Modified bunker sand rakes create hand-done look

It is very interesting how bunker sand maintenance practices have evolved with the advent of the riding bunker rake. Prior to this evolution, superintendents had their bunkers hand-raked with wooden rakes of varying widths, with long wooden replaceable teeth. Because the bunker sand was not washed in the old days, the long wooden teeth would break up the caking effect caused by the fine particles of soil present and would stir up the sand to make playing conditions difficult, at best. Witness Oakmont CC in the 1960s, fitted with similar teeth of metal, or a cultivator-type bar followed by a finish rake that creates a nice appearance. These rakes have always worked well to break up the crust and fluff up the sand.

But beginning in the 1970s, a major evolution took place. Bunker sand quality was increasing tenfold as it was being washed, sometimes several times, to remove the fine particles — and golfers, especially, on the professional tours — were demanding that the playing conditions from bunker sand be much firmer.

During most tournaments on the amateur and professional circuits, bunker sand would be raked by hand, using metal leaf rakes which do little to disturb the playing conditions while smoothing any irregularities. When a superintendent hosted a tournament which had large bunkers that were impractical to rake by hand because of time constraints, he would usually have allowed to use a riding bunker rake with leaf rakes attached in lieu of the OEM rake attachment.

This innovation spread to other superintendents who do not have national tournaments, and a new evolution began in modifying riding bunker rakes to simulate hand-low. This was also fun for superintendents, who love to modify equipment to our personal maintenance objectives.

The next progression was testing of bunker sand at soil labs to see if its particles were angular or round. Angular particles were the most desired because they settle and pack faster. Tournament specifications require that bunker sand be installed at least 90 days prior to an event and that smoothers and irrigation be used to help settle the sand properly. Most superintendents in the transition zone and cool-season regions add bunker sand in the fall or winter to allow it to settle and pack faster.

Manufacturers of riding bunker rakes have made adjustments, over the last few years, to the rake attachment by shortening the teeth and cultivating bar. They even have a different version of the leaf rake as an option.

The best new modification I have seen is the "Sandpacker" attachment that replaces the OEM cultivar bar. Its angle is adjustable for the type of sand firmness desired. Another modification that has proved worthwhile, to be installed in conjunction with the "Sandpacker," is to add two additional horizontal weights that fit easily over the two existing weights, simply by adding a longer size bolt. The added weight puts more "down" pressure on the rake, which firms up the sand even more and gives the bunker a hand-raled appearance.

During last year's U.S. Open telecast, it was interesting to note that when the course was set up for the championship, they intentionally fluffed up the sand to make the bunkers play like the hazard they are supposed to be. It will be interesting if this trend continues on courses other than those hosting amateur and professional tournaments and championships.