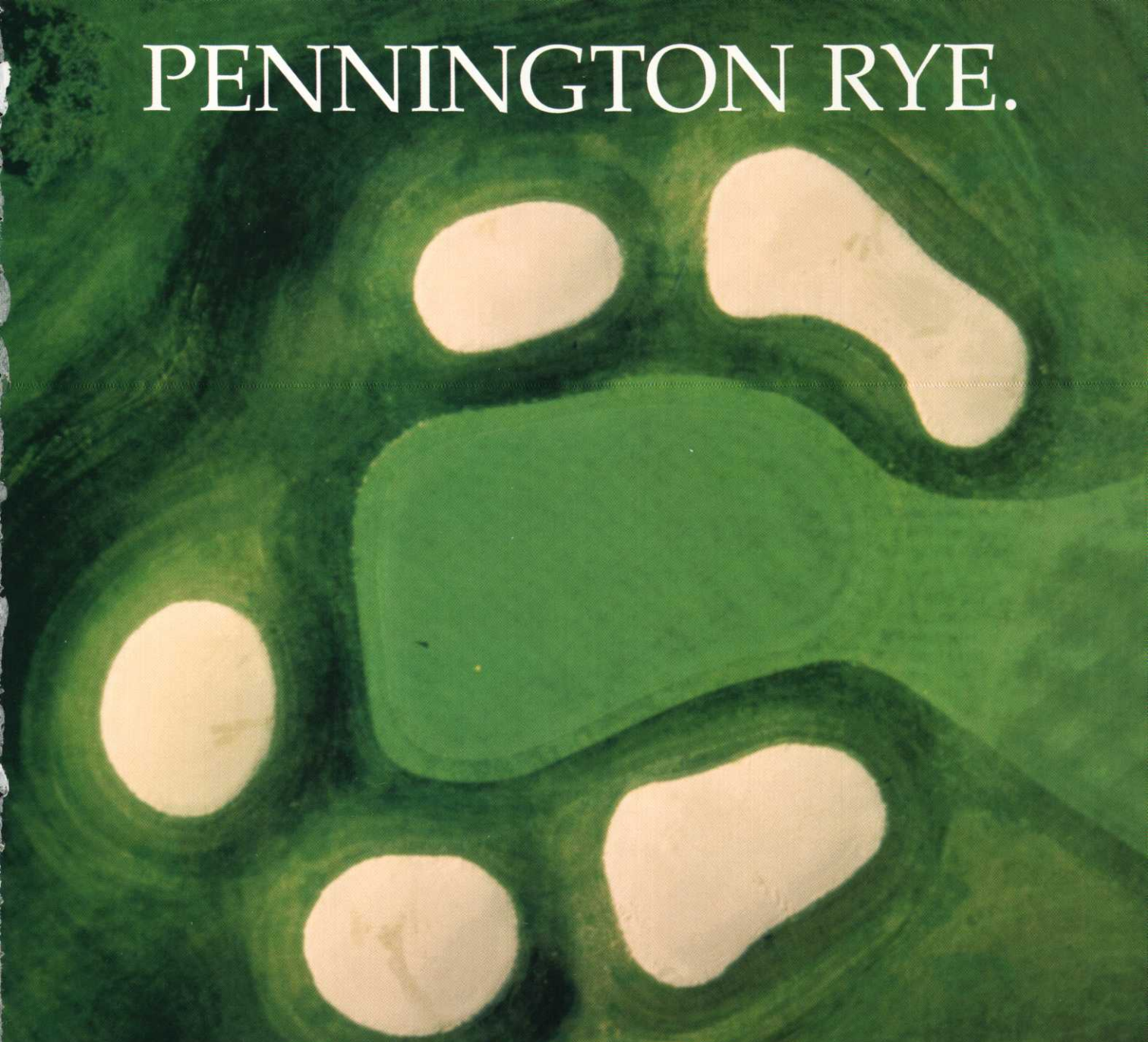


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Photo of field for illustration purposes only

New(fangled) Revenue Streams

BY GEOFF SHACKELFORD

Golf equipment manufacturers are blaming the weather for sluggish sales. Apparently, this technique is taught in MBAspeak 101: When all else fails, blame the weather no matter what you're selling.

A recent newspaper article implied that people are not buying the latest $400 drivers because of inclement weather. But the sales plunge couldn't possibly have anything to do with the price tag or the fact that some golfers are not compelled to replace their clubs on a bi-annual basis, could it?

At least weather is a fair target in the golf course industry. After all, we know that excessive green fees are not the reason for so many courses having "excessive capacity" (that's MBAspeak for "tee sheet's wide open").

The golf course industry must do everything it possibly can to avoid lowering green fees to lure back customers. (Who says you need an MBA to think like one?)

The industry must try everything it can before admitting that the customer refused to be "conditioned" to spend $150 on The Tuscan Experience at Crazy Squirrel.

So to save face and bring in more money for the industry, I propose the following:

- No longer comp the nearly 1,000 *Golf Digest* panelists. After all, they rarely pay green fees to evaluate "resistance to scoring," "conditioning" and "shot values." Estimated annual value to the golf industry in recouped green fees: $438 million.
- Use gas golf cars and do what MBAs love to do — borrow an idea from another industry. In this case, look to Avis and Hertz. After plunking down their green fees, ask golfers if they want to pay for their golf car gas up front or face the task of finding a station near the 18th tee to fill 'er up themselves. Estimated annual revenue in "Pre-Round Energy Protection Plan" sales: $832 million.
- Borrow American Golf's morale-boosting idea to charge employees $1 for every round they play at company courses. In this case, let's charge all PGA of America members $2 for every round they now play for free: $44 million annually.
- File a class-action lawsuit against the USGA to recoup all construction costs, design fees and other expenses related to "modernizing" golf courses. Since the USGA still insists that Iron Byron's persimmon driver has not been outsmarted by the aerospace engineers working in Carlsbad, the industry has a strong case. Estimated one-time take if the jury rules in the industry's favor: $1 billion ($333 million after legal fees).
- If the industry wins or settles with the USGA, why not file another class-action suit on behalf of all courses that have ripped out their choker layers and rebuilt their USGA greens to the "updated" specs? Estimated one-time recoup for the courses involved: $300 million ($100 million after legal fees).
- Estimated value to the golf industry thanks to increased third-home purchases on golf courses and 13 club membership purchases by golfing lawyers involved in the aforementioned cases: $150 million.
- Finally, promote more people to PGA Tour executive positions. Seven of the top 10 highest salaried executives in golf work for the PGA Tour. The organization has SVP COO's, EVP-co COO's and the big CEO himself, Tim Finchem, who reportedly rakes in more than $3 million a year. The executive pay starts at $400,000 and moves up to $1.2 million a year.

So let's add some co-EVP-co-CEOs and the golf industry will have more well-paid types to sit around at meetings, play golf and tell Finchem how to maintain the Tour's "core values." Estimated annual value in revenues thanks to new golf industry employment and executive spending: $9 million.

Who says there are no new revenue streams in golf?

REVERT TO GAS GOLF CARS AND DO WHAT MBAS LOVE TO DO – BORROW AN IDEA FROM ANOTHER INDUSTRY

Contributing Editor Geoff Shackelford can be reached at geoffshac@aol.com

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