# Case Study #1

**MAINTENANCE** 

# **Bunker Mentality**

Westfield CC's bunker renovation pitted mind against matter

BY FRANK H. ANDORKA JR., ASSOCIATE EDITOR

unkers deteriorate over time. Between the constant battering they take from Mother Nature to the number of players whose errant wedge shots spray sand on the surrounding turf, it's surprising they don't have to be reconstructed more often.

Eventually, the wear and tear shows, and superintendents are often left in the unenviable position of fixing something in a few weeks that took three decades to create.

That's the challenge Mark Jordan, superintendent at Westfield CC in

## **Problem**

**Uneven sand** and poor drainage made many of the back-nine bunkers unplayable.

### Solution

**Replace** the sand in the old bunkers to uniform depth.

**Add** more drainage tile to prevent puddling.

Create new bunkers to restore the strategic integrity of the course as originally envisioned. Westfield Center, Ohio, faced when it came to renovating the back-nine bunkers on the South Course. Designed by Geoffrey S. Cornish in 1968, the bunkers on the back nine featured high splashes and open faces, a contemporary look for the club at the time.

By the time reconstruction started, however, 31 years of play had worn the bunkers down, leaving them weathered and bedraggled.

Westfield hired Craig Schreiner, a Kansas City, Mo.-based golf architect, in 1994 to create a master plan for the North and South Course renovations, including the bunker renovations implemented last year.

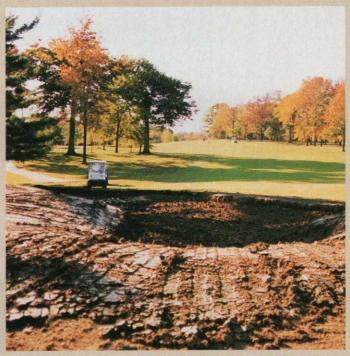
"Most bunkers have a life expectancy of 30 years," Jordan says. "It was important to us to re-evaluate each of the bunkers and fix them."

Schreiner says he wanted to reconfigure the bunkers to bring them back into the strategic thinking of the players.

"Our goal was to force the better players to take the bunkers into consideration before they hit shots," Schreiner says. "With better bunkers, you can also bring out the real character of the greens."

#### The problem

Thirty-one years of play created problems on three lev-



Westfield CC excavated new bunkers to return strategic thinking to its South Course's back nine.

els for the 37 bunkers:

- Time-consuming hand maintenance drained both the budget and led to the neglect of other parts of the course.
- Years stripped many of the bunkers of their playability, leaving players grousing about bad lies, puddles in the bunkers and uneven sand distribution throughout.
- As the course matured, tree and vegetation growth altered course layout, rendering several bunkers toothless tigers.

In addition, the course purchased different sand types to fill the bunkers as it became necessary over the years. The practice produced different layers of sand, which hindered proper drainage, affected playability and allowed drainage stones to pierce the surface as a result of the natural expansion and contrac-

tion of the ground during Ohio's winters. "We were spending an inordinate amount of time on these bunkers, taking out stones and making sure the sand didn't completely wash out when it rained," Jordan says.

Jordan knew the bunkers weren't up to the standards he — or the members — wanted. But how could Jordan bring the bunkers up to modern standards without destroying the strategic integrity of the course?

"It wasn't just a matter of ripping up the old ones and putting in new ones," Jordan says. "We knew we were going to lose some of them—they had outlived their usefulness as the course matured—but we wanted to have someone do this renovation who could see the course as Cornish saw it."

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Schreiner says most people don't realize how much a golf course can change over the course of time.

"A golf course is a living biomass," he says. "It's a dynamic system. Strategic architecture changes when you do it in a setting like that. We wanted to return

some of that strategic architecture to the course under current conditions."

Scheduling conflicts created another challenge for Jordan: Schreiner's vision for the bunkers had to be completed in a mere 10 weeks.

"We were working on a tight schedule, but Craig was convinced we could do this in that time," Jordan says. "So everyone, in all aspects of the project, rolled up their sleeves and went to work."

"We got lucky with the weather," Schreiner adds.

#### The solution

The process started with cleaning the old bunkers of disparate sand layers and digging up the old drainage tile.

Then Jordan and his crew replaced 10,000 yards of sod and redid the drainage on many of the bunkers with 2,500 feet of 4-inch tile, 1,300 feet of 6-inch tile and 380 feet of 8-inch tile.

"You can never have too much drainage in the bunkers," Jordan says. "We spared no expense when it came to that."

After filling in the outdated bunkers and excavating new ones where Schreiner suggested, it was time for the new sand to replace the old. Using 730 tons of Chardon, Ohio-based Best Sand's Tour Signature product — a finely ground angular sand — the crew filled in the bunkers. Jordan chose Tour Signature because its composition allowed the bunkers to firm up more quickly — which with a 10-week window was vital.

Schreiner says he also deepened the bunkers and articulated the faces more sharply to make them true obstacles.

With consistent sand and better drainage, Jordan's team spends less time on intense bunker maintenance, and players have praised the bunkers' increased playability. Most importantly, Jordan says the structural modifications to the bunkers returned the course closer to Cornish's original vision for it.

Jordan says he hopes a similar bunker reconstruction can take place for the front nine this fall.

"That's the date we're aiming for, but there are no guarantees in this business," Jordan says. "It's something we're looking forward to doing."

