

The Little Roller That Could

A useful technique to firm up soft greens after close-center aeration.

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Golfers often ask, “Why is it so necessary to riddle the putting surface with holes and then bury the greens with sand when the grass looks healthy?” Certainly the answer varies, but, for the most part, core aeration is scheduled in conjunction with heavy topdressing to manage organic matter accumulation.

To enhance the results of core aeration, superintendents have had the options of changing the size of the tine, which ranges from 0.25 inches to 1.25 inches in diameter, or running the aerifiers in multiple directions. Unfortunately, the agronomic gains in either case can be more than offset by the disadvantages of greater putting surface disruption and extended turf recovery, thus creating a Catch-22 situation.

Unsatisfied, several superintendents in the USGA’s Northeast Region reportedly began experimenting in the early 2000s. Eric Greytok, superintendent of the 2006 U.S. Open Championship site at Winged Foot Golf Club, had the club’s Ryan Greensaire aerifiers retrofitted with quadra-tine holders bored out to accommodate 0.50-inch-diameter hollow tines. This changed the aerifier’s hole spacing from its normal 2.5-inch square pattern to a 1.25-inch triangular pattern. As a result, core aeration became more effective without added disruption or delayed turf recovery — a win-win situation for everyone.

Close-center aeration (CCA) is the popular term used when referring to aeration with modified equipment for the sole purpose of reducing the hole spacing of large hollow tines. Having proven to be a valuable technique for managing abundant organic matter accumulations on putting greens established with warm- or cool-season turfgrasses, it has since been widely accepted across the country.

If the merits of CCA sound too good to be true, it is important to mention that some superintendents have been caught off guard by one possible side effect. Specifically, because CCA has a greater impact on the soil profile, the putting surface can become so soft under

foot that riding equipment creates severe tire ruts. This problem typically is associated with newer, sand-based greens that have accumulated excessive organic matter and exhibit shallow rooting. As these two issues are addressed over time, after two or three CCA treatments, the problem generally subsides.

To restore order to soft greens following CCA, initial attempts to compact the surface were made using various types of putting green rollers. These efforts bore little fruit, however, as the small size and relatively light weight of the rollers limited their ability

to firm up cultivated ground. Consequently, attention quickly turned to the use of mini-construction rollers typically found at equipment rental yards.

Concerns about employing the little yellow rollers engineered for use on asphalt driveways were clearly on everyone’s mind. A number of people simply assumed that using a piece of equipment that weighs a ton or more would damage a green’s infrastructure or, worse yet, crush the delicate turf. In practice, though, such dire problems never developed because the weight of a small construction roller is distributed across a large surface area.

When renting a mini-construction roller, keep in mind a few key features. First, units that have a split front roller are less apt to damage the turf around the perimeter of a green because they turn more easily. Secondly, some rollers allow for the addition of ballast to the front and rear drums, if desired. When rolling greens for the first time, it is best to start with empty ballast tanks, adding weight gradually to achieve the best possible results. Remember, too, that cored greens can also be rolled in several directions, albeit with a 24-hour resting period between treatments.

If unstable ground has been a concern at your course following close-center aeration, the technique of using a small construction roller may be the ticket for future success.

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