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Aerating greens with solid tines is becoming more popular, which helps to speed up the aeration process while still filling the holes with sand to dilute thatch and organic matter.

IS SOLID-TINE AERATION RIGHT FOR YOUR GREENS?

BY PAT GROSS | REGIONAL DIRECTOR, WEST REGION

Observations over the past year indicate that an increasing number of golf courses in the West are abandoning traditional core aeration on putting greens in favor of solid-tine aeration. From an agronomic perspective, is this a good thing or a bad thing?

Traditionally, core aeration in the spring and fall has been a standard practice to reduce thatch and organic matter accumulation and incorporate sand topdressing into the soil profile. It makes sense that physically removing cores of thatch and organic matter and backfilling the holes with clean sand is the most effective way to modify the putting green rootzone. Additional benefits of core aeration include relief of soil compaction and stimulating root growth.

Advocates of solid-tine aeration report that they get the same benefits of

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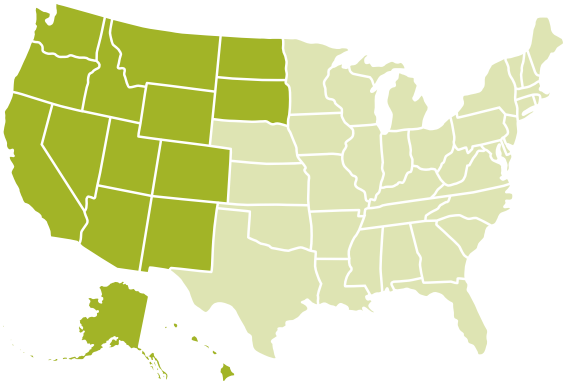
thatch and organic matter reduction with less labor for the collection and removal of aeration cores. Whether you pull a core or use solid tines, it's all about sand volume and the ability to dilute organic matter in the rootzone. Regardless of the method, the most important factor is filling the hole with sand. It's all about dilution, and if you can do that with less of a mess and less labor, then solid-tine aeration is a viable alternative.

Some would argue that solid-tine aeration contributes to soil compaction at the bottom and edges of the hole. While this could be a plausible argument in a clay or silt soil, there is little evidence to support that compaction is increased in a sand green. In general, the dilution of thatch and organic matter provides a greater benefit to turf health and playing conditions compared to any potential soil compaction, however small.

There is no one-size-fits-all program for aerating greens. Each course has site-specific conditions that need to be addressed, and it is up to the superintendent to determine what is best based on the prevailing conditions. Many courses use a variety of aeration practices throughout the year, including both hollow-core and solid-tine methods to relieve soil compaction and dilute thatch and organic matter. Solid tine-aeration is just one of the tools in that toolbox to help with the process.



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