

SAND TOPDRESSING
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As part of today's Sand Topdressing Forum, you will hear three different views and practices of the use of sand topdressing. My comments will cover my practices on both greens and tees.

A question we might ask, why topdress at all? A quick review:

1. Control Thatch
2. Correct surface irregularities
3. Provide a firm, tight, and fine textured turf

There are two basic approaches to topdressing:

1. Topdress only as needed to correct surface irregularities and control thatch.
Usually done 2-3 times/year at heavier rates and often with aeration.
2. Topdress lightly and frequently throughout the season.

Today I want to talk about the second approach for greens and a slightly different approach for tees. At Sycamore Hills, we have six year old USGA greens that are a 90-10 mix, that is 90% sand and 10% sphagnum peat. During the first year or so, I used the original 90-10 mix. During the topdressing operation however, I noticed that the peat would separate and be mowed up, leaving almost pure sand. After that first year, I went to 100% sand. The same sand used in the construction.

By topdressing frequently, we are able to maintain a firm, tight, fine textured turf and are constantly smoothing the surface. The most important benefit of the light, frequent program is smoothing. We have a lot of play which means a lot of ball marks and foot depressions and with undulating greens, scalping is always a problem.

The equipment we use is a 3 wheel Cushman & Meter Matric III Topdresser. This machine has a 1/8" deep corrugated, herringbone belt pattern which allows very light applications and the use of somewhat wet material. The old Meter Matic II had a smooth belt and would not deliver light applications unless the material was very dry.

A light application means 2-4 cu ft/1000 or about 1/2 - 3/4 cu yd/5000 sq ft green. This results in a sand depth between 1/32 - 1/16" of somewhere between a dime and a quarter. We normally apply 2-2.5 cu ft/1000, but may go heavier or double some areas dependent upon what we are trying to accomplish. Our frequency target is every 2 weeks during the summer under heavy play and good growth, and every 3-4 weeks during spring and fall.

The type of drag used also depends upon the application. For heavier applications in spring and fall, we may use the conventional steel mat when stress is not much of an issue. For light summer applications, a brush does a nice job without the abrasion. The problem with a brush system however, is the brush tends to kick the needed material out of the low areas whereas the steel drag tends to deposit and smooth the area. Again, the steel drag is very abrasive.

Realizing the problems with the two drags, I tried astro-turf and several carpets trying to find a drag system that would accomplish both without the damage. These materials did a fair job, but did not work in the material as well as a brush, nor did they move and deposit material like a steel drag. The best system I have come up with yet, is a 3M material used for door mats which is like a thick, heavy Enkamat. We have only used the system 2-3 times, but it appears to be the best of both drags with no damage.

Using light, frequent topdressing has allowed us to maintain smooth, consistent putting surfaces and as these profiles show, also maintain a good uniform mix of sand, roots, and decomposing organic material without layering. We had not aerated the greens in the six years since construction until late this fall. Previously, I had not seen the need to aerate, but the greens have been sealing up in the surface 1" during the last 2 years and causing poor water and air infiltration and anaerobic conditions. We will now aerate early spring and/or late fall to relieve this problem and hydroject in between.

Our topdressing program for tees is slightly different than the two approaches mentioned for greens. It used to be 2-3 times/year, or as needed, or as we got around to it. Now our program is heavy and frequently, although not as frequently as greens. The tee program frequency will depend on traffic, but normally would be at 3-4 week intervals. Application rates are estimated at approximately 8-10 cu ft/1000 or about 1/3 cu yd/1000. Most of the time we will double apply the divot areas and skip the edges or cleanups at least every other time.

Our best results for heavy use bentgrass tees:

1. Topdress heavy with a double application in the divot areas.
2. Drag material in well and mow to remove tufts and smooth.
3. Fertilize with starter or a quick release N source.
4. Do not mow for several days if possible and let grass grow into the topdressed surface.

This program has been very successful for a quick turn around and maintaining quality bentgrass tee surfaces.

Our bentgrass practice tees take as much sand and as frequently as we can give it. We try to fill divots as much as possible, but by mid season we get into very heavy topdressing. Running the Meter Matic wide open at rates of 20 cu ft/1000 or a good 1/4" of material. This is equivalent to 3/4 yd/1000.

In summary, we do a lot of topdressing at Sycamore Hills and use a lot of sand. Although this is an expensive operation, it is one that has given us very good results and maintained excellent playing conditions in spite of the ever increasing rounds of golf and little time to give the course a rest.