



# Four keys to great bunkers

*Extra care can distinguish your course from run-of-the-mill 18s, and attract new members.*

by JERRY ROCHE / Editor-in-Chief

**I**f having to maintain 110 sand bunkers for 27 golf holes doesn't make Tony Mancuso an expert, nothing does.

Mancuso, superintendent at the Jack Nicklaus-designed New Albany (Ohio) Country Club, is—as you might expect—a big fan of bunkers on a course.

"Our bunkers are typical of a Jack Nicklaus design," says Mancuso. "They provide some of the most dramatic features on a golf hole, and—after something like a torrential rain—provide some of the most depressing, disgusting, humbling feelings you as a superintendent can get."

He has four "keys to great bunkers," and they are:

- 1) construction issues
- 2) good drainage
- 3) the correct sand
- 4) good grooming

#### **Construction issues**

Mancuso believes that each bunker must be protected from rain and irrigation water runoff. "Sometimes we forget to berm around the bunkers and make the water go around them," he says.

Nicklaus-designed bunkers are 'flushed,' so golfers don't play blind.

It's also important that machine rakes have several access points around the bunker, to avoid wear areas—even if you have to "give up aesthetics." The golfers must also have several points from which to access the bunker.

The bunker should be designed so that it is "flushed," that is, so the golfer can see the sand in the bunker from his or her previous landing site. Mancuso also prefers bunkers with 1 to 1½ inches of sand on their sloping faces. "When a ball hits the side of a bunker, it shouldn't stay there," Mancuso notes. "The bunker's enough of a hazard as is."

#### **Good drainage**

It's a necessity to have an impermeable base in the bunker. Clay should be molded into the bottom of the bunker so water will go through the sand and get to the drains.

The base should also have a "fall" built into it so the water doesn't collect in one or two spots. And the bunker should also drain at its low point(s).

"Don't expect one strip drain to do the

whole job," Mancuso says. "You need to know the elevation and put as many drains in as you can. Don't spare any expense, because it'll save you time and money over the long run."

New Albany Country Club uses regular washed pea gravel under drain tile, then gravel on top. "Some people like to use fabric socks over the tile, but if the fabric clogs up, you have to take it all out," Mancuso observes.

#### The correct sand

Of prime importance is knowing your suppliers, Mancuso says. "Sand is completely different at every sand plant in the country. Some sand plants are more concerned with the highway market where the big profits are, so they believe that spending a lot of time and money on golf course operations isn't justified.

"There are specific recommendations for golf course sand. You need to identify which sand plants want to work with those specifics; a lot of time those are the plants where the owners play golf."

Color is also a consideration. New Albany's sand is a very pale brown. Some-

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times you have to take what's available, but remember that most of the cost of purchasing the sand is in the hauling.

Sand should also be free of silt and clay, be easy to install and have the proper particle distribution.

"Our sand is 98.6 percent pure sand, and we can have up to 3% of clay and silt," Mancuso reveals. "For proper particle distribution, you should check the laboratory specifications. We don't like our sand to crust or set up or bury."

Firmness of sand makes a great deal of difference to golfers. "We prefer firm," says Mancuso, "so we chose a sand that was going to be firm. But we leave the top one inch loose."

#### Grooming

"Hand raking versus machine raking is always a question," Mancuso notes. "Nothing looks prettier than hand raking, at least the green-side bunkers."

A machine can wear out the grass around the bunkers, creating special maintenance chores along the edges, so New Albany crews always hand rake around the

edges. Mancuso also prefers using a clockwise spiral pattern from the edges to the center of the bunker when he must use a machine rake.

Edging is done twice a year using a Redmax reciprocating trimmer.

"We only take off the excess grass on the edge," says Mancuso. "We don't want to change the original dimensions of the bunker, and with a Redmax you can't dig into the soil. With something like a spade shovel, you'll have a tendency to go further out into the soil."

Maintenance employees alternate on and off the

bunker-raking crews. Everyone gets a turn. But when special events are scheduled, Mancuso prefers to choose his more meticulous workers. "Some people are better at raking bunkers, just like any other job," he notes.

To put the final touches on your bunkers, you should remove silt, leaves and debris with a power blower before raking, Mancuso warns. "Silt will reduce the infiltration rate of water in your bunkers. You've got to take the time to get it off there."

Mancuso has been at New Albany Country Club on the northeastern outskirts of Columbus, Ohio, since construction was begun in 1990. Besides the golf course proper, he also oversees maintenance of a huge driving range, two practice greens, a bentgrass croquet court and two bentgrass tennis courts that receive the same maintenance intensity and regime as the golf course greens. □

*After all else is done, use a power blower to remove silt, leaves and other light debris.*

