



*Topdressing rates and frequency should match plant growth.*

## THE GOLDILOCK PRINCIPLE FOR SAND TOPDRESSING

BY JOHN DANIELS | AGRONOMIST, CENTRAL REGION

Light and frequent sand topdressing is crucial to maintain a healthy growing environment and smooth, firm putting surfaces. The key is to apply enough sand to keep pace with turf growth so that organic matter accumulation does not become excessive. Regular topdressing is also a best management practice for combating pests like cyanobacteria. Many highly-regarded golf courses accomplish this task by topdressing their putting greens every seven to 14 days. The question is, how much sand should be applied?

Apply too little sand and organic matter can quickly accumulate within the upper rootzone – hindering drainage and oxygen diffusion while causing a variety of other issues. Conversely, applying too much sand at one time will disrupt ball roll and dull mowing equipment. Like Goldilocks, golf course superintendents must find the amount of sand topdressing that is just right.

A good starting point is 100 pounds of dry sand per 1,000 square feet of putting surface. [Research at Rutgers University](#) has demonstrated that topdressing every two weeks at this rate improves turf quality and lessens the severity of anthracnose symptoms. Such an amount also should be relatively easy to work into the turf canopy if the sand is dry. During periods of rapid turf growth, superintendents may elect to topdress at an even heavier rate—e.g. 150 pounds of dry sand per 1,000 square feet.

Determining whether the current topdressing configuration is within the suggested rate can be evaluated quite quickly when using the following assumption:

- One cubic foot of dry sand weighs about 100 pounds.



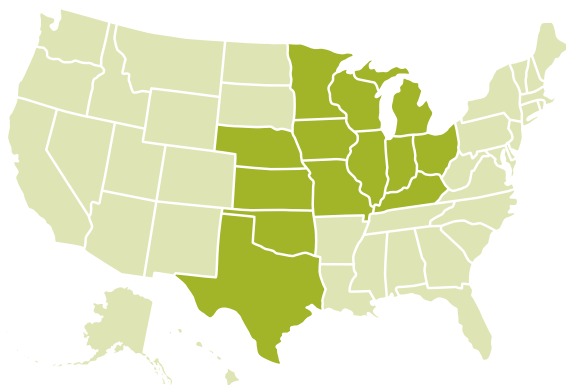
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The amount of sand needed during a single application can be calculated by dividing the square footage of your putting greens by 1,000 then multiplying by the desired topdressing rate in pounds per 1,000 square feet. The resulting amount of sand in pounds can be converted to cubic feet by dividing by 100. For example, you would need roughly 12,000 pounds of dry sand – i.e., 120 cubic feet – to topdress 120,000 square feet of putting greens at a rate of one cubic foot of dry sand per 1,000 square feet.

When you consider that an average spinner-style topdresser has a heaped capacity of 25 cubic feet, a golf course with 2.75 acres – i.e., roughly 120,000 square feet – of putting greens would require five fully loaded hoppers to topdress all the putting surfaces with 100 pounds of sand per 1,000 square feet.

So, before the next time you topdress the putting greens, do some simple calculations to make sure your rate is “just right.”



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