

## BUNKERS: A GOLFER'S POINT OF VIEW

By Dr. David U. Cookson



I have often noted that a surprisingly accurate appraisal of a particular golf course's general maintenance can be determined by checking the bunkers. The careful superintendent who understands the needs of his golfing membership will put the same degree of attention to bunker maintenance as he does to the rest of the course, while the less diligent superintendent will often leave bunker care at the bottom of his priority list. Certainly nobody will seriously argue that bunkers are as important as greens or fairways, but proper golf course maintenance includes the whole course, and paying attention to bunkers does enhance the player's golf experience while bunker neglect detracts significantly from the employment of those unfortunate enough to find themselves confronting this situation.

Bunker design is not a primary green superintendent responsibility, but often bunkers do need remodeling or refurbishing, and design may then become a part of that process. First, they should be properly positioned; not so far away from the putting surface that they are out of play, and nearer the entrance to the green than further back since most shots to greens are too short rather than long. I assume of course that we will agree that bunkers are to be placed strategically, so that the good shot is rewarded while the almost good shot is relatively penalized. The bunkers should ideally be visible from the area of the fairway where the approach is generally made, and shaped to be esthetically pleasing as well as to enhance the beauty of the target area. Green side bunkers should have depth, and a definite lip on the green side so that one cannot putt out of them. Some courses ring the bunker, at least on the outer sides, with long grass, which often does enhance beauty and playability, but if not in character with other areas of the course may

look gimmicky and even take away from the esthetic appearance. Placing bunkers where trees may physically interfere with swinging from within the bunker should also be avoided.

The nature of the sand is certainly the green superintendent's responsibility, and too often not recognized for its importance. Mason sand is preferred, and no gravel please! Particle size should be between  $\frac{1}{4}$  and  $\frac{1}{2}$  millimeter in diameter; heavy enough so that it is not easily blown out by wind, and obviously devoid of clay or silt. This sand provides as well the best kind of sand to hit out of; there must be firmness, yet not so much that the club cannot easily penetrate the surface. The sand must not be so soft that all balls plug, ideally at least half the ball should remain above the sand surface. Some of the silica sands have this too soft characteristic, making a precise shot from such a surface exceedingly difficult and taking away the advantage of having learned to produce an exacting bunker shot. Again, sand should be deeper in the middle of the bunker than on the sloping edge, so a ball will not likely plug unfairly on the steeper lies near the edges of the bunkers. Sand too firm is equally bad, (where all balls sit on a "hard pan" surface), this also taking the differential skill out of executing the shot.

Most important are the specific maintenance practices that the green superintendent directs his crew to perform. Insofar as raking is concerned, I don't think it matters if the raking is done by hand or by machine, as long as care is taken not to leave ridges or furrows after the machine has finished. This occurrence means the operator should smooth out the machine mistakes by hand; time consuming, but the mark of good maintenance practice. Bunkers should be raked often, usually daily; and just because it is spring

or fall doesn't mean that the task should be put off (as is done too frequently, even at very private clubs). One should not neglect bunker edging, and grass adjacent to bunkers, whether cut short or left long, should not appear disorderly. Obviously weeds should be removed immediately from sand surfaces, and poor drainage should be corrected. The green superintendent should keep in mind that playing from wet sand should be avoided, and if green watering encoaches on adjacent bunkers the greens should be watered at a time which allows the sand to dry out before play occurs on the course. Frequently greens are watered soon after dawn, leaving nearly all the players during the day having to deal with wet sand unnecessarily. New sand should never be placed just prior to an important event; balls always plug in new sand, and players in a competition should not have to confront this problem. New sand is always best placed in fall, allowing some compaction over the winter before players need to play from it.

The pertinent message I have wanted to present here is that bunkers influence playability of the course for the golfer more than I think many green superintendents realize. They are important esthetically and in influencing playing strategy, but proper maintenance with the golfer in mind is a significant contribution of the thoughtful and competent superintendent who presents his membership with a first rate playing ground.

A handwritten signature in black ink, reading "David U. Cookson".

*Editor's Note: Be sure to read Dr. Cookson's excellent article on "The Great Golf Course" in the Winter/Spring issue of the Wisconsin Amateur Golfer's Newsletter. It is on page 15 and is complementary to Rod Johnson's article in the last issue of THE GRASSROOTS.*