



“Every time the weather would zig, we’d zag.”

— Bob Pearsall, Salish Cliffs Golf Club



A championship golf course designed by a master architect, impeccably manicured fairways, smooth-rolling greens, the best bunker sand money can buy and a well-trained staff dedicated to its customer base – all are important keys to a successful operation.

In a perfect world, with these components working in harmony, an owner can sit back, watch one foursome after another head off the first tee and count the money at the end of the day. But what happens when Mother Nature rears her head and opens the skies for a morning of rain? A course with poor drainage is going to suffer that day, and possibly feel the ramifications far into the future.

Golfers are not going to pay to putt through puddles, search for plugged balls and avoid bunkers-

turned-water-hazards. And if they do, they will not be happy and quite likely won’t return, regardless of how beautiful the course looks or plays in ideal conditions.

Add excellent drainage to that list of keys.

Salish Cliffs Golf Club, the newest amenity of Little Creek Casino Resort in Shelton, Wash., received a lot of hype and notoriety in the months leading up to its scheduled unveiling. Owned and operated by the Squaxin Island Tribe, the grand opening of the Gene Bates design had to be pushed back several times due to an unrelenting spring of torrential rain.

In October 2010, the team at Salish Cliffs first discovered the existing drainage wasn’t sufficient for the western Washington rainfall, which annually comes

in at approximately 65 inches. Something had to be done.

According to Bob Pearsall, a 23-year veteran superintendent with the last 15 months spent at Salish Cliffs, the initial step was to consult an engineer to devise a plan to reroute the original drainage. Craig A. Peck and Associates of Tacoma was called upon for the design.

First things first, however. Considering November and December are traditionally the wettest months for Shelton, a temporary fix was put into place.

“We put drainage above ground to move the water off site, so as not to lose more sand ... keep erosion down,” Pearsall says. They also strategically positioned bales of hay and straw waddles where needed. “Every time the weather would zig, we’d zag.”

Work was done in-house as well as by George Travis Construction and Bar D Construction, which is owned by a tribal member. Considering the rave reviews being heaped upon Salish Cliffs, the team seems to have addressed all concerns.

“The finished product is great. The feedback has been extremely positive,” Pearsall says. Of the golfers: “They love both the playing conditions and the layout of the course.”

At the opposite end of the age spectrum is the Yale Golf Club in New Haven, Conn. Designed by esteemed architect and United States Golf Association co-founder Charles Blair Macdonald, and opened in 1926, the course has a long and glorious past, but also has fought drainage issues from the start.

According to Scott Ramsay,





who has been superintendent at Yale Golf Club for eight years – 25 years total in the profession – Yale is “an old course that was blasted out of ledge and the course is routed through the low areas. Surface runoff and side-hill seeps all end up draining to the playing surfaces.”

Also unlike Salish Cliffs, which only had drainage problems on a few holes, driving range and warm-up area, most of Yale Golf Club’s holes were negatively affected. Fortunately, golfers in the Northeast are a hearty lot and rounds lost were nominal, says Ramsay.

“We just route play around the areas and rarely close,” Ramsay says. “So we lose minimal rounds.”

Ramsay sought the help of turf-

drainage consulting engineers John Kelly and Steve Ami out of Pointe-Claire, Quebec, Canada, who, in addition to being recognized by the USGA, regularly teach a GCSAA seminar. They were charged with formulating a master plan and overseeing construction.

Once the design was submitted by Kelly-Ami, an open bid was put out for the installation.

“K/A can recommend contractors for bidding,” Ramsay says. “We also involved local excavating companies to bid. The smaller jobs, local companies can compete. As they get larger and more involved, regional outfits with previous experience typically win the bids.

“The materials used aren’t typical of drainage work usually



Water isn’t just a hazard for players. Proper drainage ensures that it stays in the feature and off the course.

undertaken by superintendents,” he adds. “K/A has highly specified styles of pipe and only uses sand as a drainage medium. And they are highly selective as to the sand type, too.”

According to Ramsay, they are roughly halfway through a 10-year drainage-overhaul process.

“Each hole takes between 10 and 14 days,” he says, adding cost

varies significantly. “At Yale Golf Club, it is between \$10,000 and \$80,000 per hole, depending on the severity of the issues.”

As for the impact on golf and golfers, of course there is disruption, but Ramsay says they get creative by closing the hole for short periods of time or make the hole a par 3 for the work day.

“We get an occasional com-

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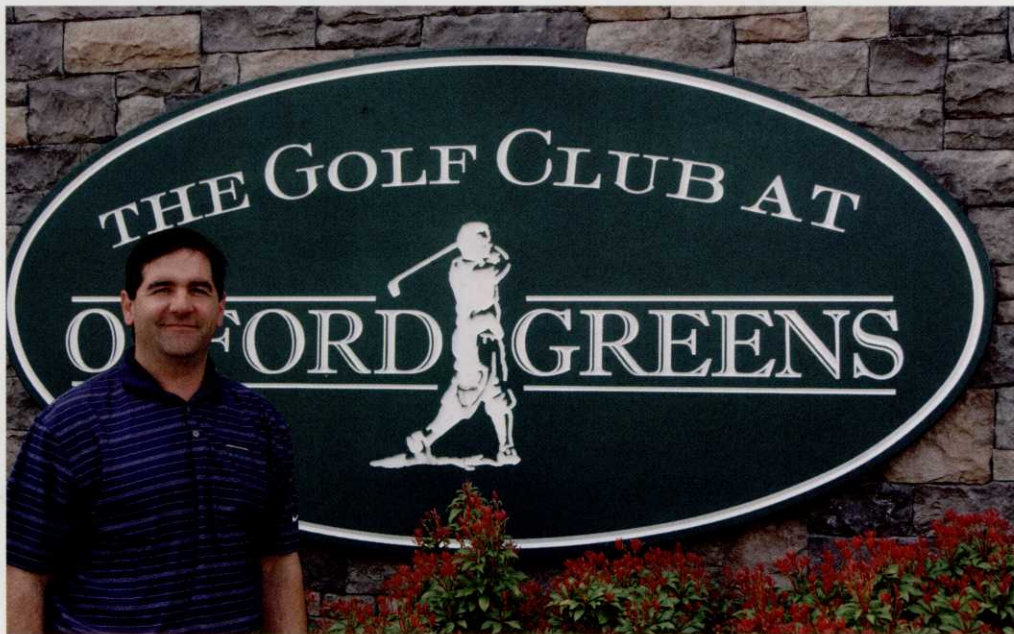
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Before superintendent Bryan Barrington took on the replacement of bunker drainage, he considered how much the work would disrupt play and what his possible labor and costs would be.

plaint,” he says of his golfers, but nothing too bad. “Mostly we have informed everyone ahead of time so they understand. It is a huge difference once the drainage is completed.”

While Yale Golf Club is in the midst of its decade-long project, just down the road in Oxford, Bryan Barrington and his team at The Golf Club at Oxford Greens took care of a developing drainage problem in under a week.

“This wasn’t a big project, but was certainly one that was, at the end of the day, just as impactful,” he says.

Barrington has been a superintendent for 12 years – the last seven at Oxford Greens – and places great importance on good drainage.

“I have built two golf courses in New England and there is no question that drainage is the most important aspect to a successful growing environment and playability,” he says. “There is a wide window of why, how, how much and where to use drainage, what’s the objective for the drain? Is it to capture surface water? Sub-surface ground water? Understanding the source and reasons

why drainage is needed will lead to a successful project.”

For the current project, two areas on Oxford Greens were affected: the 10th fairway and bunkers on the second fairway.

“Our drainage issue was one that a fairway complex of bunkers was no longer draining like the others,” he says. “This had occurred because of contamination over the years from washout. Really impacted for about half a season.”

According to Barrington, no rounds were lost, rather, just some player annoyance if there had been a rain event and water was in the bunker.

The same held true during the drainage overhaul. The project lasted four days, with most of the time spent removing the sand, the old drain and stone.

Before any work was done however, Barrington weighed his options.

“How long would we be disrupting play?” he asks. “What are the labor and material costs?”

“I had already communicated the project to management,” he adds. “I was looking at a relatively new drainage product, which was the ADS pipe wrapped in Styrofoam peanuts. This would allow me to not have to use peastone to surround the pipe, which would

lead to material and labor savings in the installation.”

As is the case with many projects, the actual installation goes much differently in practice than as it’s being done.

“To my surprise, the drain stopped in the bottom of the bunker and made two 90-degree turns before it exited the bunker,” Barrington says. “We removed it and continued the bunker drain straight out.”

This “straight-forward” project was affordable (\$1,000 for material; \$1,800 in labor; \$700 in new bunker sand) and has garnered rave reviews from the golfers, who, after seeing the results, want the club to renovate more of the bunkers. If they get their way, the actual construction may be slightly different, however.

“This was basically by the book, although I’m not sure I would use the wrapped drain pipe in a bunker again, just because it’s round and you lose the surface of the trench due to the cylindrical shape versus the square trench,” Barrington says.

Whether the course is new or old, problem minor or major, project extensive or minimal, proper drainage is certainly important from playability to aesthetics to the health of the turf. **GCI**

*Rob Thomas is a freelance writer based in Cleveland.*



Correct drainage is the most important aspect for a growing environment and playability, says Barrington.







# Travels With Terry

Globetrotting consulting agronomist Terry Buchen visits many golf courses annually with his digital camera in hand. He shares helpful ideas relating to maintenance equipment from the golf course superintendents he visits – as well as a few ideas of his own – with timely photos and captions that explore the changing world of golf course management.

**Terry Buchen**, CGCS, MG, is president of Golf Agronomy International. He's a 41-year, life member of the GCSAA. He can be reached at 757-561-7777 or [terrybuchen@earthlink.net](mailto:terrybuchen@earthlink.net).

## TERRY'S REAL GENIUSES



Terry's traveled the world seeking out innovative course creations. Here are his Top 10.

All of the ideas used in my Travels with Terry column over the years have been fantastic, partly because these innovative ideas each proved to make their golf course maintenance staff more efficient and productive.

I was asked to choose the best of the best, and let me tell you, this was no easy task. Enclosed are my Top 10 great ideas from Travels with Terry from the past six years. – Terry Buchen

### JULY, 2005

*Bel-Air Country Club*  
Los Angeles, Calif.  
Brian T. Sullivan, CGCS, MG  
Ernie Hernandez, assistant  
John Nachreiner, assistant

#### “Terry Says”

Sullivan and his assistants removed the front bumper from the Club Car utility vehicle, installed a steel plate with two pieces of 2-inch square tubing, welded some 1 ½-inch square tubing onto their Billy Goat push-type blower, drilled bolt holes in the square tubes, slid the blower-mounted square tubing into the vehicles square tubing and then bolted or lynched-pined it in place. No more pushing the blower or hand raking leaves with this simple but extremely effective and efficient way to make better use of their existing labor force. When not in use, the blower is removed, two pieces of 1 ½ x 1 ½-inch square tubing was installed on the inside of the bumper, which was then put back in place and held with bolts or lynch pins. All of the parts were in stock and it took about three hours to design and build.





## MARCH 2006

*Delaire Country Club*  
Delray Beach, Fla.  
Brian Bowles, superintendent

### “Terry Says”

To rake the fairway bunkers real smooth without any rake furrows, Bowles uses a 36 x 76-inch corded rubber slotted drainage mat pulled behind a Toro Sand Pro riding bunker rake. The OEM rake teeth where removed from the riding bunker rake and the remaining five individual feathering rakes were left in place. The rubber mat was bolted on top of the rake mechanism and is rolled-up when transporting in-between bunkers. The three knobby OEM tires were replaced with smooth triplex greens mower tires to keep the bunker sand as smooth as possible. The rubber mat is available from [www.mcmaster.com](http://www.mcmaster.com). The rubber mat cost about \$150 and it took about one hour to mount.



TERRY'S  
REAL  
GENIUSES

## OCTOBER 2006

*Salina Country Club*  
Salina, Kan.  
Mike Hulteen, CGCS  
Leland Davis, equipment mechanic

TERRY'S  
REAL  
GENIUSES



### “Terry Says”

Why walk when you can ride in a good old-fashioned “sulky” behind a walk-behind greens mower. 1½-inch square metal tubing is used for the frame and supports, and ¾-inch flat steel is used for the seat post, which is bolted and welded to the frame. The pneumatic tires and wheels are replacement for wheelbarrows and the special U-shaped receiver intersects with a flat piece of steel with a hole drilled into it for a bolt to hook it up to the mower. Most of the materials were already in stock and it cost about \$100 in additional materials. It took about five hours to build.

## JULY 2007

*The Club at Admiral's Cove*  
Jupiter, Fla.  
Bill Brousseau, director of golf course maintenance  
Jim Matis, equipment manager

TERRY'S  
REAL  
GENIUSES



### “Terry Says”

The engine on the Buffalo Blower had to be replaced and Matis used an old John Deere 2653 Utility Triplex Hydraulically Operated Reel Motor instead. The hydraulic motor was hooked-up to one 10-inch diameter and one 3-inch diameter pulley and the two hydraulic motor hoses were hooked up to a two-spool hydraulic coupler on the back of a John Deere Pro Gator. The engine battery is used to change the blower nozzle direction, as it is hooked up to the alternator on the tow vehicle with pig tails to keep the battery charged at all times. The blower RPM's are changed as needed by changing the ground speed of the tow vehicle with the throttle lock when desired. The blower is significantly quieter than when it had an engine and it saved the club over \$2,000 for a new engine. The used real motor cost \$65 and it took about eight hours to build.





## SEPTEMBER 2008

### *The Silverleaf Club*

Scottsdale, Ariz.

Jeff Prichard, CGCS, director of agronomy

Kent Coburn, superintendent

Bruce Leonard, equipment manager

### “Terry Says”

The maintenance staff has to travel 1.7 miles to the first tee and over 2 miles to the farthest green from their turf care center. Coburn and Leonard came up with idea to transport their John Deere Aero-core 800 and Toro green's aerifiers to save valuable time and wear and tear on the machines. The square tubing, wire mesh, golf cart wheels and tires, axle kit, expanded metal and scrap metal cost about \$575 each and it took about 40 hours to build the first trailer and 20 hours each to build the second and third trailers.

TERRY'S  
REAL  
GENIUSES



*Editor's Note: All superintendents and personnel reflect their respective positions at the time of the original publication.*

## DECEMBER 2008

### *Muirfield Village Golf Club*

Dublin, Ohio

Paul B. Latshaw, MSN, CGCS, director of grounds operations

Jake Gargas, superintendent

### “Terry Says”

To keep wear and tear from the walk-behind greens mowers turning on the collars, these 30 x 60 x ¼-inch HDPE plastic sheets placed end to end on the collars do a great job of protecting them. Four handles are cutout with an electric jigsaw so the operator can move all three easily from one end to the other as each green is being mowed. The plastic pieces cost less than \$50 each, they are available from kitchen countertop stores and the labor time is about 15 minutes each to cutout the four handles.

TERRY'S  
REAL  
GENIUSES



TERRY'S  
REAL  
GENIUSES

## JUNE 2009

### *The Members Club at Grande Dunes*

Myrtle Beach, S.C.

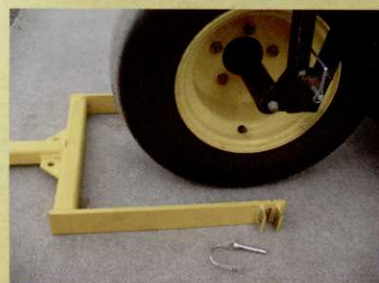
Scott Grumman, superintendent

Jon Stewart, assistant

Joe Corsetti, equipment manager

### “Terry Says”

A great idea for towing a John Deere Aero-core 800 green's aerifier behind a turf vehicle to save the operator walking time in-between aerifying greens. The tow bar design uses tubular and flat steel welded together that is attached to the tow vehicle with a hitch and pin with a chain so the pin won't get lost. The other end is attached to the aerifier with a U-shaped metal bracket held in place with two lynch pins that connects/disconnects quite easily. This model aerifier has a neutral free-wheeling shift lever and it can be towed up to 10 MPH. The materials cost about \$65 and it took about 3.5 hours to build.





## AUGUST 2009

**Butterfield Trails Golf Club**  
El Paso, Texas  
Joe Perez, head mechanic  
Nick Guillen, assistant mechanic

### “Terry Says”

To increase the life of the eight conventional-type street brooms on this John Deere TC 125 collection system, Perez and Guillen designed and built 1 x 1 inch thick pieces of oak wood “spacers” bolted to the top end of each broom to compensate for wear of the bristles. This great idea saves about \$100 per set of four brushes, \$200 total in replacement costs. The materials cost about \$15 and the total labor time was approximately one hour.



## JANUARY 2010

**Town & Country Club**  
Saint Paul, Minn.  
William R. Larson, CGCS, superintendent  
Ryan Browning, assistant



### “Terry Says”

The first-ever Smart Board Interactive White Board in the golf industry was placed in the employee lunch room/meeting room. It is operated in conjunction with an LCD projector mounted from the ceiling and a dedicated computer equipped with the necessary software to allow the interactive white board and computer to communicate. Instead of using a “mouse,” the screen is operated with the touch of a finger, similar to interactive television boards used on CNN, etc. The Smart Board ([www.smarttech.com](http://www.smarttech.com)) can do any function just like a computer monitor, it is totally interactive and it can operate exactly like a dry erase board on a conventional white board using four different colored electronic pens along with an electronic eraser pad. It is used as a daily job assignment board, for training videos, going onto the internet and doing any other computer function interactively. They range in size from 48 inches to 94 inches and Larson choose the 88-inch model costing about \$8,000, which includes installation and wiring. The dedicated computer & monitor cost extra.



## OCTOBER 2010

**South Hills Golf & Country Club**  
Fond du Lac, Wisc.  
Jim VanHerwynen, CGCS, superintendent



### “Terry Says”

A much easier way to eliminate hand raking of leaves and putting branches into piles where the idea actually came from a superintendent’s dream. The Hanheraker uses seven Union Tools plastic fan-type leaf rakes that are two feet wide with squared-off bottoms that are attached to the plywood (with muffler clamps) that has a 30-degree angle. Two large springs provide resistance when needed and one of VanHerwynen’s employees named the rake after him. Many of the parts/supplies are already in inventory. The rake heads and muffler clamps cost about \$80 and it took about four hours to assemble.







**Henry DeLozier**, a principal in the Global Golf Advisors consultancy. DeLozier joined Global Golf Advisors in 2008 after nine years as the vice president of golf of Pulte Homes. He is a past president of the National Golf Course Owners Association's board of directors and serves on the PGA of America's Employers Advisory Council.

## FIVE PROJECTION POINTS TO PONDER

**T**here's a long-held financial precept pertaining to business models that has always made sense to me. It goes like this: "You can cut costs only to zero. After that, you must actually make money." We're rapidly reaching that point in the golf business. Operators, managers, superintendents and their staffs have cut costs until their pencils were worn to the nub. Now, with the annual budgeting process underway at many facilities, the focus must turn to revenues.

Planning for revenue growth is more difficult than expense reduction, even if it does not involve some of the agonizing decisions that come with cost-cutting. But as a number of clubs are proving, it's possible to grow revenues even in the current economic climate. In fact, the number of clubs and courses reporting revenue growth has increased from 7 percent in 2009 to more than 23 percent this year, according to a recent study by Global Golf Advisors. Revenue is growing by following five strategies that are right for our times:

**PRIORITIZE REVENUES.** While many facilities have not increased dues in several years, fearing a loss of members, others are creating organic growth. They're doing it by slightly increasing the price of incidentals such as club storage and lockers and high-volume consumables such as coffee, salads and draft beer. If you've fished all of the nickels and dimes from the sofas in the men's and ladies' locker rooms, it's time to get creative. Most clubs and courses offer a wide range of goods and services for sale. Ones you might not have considered include generational memberships, family-focused tee times and bundled packages for golf and entertainment. Top-performing management teams monitor all sources of revenue and constantly make adjustments to increase revenue without unfavorably impacting utilization. Just as it's not smart to increase prices too much or too often, it's equally ill-advised to ignore discreet price increases.

**MONITOR UTILIZATION.** This sounds like an expense-reduction strategy, but utilization also affects revenues. While many facilities cling to outdated and inefficient operating models that require staff even during low-demand periods, savvy operators and managers are monitoring utilization and comparing utilization rates to revenues generated. Where utilization is low, consider closure, right-sizing or other cost efficiencies. Better yet, look at ways to make the amenity or service more profitable. You could start by surveying members

and customers to find out what would make them want to take advantage of under-performing profit centers.

**MAKE VALUE A NO-BRAINER.** Once members start to question the club's or course's value – what they get for what they pay – the facility is on a slippery slope to nowhere. Every management team must objectively evaluate the value they offer, understanding that revenues can be easily increased only when value is widely acknowledged. In this scenario, value is a function of relevancy to as many segments of members and customers as possible. When executing this exercise, make women and families a top priority. Facilities today underestimate the importance of women's opinions relative to lifestyle value at their own peril.

Planning for revenue growth is more difficult than expense reduction, even if it does not involve some of the **agonizing decisions** that come with cost-cutting."

**EVERYONE SELLS.** Effective salesmanship is highly valued in tough economic cycles. Top-performing clubs have invested in sales training programs to help their staffs be more effective when asking for the order. When the golf pro or starter asks what time you want to book for next week, or when the retail sales team packages a souvenir cap with a right-priced golf shirt, revenue grows. Sales skills are important and require constant cultivation. Not everyone is a born salesperson, but everyone can improve with focused effort.

**THINK DIFFERENTLY ABOUT MEMBERSHIPS.** There are two aspects to club membership expense: the cost of joining – usually an initiation fee; and the cost of belonging – usually periodic dues. Clubs that have reinvigorated revenues have introduced new membership categories that offer fewer benefits as an offset against higher initiation fees. If you're debating reducing or waiving initiation fees as a membership incentive, think of it this way: An initiation fee is one-time revenue; dues are an annuity.

Before you submit a budget that projects another year of flat growth, consider ways to prime the revenue pump. Remember, you can't just keep cutting costs; eventually you have to make money in this business. **GCI**



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# Giving MANAGEMENT COMPANIES a fair shake

A lot of myths surround working for management companies. GCI's Bruce Williams examines a few and you might be surprised by his findings.

by Bruce R. Williams, CGCS

**R**ecent statistics have shown the steady growth of management companies in the golf business. There are a number of companies that have been around for decades, but there have been some newcomers in recent years, too. Management companies account for at least 15 percent of golf operations in the U.S.

Additionally, there are golf course maintenance companies and for our purposes the findings would be applicable to both groups. Some of the companies manage a few golf facilities while others have hundreds in their portfolio.

Management companies should be considered a major employer of golf course superintendents. Well over 1,000 superintendents are employed by management companies and the number is growing. While many myths and rumors exist about working for a management company, the best way to get a good look inside of management companies is to go straight to former and current superintendents who work for those companies.

After speaking to a dozen or more people it became clear that there was a constant refrain with a regard to the many positive benefits of working as a superintendent for a management company. It is my hope to share the top reasons why superintendents like working for management companies and why people might want to consider working for them.

