

Filling Aerator Holes Completely, The First Time

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(Above) The first step is to apply dry topdressing sand heavily only to the strip that is to be aerated.

(Opposite page, top) The sand begins to fill the holes by gravity or the "hourglass" effect, even without brooming.

(Opposite page, middle) After the Verti-Drain has completed its pass, the crew hand-brooms the topdressing material into the holes. The back-and-forth action completely fills the holes with minimal injury to the turf.

(Opposite page, bottom) The final results — holes filled to the surface.

THERE CAN BE little doubt that deep soil aeration, by solid or hollow tines, has given the golf course superintendent a very important tool with which to better manage grass under less-than-perfect soil conditions. Unfortunately, the soil in most putting greens in this country is far from ideal, and as an alternative to the expensive and aggravating reconstruction of these greens, most turf managers exercise the option of trying to modify the existing soil through a program of shallow and deep aeration in conjunction with topdressing.

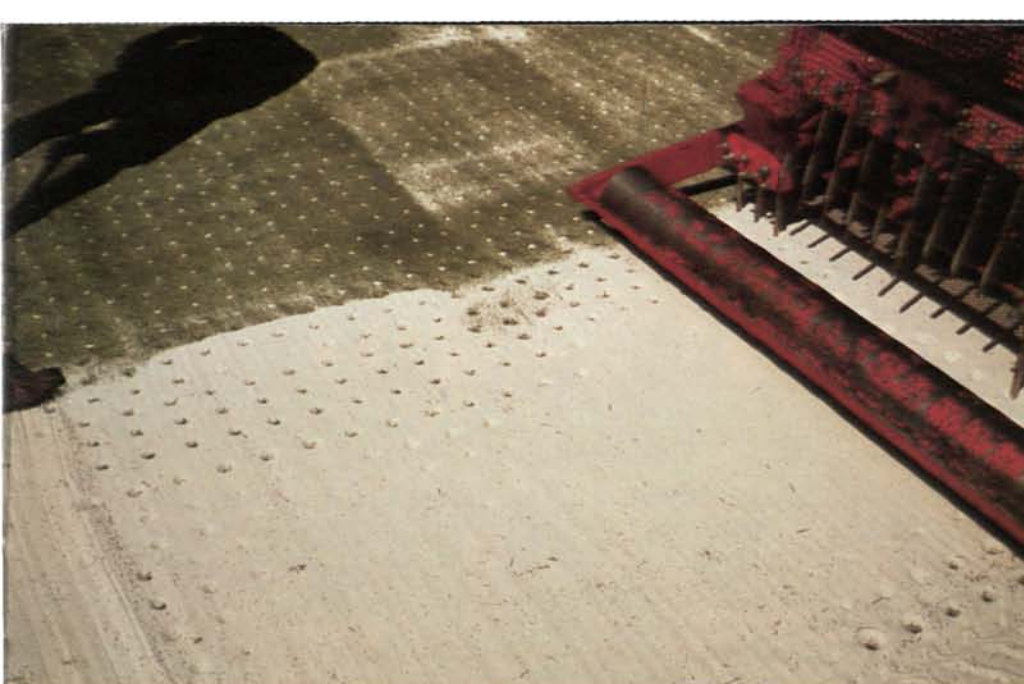
These techniques are well understood by the turf manager. What is more difficult is the

challenge of filling these deep-tine holes with topdressing material. In fact, due to the difficulty of filling these holes, most turf managers do not even try. A variety of techniques have been used, but the results usually fit one of the following descriptions: The holes are not filled the first time, the holes are only partially filled, and/or the greens are so heavily topdressed that the grass is either badly bruised or else the surface of the green is left buried in topdressing material.

Golfers tend to be unhappy with these results, and with most superintendents being sensitive to criticism, it is no wonder we see so many deep aeration operations being just

that — the punching of holes into the greens without any attempt made to fill the holes. It usually is just not worth the aggravation of trying to fill these holes, except on certain troublesome greens. The holes are left open not because it is better to do so, but because there does not seem to be a good method to fill the holes to the surface.

Why fill holes in the first place? In terms of improving drainage in a soil profile, there is no question that filling the holes to the surface is very beneficial. In fact, partially filled holes have little effect on water movement through the soil profile. Consequently, in situations where you want long-



term drainage improvement, soil modification, and interruption of layers in the profile, filling the holes is important. My turf tip this year is the result of a USGA Green Section Turf Advisory Service visit to Wilmington Country Club when aerification and topdressing were being done. Paul Latshaw, Sr., is the golf course superintendent. During our visit, I saw firsthand the filling technique described briefly in the following steps.

Step 1. Topdressing is applied heavily to the strip of the green to be aerated, in this case with solid tines.

Step 2. One or two passes are made over the topdressed area with a Verti-Drain.

Step 3. After the holes are punched through the topdressing and into the green, the topdressing is hand-broomed into each hole. It takes several employees to accomplish this task. The back-and-forth action of the brooms works the dry topdressing into the holes *completely* and *gently*. This careful brooming allows each aerator hole to be filled individually. If a little extra topdressing is needed, it can be back-brushed over the hole and, like an hourglass, the topdressing filters down into the hole and fills it up.

Step 4. Excess topdressing then is brushed forward into the area where the topdresser and Verti-Drain make their next pass. Thus, excess topdressing sand is moved forward and not left in place.

Step 5. The whole process is repeated on the next strip of green.

In seeing this technique in action, it was remarkable how little the turf was damaged. The greens were playable soon afterward, and the grass was less bruised and under less stress.

Naturally, matting of the entire green's surface after a heavy topdressing using a steel drag mat behind a wheeled vehicle can be very abrasive to the grass. Also, the heavy traffic over the green as the topdressing material is matted into the surface (usually in a circular motion) tends to mash down and close the aerifier holes you are trying to fill!

Please note that this turf tip involves significant handwork, and this may be a limiting factor for some golf course maintenance operations.

As with any golf course maintenance technique, what might work well at one course may not work so well at another. There are no panaceas in our industry. However, in situations where you want to fill aerifier holes completely and reduce the scuffing and abrasion of the grass so common with mechanical drag mat use, give this technique a try. It works well for Paul Latshaw, Sr., at Wilmington Country Club, and it could work for you.