

Real-Life Solutions

■ BUNKER RECONSTRUCTION

A Big Drain

Southern superintendents
sold on Billy Bunkers

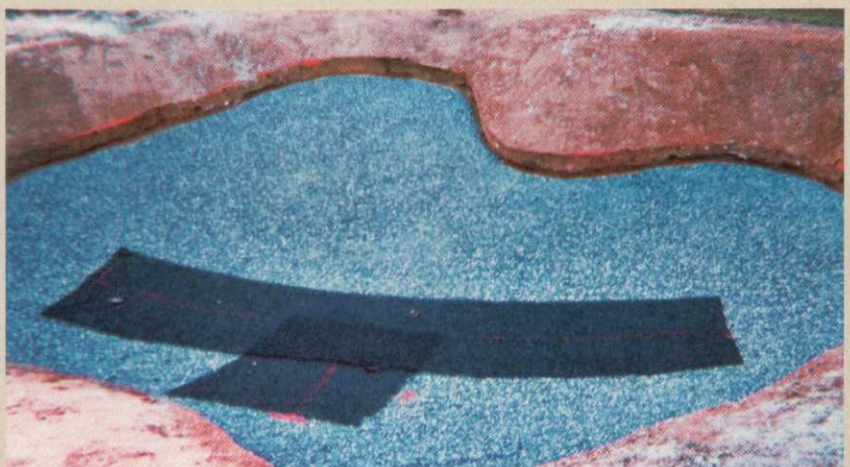
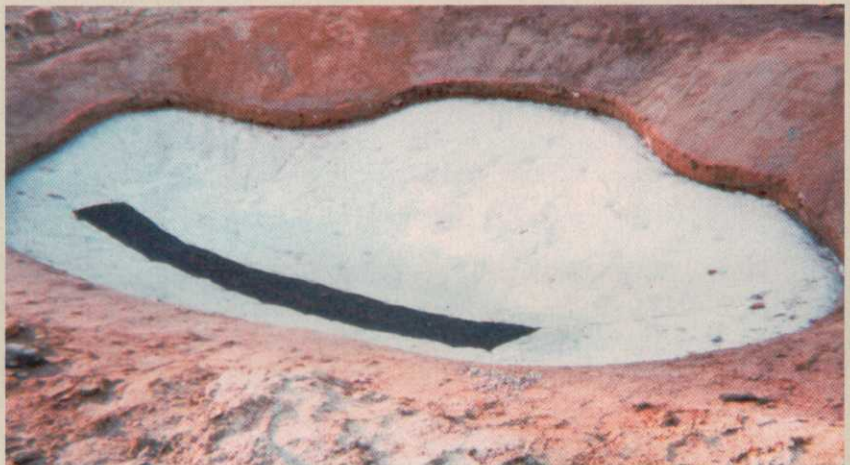
BY HAL PHILLIPS

At bottom, rainfall is a superintendent's ally. But there are subclimates where too much of a good thing can wreak havoc on bunker-maintenance budgets and crew scheduling.

"I've witnessed as much as 130 inches in a single year and as 'little' as 56 inches, which we consider a drought around here," says Bo Alexander, superintendent at Wade Hampton GC in Cashiers, a North Carolina community nestled high in the verdant Blue Ridge Mountains.

They're verdant for a reason. As Alexander notes, this is one of the wettest corners of the country and even well-built bunkers can't reasonably drain away that sort of inundation. Instead, they wash out — over and over again — at a great cost and inconvenience to clubs.

After spending a fortune and untold manhours rebuilding his bunkers year



(Top) The Billy Bunker's white Trevira liner prevents the bunker sand from migrating into the native soil, and vice versa. **(Below)** Note how the liners are specially cut out to reveal (and promote water passage to) the bunker's drainage pattern.

after year, Alexander embarked on a "radical" renovation of Wade Hampton's 38 greenside bunkers. During the winter of 2001-02, he watched closely as the course contractor employed a hot technique in renovation today: the Billy Bunker method.

Eighteen months later, Alexander can't say enough about his Billy Bunkers or the construction firm, Gainesville, Ga.-based Course Crafters, which has worked at Wade Hampton, tackling an assortment of projects alongside Alexander since 1993.

"These bunkers get the water into the tile so fast, the sand doesn't have time to wash," Alexander says. "Course Crafters did all 38 [greenside] bunkers in one three-month period. It involved a lot of hand-work, which is something you need to understand about the Billy Bunkers. But the folks at Course

Crafters got it done, and they get high marks from me."

Alexander emphasizes that while Wade Hampton is one of the most decorated courses in America — the 1987 Tom Fazio design ranks 37th on *Golf Digest's* Top 100, 52nd on *Golf Magazine's* list — it's also one of the dampest, receiving an average annual rainfall of 85 inches.

"So you can see why we brought in Course Crafters to address the bunker situation," Alexander says. "They shelled them all out and redrained

Problem

The bunkers at two clubs, both in high rainfall regions, were continually washing out, sapping maintenance funds and manpower, and irking the clubs' members.

Solution

Rebuild the hazards using the Billy Bunker Method, a drainage-intensive technique that provides cost-effectiveness through long-term durability.

them in the Billy method. They also removed and replaced 400,000 square feet of sod around the greens.”

Course Crafters has plenty of renovation experience when it comes to Billy Bunkers — so named because the method was invented by Billy Fuller, former superintendent of Augusta (Ga.) National GC, where Course Crafters has been handling renovations for the past decade, including the latest round of changes supervised by Fazio. But Course Crafters President Bob Pinson says his crews didn't learn the Billy Bunker Method in Augusta.

“We first executed the Billy Bunkers up at Charlotte (N.C.) CC,” Pinson explains. “I learned the method from Mark Stoddard, who was superintendent in Charlotte at that time. Billy Fuller sent the specs to me, and we did them as part of architect Brian Silva's restoration at Charlotte in 1995. I don't know of anyone who was doing Billy Bunkers, other than Billy himself, as early as 1995. We've done hundreds of them since.”

The Billy Bunker Method allows for excellent drainage because, as Pinson explains, each lateral drainage arm runs straight into an outfall pipe — or into individual “smiley” drains located at the terminus of each lateral. Once all this base drainage capability has been established, a 1.5-inch layer of gravel is laid over the entire bunker floor, capped by a Trevira liner, which is specially cut to reveal the herringbone drainage pattern. Then the entire drain-line scheme is further overlaid with Enkamat, a fiberglass mesh material which keeps the gravel from resurfacing in the sand layer.

“Then you put your 4 inches of sand over it and you're done, with that bunker at least,” Pinson says. “The hand-work required [to lay the gravel and custom-fit the liners] is where this process gets labor-intensive and expensive. But in the long run, with all the repairs you end up doing to a regular bunker and all the wash-out repair, a

new Billy Bunker ends up costing less. In my view, the Billy Bunkers ultimately reduce maintenance costs. The upfront cost is considerable, but you'll pay for your bunker renovation within five years.”

It's a trade-off, but one that many superintendents in the soggy Southeast are increasingly willing to make. Superintendent Tim Kennelly oversaw the Billy Bunkering of all 82 bunkers at The Farm GC in 1999. This is another Fazio design, located in Rocky Face, Ga., which receives close to 70 inches of rainfall a year.

“Our bunkers washed out constantly, and we weren't meeting the expectations of our members,” says Kennelly, superintendent at The Farm from 1994-2002 (he left in April 2002 to become superintendent at Baltimore CC in Timonium, Md.) “We were spend-

ing so much time shoveling bunkers, it was ridiculous. Course Crafters suggested the Billy Bunkers, and it turned out to be a great solution. It's not cheap, but it's an excellent, long-term solution.”

So Billy Bunkers are not for the penny-wise and pound foolish. Pinson also warns that superintendents should check their sand depths in each Billy Bunker at least once a month because “players splash the sand out and if you don't keep your depths consistent, someone will tear the Trevira.”

“Also, you can't mechanically rake the Billy Bunkers or they will rip the Trevira and Enkamat to pieces,” Pinson says. “You have to hand-rake them, but not nearly as often as regular bunkers.” ■

Phillips is president of Phillips Golf Media in New Gloucester, Maine. His company represents Course Crafters.



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