

Enjoy the Sand Without Going to the Beach

Sand silos — keeping sand dry and contamination free.

by BRIAN MALOY

TEN YEARS AGO there were few cultivars available for use on greens. Today, the options are more numerous for both cool-season and warm-season grasses. These new cultivars generally have a finer texture, tolerate greater environmental extremes, and can be mowed safely at lower heights of cut. As a by-product of these physical attributes, many of the new, improved cultivars have an increased rate of thatch or organic matter production. Therefore, it will be necessary to increase the frequency of certain management practices to maintain excellent putting quality. Common methods used to manage thatch accumulation include vertical mowing, reducing nitrogen application rates, core aeration, and topdressing with sand. Frequent, light topdressing is one of the most effective management strategies for managing thatch and producing a smooth surface.

To implement a topdressing program, large volumes of sand must be stored on site. The typical means of storing sand is to place it in a concrete storage bin. In areas of the country that frequently experience windy conditions, however, much of the sand can be lost, resulting in increased expense and waste. Furthermore, weed seeds and finer-textured sand, silt, or clay particles can be carried and deposited into the storage bins by wind. And finally, unless the storage bin is covered, rain will dampen the sand and make it very difficult to apply.

To address the problems associated with storing sand on site, Lee Redman, CGCS at Sunset Country Club, in St. Louis, Missouri, has purchased a special silo. The advantages of using a silo for storing sand are that it keeps the sand free of wind-blown debris, eliminates the need to brush wet sand into the turf canopy after application, and allows a single employee to load a topdresser by pulling open a trap door.

The capacity of Mr. Redman's sand silo is 36 tons, compared to the 25-ton capacity of a typical delivery trailer. For light topdressing, the silo holds enough for three to six applications, depending on the rate. For topdressing following aeration, 50 to 75 tons of

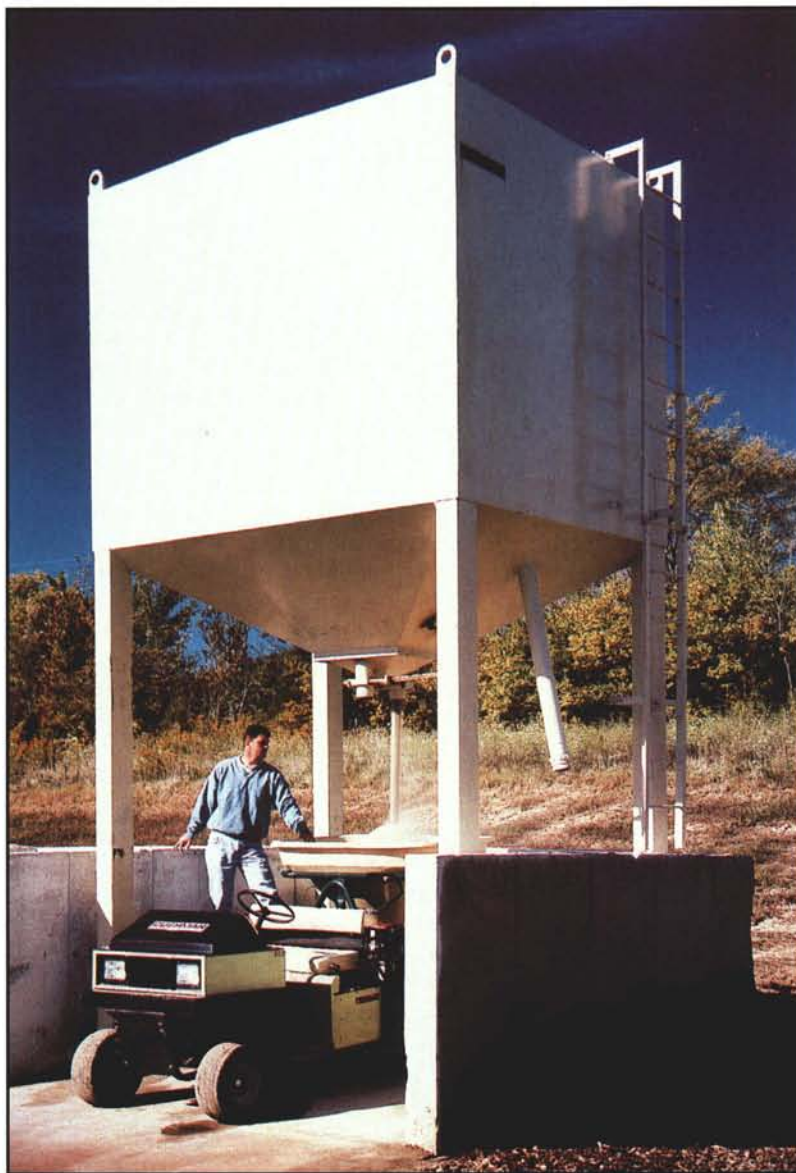
sand are required, in which case two 36-ton sand silos may be necessary.

Although it may sound easy, many of the sand suppliers are not set up with dryers or the 50-foot pneumatic trailers required to blow the sand into the silo. Additional costs are required to deliver the kiln-dried sand with the pneumatic trailers and blow it into the silo. Another concern is the silo location. Many courses have extremely narrow maintenance roads that make it difficult to accept deliveries from the 28- to 50-foot trailers.

The sand silo provides superintendents with another tool to help improve

overall efficiency. The kiln-dried sand is kept dry, allowing extremely light topdressing that minimizes or eliminates the need for brushing the sand into the green afterwards. The sand is also kept clean, eliminating the potential contamination from wind-blown soil particles, weed seeds, and subsurface debris. This results in less wasted sand and expense. Finally, the "dusting" operation can truly be a one-man job.

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By storing sand in a special silo, one employee can load a topdresser in a matter of seconds by opening the trap-door at its base.