A Technique for Dealing with Soft Sand

by JAMES T. SNOW

Director, Northeastern Region, USGA Green Section



A cement finisher has proven to be an ideal tool for firming new sand in recently renovated bunkers at the Bridgehampton Club.



The application of water to the newly installed sand produces an ideal base on which the cement finisher can move.

REPLACING old bunker sand with new is often a traumatic experience. The removal of the old sand and its replacement with new is time consuming for the maintenance crew and costly for the membership. In addition, once the sand is in place, many golfers find its playing characteristics different from the old sand.

The length of time it takes for golfers' complaints to subside depends in large part on the degree of softness of the new sand, a factor that depends on the shape of the sand and its range of particle size. Certain sands can remain too soft for months or years, while others firm up in days or weeks. Anything the golf course superintendent can do to make new sand firm, even if the effect is somewhat temporary, is appreciated by the golfers at most courses.

Scott Bertrand, superintendent at the Bridgehampton Club, in Bridgehampton, New York, discovered an unusual and successful technique for developing instant playability for bunkers filled with new sand. He knew from experience with various construction projects that a cement finisher (a steel plate mounted to a gasoline-powered engine

that produces a compacting effect by vibrating horizontally) can produce a very firm base of sand on which bricks can be laid for a patio, for example. Using this principle, he reasoned that using this machine on fluffy sand that has just been placed in a bunker should provide the golfers at his club with a firm, playable surface without having to wait months for the new sand to settle. Needless to say, his idea worked very well.

Scott found several little tricks that could be successfully employed to make the work go smoothly.

After spreading four to six inches of new sand in the renovated bunker, lightly water the sand before running the machine over it. He found that the compactor tends to bury itself in dry sand, but it glides nicely over damp sand.

In using the sand available in eastern Long Island, where Bridgehampton is located, Scott discovered that one pass with the machine produced perfect results. He cautions, however, that bunker sands are quite variable from area to area, and some sands might require more or less compaction to achieve the desired results.

He suggests that others go once over their sand, and then test it to determine if further compaction is needed. Test the sand by walking through the bunker to get a feel for the firmness and consistency, and hit a few shots to help determine its playability. If possible, have the club professional or one of the good golfers participate in the test.

If by chance the compactor has made the sand too firm, it is easy to loosen the top inch of sand with a hand rake or riding mechanical rake, producing just the desired effect. Thereafter, avoid cultivating the bunker too deeply to minimize the possibility of softening the sand too much. Eventually, fine soil particles and organic debris will begin to contaminate the sand, and a natural firmness will develop.

Scott Bertrand's technique for firming new bunker sand is one that does not require a large inventory of expensive equipment. Cement finishers can be rented by the day from local equipment rental companies for a very reasonable cost. For newly built courses or older courses where major bunker renovation work is being done, the club might consider buying such a machine.