

TOPDRESSING - KNOW YOUR MATERIAL

When I first came to Skokie Country Club, two years ago, I inherited problems of sorts related mostly to soil texture, topdressing and drainage on greens. I would like to discuss what I think was the main problem, that of topdressing material, and it's relationship to soil texture, drainage and overall consistency. At Skokie, they used three different topdressings. Twelve greens were topdressed using a 3-1-1 mixture. Three greens were topdressed using an 80-20 mix and three greens were topdressed using a straight sand from near Milwaukee. From the initial topdressing using the three different mixes we noticed the results within a week. For the past two years we've been testing and experimenting with different blends of materials to achieve a topdressing that could be used on all our greens. In the following, I will discuss the problems with each of the topdressing materials that have been used in the past and relate to how we arrived at our present mix now used on all of our greens.

1. The twelve greens topdressed with the 3-1-1-mixture produced an immediate cementing reaction to the surface. No matter what thickness it was spread. This layer was practically impervious to water penetration and when the water did penetrate there was too much moisture retention at the meristamatic point of the grass plant.

To temporarily combat the impervious layer problem we would double spike the greens approximately four days after topdressing. This resulted in better water penetration. It is obvious that the material being used had too high of a silt concentration in the mix.

2. Skokie has had three greens built to U.S.G.A. recommended specifications, that of an 80 percent sand 20 percent peat mixture. Over the years the 80-20 mix delivered by the supplier started to vary within it's sand fraction particle size. Through further testing we found that an unacceptable amount of silt and clay were also included in the mix. Again this proved to provide an impervious layer situation such as that of the 3-1-1 mix. We therefore, had to spike frequently to achieve the water infiltration we needed.

3. For three successive years we've had three greens, that were tucked in next to the woods, on a straight Milwaukee sand topdressing program. As everyone knows, this is a uniform sand with less than 2% silt and clay. We continued this program as in the past and found varying problems related to this topdressing and the particular greens it was used on. First of all was the winter of 77-78. As I already discussed in a previous article, the sand topdressed greens suffered more poa loss than all the other greens put together. The reasons were a restricted root system, caused by water level at field capacity followed by freezing the next day. We can relate this to the problem on our fourth green.

The fourth green was built entirely of heavy clay. It has been on a straight sand topdressing program for three years. During the summer months, after a heavy rain, water would accumulate in the 2½" sand layer near the surface as well as in the many sand filled aerified holes. This created a perched water table situation for too long a time period enabling disease and wet wilt to run rampant. It also created a puffiness problem, whereas the mowing height would have to be constantly adjusted.

Another green, in particular, had also been on the straight sand topdressing program for three years. One of the problems that has developed in this instance, is that the green is now too firm for the average golfer.

This hole is a 230 yard par 3 to an elevated flat green approximately 6700 sq. ft. in size.

In conclusion, after much testing with different topdressing blends we have decided on a topdressing mix of 70 percent Milwaukee Sand and 30 percent Milburn peat. The main purpose of the organic matter content is to slow down the water infiltration rate at the surface allowing time for the topmix to absorb the water. This 70-30 mix helps to reduce the perched water table effect. Eliminates the subsurface standing water by providing more runoff and eliminates the chance of starting a new impervious layer in the soil profile. It also prevents the green from becoming too firm for the average golfer and is a compatible mix for all our greens.

John Berarducci, Supt.
Skokie Country Club

ROSEMAN

2620 CRAWFORD AVE. 864-1842
EVANSTON, ILLINOIS

TURF EQUIPMENT HEADQUARTERS

ROSEMAN GANG MOWERS	FORD TRACTORS
TILLER RAKES	DEDOES AERIFIER
LELY SPREADERS	LOADERS
SEEDERS	LEAF MULCHERS
ROTO TILLERS	ROTARY MOWERS
HOMELITE CHAIN SAWS	HOMELITE PUMPS

SALES ● SERVICE ● PARTS ● RENTALS

- All Major Turf Supplies
- Par-Ex
- Bean Sprayers
- DuPont
- Chipco
- Vertagreen
- Daconil - Dacthal

Quality — Value — Service

PAARLBERG CHEMICALS

1840 E. 172nd & Paxton, So. Holland, Ill.
312 - 474-3086 312 - 258-3485

Rogers' Pump Sales and Service
16 S. Washington Batavia, IL 60510

All Makes - Industrial & Commercial
And all obsolete Pump Repair
Mobile crane rental (5 ton)

(312) 879-7747; 879-7742; 879-7772