

Tim Moraghan is principal of Aspire Golf Consulting in Long Valley, N.J. He can be reached at tmoraghan11@comcast.net or 908-635-7978.

PREPPING FOR THE MEMORIAL

Why would Jack Nicklaus furrow the bunkers at Muirfield Village Golf Club in Dublin, Ohio, to make them so penal?

Nicklaus believes sand bunker prepara-Ations have created a safe haven for players nowadays. They've become the preferred place to be, and it's easy to get in and out of them without much penalty. While playing into a bunker isn't a new philosophy, with today's bunker preparation, players feel extremely confident they can make a sand save without issue.

This era has ended at Muirfield Village, where golf course superintendent Paul B. Latshaw, at Nicklaus' request, reviewed bunker preparations and decided to make bunkers more hazardous. The following ensued:

- · First, Latshaw and Nicklaus reviewed bunker sand quality, shape, particle size, firmness, drainage capabilities and depth to see if the sand could be raised and furrowed.
- · Next, the crew found an old-fashioned wooden leaf rake with teeth long enough to provide the proper furrow depth. This wasn't an easy task.
- · Latshaw and Nicklaus reviewed tooth depth and spacing. Latshaw settled on a 1.25-inch tooth length and a 1.75-inch space between teeth. The goal was to have more sand around the ball to influence the shot.
- · They reduced rake-head size and varied the handle lengths to allow workers to reach all portions of the steep-faced bunkers, capes and bays.
- · The crew irrigated sand by hand each night so moisture content was proper for the next morning's work. They occasionally applied a soil penetrant to reduce surface tension and allow sand particles to fall together, especially on the steep faces.
- · Each morning before play, the raking crew would hand-rake the furrows into the sand slowly. There were front and back nine crews to accomplish this.
- · Furrows remained in place until a ball entered, and caddies raked the mark left

from an explosion shot.

This process shouldn't be the daily practice at your golf course. The tournament goal of providing an additional penalty for those who miss-hit their approach shots worked during the Memorial and frustrations followed. After all, a bunker is a hazard.

How was the golf course preparation work and done so quietly?

The club is located within a housing Adevelopment. The first and 10th teeing grounds and the practice green, being located near the clubhouse where traffic volumes were high, required a stealth-like maintenance operation.

Palletized rubber material was used to pave the cart paths around the clubhouse, first and 10th teeing grounds, and practice green. This reduced the noise of the equipment, people, competitors and machinery moved and transported. The rubber material can be mixed similar to concrete so it can be included in the cart path material as well.

When cutting the fairways from teeing ground to putting green approach, the mowing units would return along the cart paths for their next mowing pass, eliminating transport noise.

All metal-on-metal contact was reduced by coating each component with the rubberized material. Even the tool boxes and tools were wrapped with cloth or plastic to eliminate noise.

Finally, the air generator is battery-powered, not gas-powered, to reduce noise.

How does the mechanic staff service igspace equipment and help people if there's a breakdown?

Bill Clayton, the club's equipment Amanager, has a chase vehicle he uses to traverse the property to check on all people and equipment. The vehicles include:

· An enclosed driver's cab to protect Clayton from the elements and reduce the noise from his conversations with employees via radio transmissions, cell phone calls and text message alerts.

- · Extra-wide tires for noise reduction, stability and off-road capabilities.
- · An Internet connection for ordering parts, reviewing equipment specifications or locating vendor information.

If you elect to prepare a response unit of this sophistication, consider including the following:

- · Two tool boxes containing standard and metric tools for any type of equipment
- · A portable air compressor mounted on the unit's bed.
- · A small lift capable of fixing flat tires, mower work, reel repair and height of cut adjustments.
- · A supply of the most often repaired parts for the most-used pieces of equipment during tournament preparations.
- · Lights for early mornings and late nights, and portable lights for repairs or directing crews, mowers and people around the golf course.
- · Trailer hitches and able to pull medium-sized turf equipment back to the maintenance facility.

Why did the intermediate rough cut extend from each teeing ground in a V-shaped cut to the edge of the fairway? Did this make the tee shots easier?

Nicklaus fanned the intermediate cut Ato open up the fairway target from the teeing ground. Having thick, high-cut rough occasionally prevents balls from reaching the fairway on a long carry. This cut eliminates players getting caught in thick rough if they can't reach the fairway, enhances the formal look of the course design and gives direction off the teeing ground.

The shorter cut didn't reduce the labor involved in preparing this area. Mowing increased because of the height of cut, which required more mower adjustment time and additional labor and equipment. In the final analysis, time, labor, fertility, irrigation and pesticide use increased. GCI