

Topdressing: A Practical Approach To Good Management

By HUBERT E. (AL) FRENETTE



In recent months, a lot has been written about the pitfalls and dangers of topdressing with sand or sand-organic mixtures. This followed on the heels of a paper published at one of the turf schools in California. Superintendents who experimented with the technique gave varying opinions on its merits. Some saw no significant difference from their normal program, some saw a marked improvement, and still others abandoned the program as too time-consuming for the benefits noted.

In the wake of this experimenting came the warnings from everyone who needed to publish. Close analysis of some of these papers will reveal a similarity to some well-known authors' views on topdressing. Unfortunately, the new opinions were taken out of context. In some cases, the writer appears to be totally ignorant of the subject of topdressing and has assembled a paper of theory, opinion, and reprinted materials from recognized authorities on the subject of turf management.

This writer intends to present a practical approach to the business of topdressing, concentrating on the purpose, materials, blending, and application of topdressing on fine turf areas.

For years, golf course superintendents have recognized the practice of topdressing as a valuable tool. Research has further taught us the purposes for which topdressing can be used in a total program. We recognize it as a tool for the control of thatch, probably the most important reason, because it promotes bacterial activity that reduces thatch, footprinting, disease incidence, and graininess. Spring and fall topdressings eliminate or mask scarring from worn turf and ball marks. In addition, topdressing newly seeded areas aids in stabilizing the seed and hastening germination. As an added benefit, topdressing helps level the surface and promotes juvenility. Some would disagree with the order of importance placed on this list but none would disagree that topdressing provides all the benefits listed.

When we speak of topdressing as a tool for maintaining a good growing medium or as a method of renovating poor growing conditions, two things are basic; (1) the topdressing material should complement a good soil profile and (2) the material should improve a poor soil profile. Beyond this we cannot expect topdressing to perform miracles. Stick to the basics and you can forget what might happen in 10 to 20 years.

Prior to starting a topdressing program, the superintendent should have a valid test made of the available materials. This test should be made by a USGA approved laboratory to determine whether the materials are suitable and to make recommendations as to the ratio of sand, soil and organic. The existing seedbed should also be tested to determine whether it requires modification or is acceptable as a well-drained, silt-free growing medium. The success or failure of your topdressing program will depend on your knowledge of your soils and no amount of fingering or feel will tell you what a soil test can.

A lot has been written about the benefits of purchasing topdressing materials as opposed to preparing your own. A recent article stated that it was much cheaper to purchase prepared materials, that was of higher quality, than go through the trouble of mixing your own. This was the same fellow that recommended using 15-20% soil (whatever that is) in your mix to avoid the evils of sand topdressing.

A word of caution on purchasing materials. In some areas, topdressing and seedbed mixes are being sold as the answer to the superintendent's need for a blended material. Many of these do not meet USGA requirements for a suitable growing medium. Investigate beyond the advertisement and claims; have all such materials tested and approved before you use them in your topdressing program.

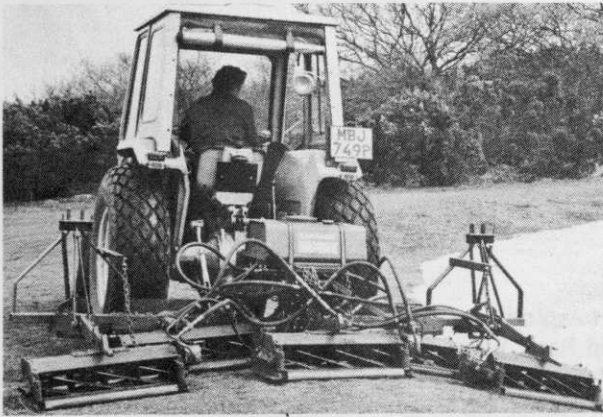
It has been our experience here at Peachtree that preparing your own topdressing definitely saves time and money. It saves time because you have a material which is homogenous and weed-free, spreads easily, and mats in without any cleanup required. It saves money because you can utilize your crew in the off-season and the cost of the materials is far less than the prepared mix. Last, but not least, you know exactly what is going on your turf. We use a 9-0-1 ration (9 sand - 0 soil - 1 organic) which matches our original seedbed mix of 8-0-2 with somewhat less organic.

Many superintendents shy away from the thought of spending the time mixing topdressing. A painless method is suggested below and we have found these steps to be very successful:

1. Sand - 100 tons at \$7.00 per ton \$700.00
We use an approved (dirty) sand pumped from the Chattahoochee river and washed through screens for proper gradation. The sand is

TURFCO

TURF & INDUSTRIAL EQUIPMENT



RANSOMES

Call or come by for details on the most complete selection of grass machinery, turf and garden tools and golf course accessories in South Florida.

16300 N.W. 49th Avenue, Hialeah, Florida 33014
Telephone: (305) 621-4677



The Lake Doctors, Inc.

**We Specialize in Keeping Your
Golf Course Waterways in
Excellent Condition.**

**FREE aquatic survey of your lakes
or waterways includes:
Full written report, custom water
management program proposal
and cost estimate**

**CALL JIM WILLIAMS
305-739-0166**

2501 E. Commercial Blvd.
Suite 212
Ft. Lauderdale, Fla. 33308

spread dumped on a corner of the parking lot which provides a perfect work area. During the off-season, the lot can be used during the weekend without any difficulty. The sand is then spread evenly to a depth of 1 foot over an area approximately 30 feet wide by 80 feet long (2400 cu. ft.) The spreading is done by 2 men in 4 hours (8 manhours at \$4.00 per hour

32.00

If extremely dry, the sand is wet down to provide ample moisture for fumigation.

2. Peat - 120 bags at \$1.95 per 2 cu. ft. bag Using a ratio of 9-0-1, we purchase 240 cubic feet of processed Michigan peat which is readily available at a local nursery. The organic fraction is included to prevent layering and not for moisture retention or CEC.

234.00

The bags of peat are laid out on the sand at 6 foot intervals by 6 men. The bags are then slit across the center and dumped in a cone shaped pile. These piles will support the tent for fumigation. This step takes the 6 men about 1 hour. (6 manhours at \$4.00 per hour)

24.00

3. Polyethylene Sheet - 40' x 100' (6 mil)

42.00

We place this sheet over the peat and secure the edges with sand to prevent the sheet from being lifted by the wind. This operation takes the 6 men about 1 hour (6 manhours at \$4.00 per hour)

24.00

4. Dowfume - 1 Carton (24 lbs.)

45.00

The material is fumigated with Methyl Bromide at the rate of 1 lb. per 100 cubic feet. This operation should be done on a sunny day and when the temperature is above 40°F. This will enable the gas to volatilize and disperse. The Methyl Bromide is released under the sheet with the approved applicator. Due to the risk involved in this operation, the superintendent or his assistant is responsible for actually releasing the chemical. This step takes about 1 hour.

6.75

We leave the fumigant under the sheet for about 48 hours. We try to complete the whole operation on a Friday and leave the sheet on over the weekend. As stated earlier, should the temperature drop below 40°F, we will leave the sheet on until we have gotten at least 1 day of sunshine on the polyethylene

When the sheet is removed, the mix is allowed to air for some 1-2 hours. Removing the sheet requires the same 6 men for about 1/2 hour (3 manhours at \$4.00 per hour)

12.00

5. Blending

The piles of peat are now spread to a uniform layer over the entire area, using wide bunker rakes. This step will take 2 men 1 hour to complete (2 manhours at \$4.00 per hour)

8.00

We now put a small garden tiller on the pile and till it as deep as possible, in two directions. 1 man can complete this operation in 4 hours (4 manhours at \$4.00 per hour)

16.00

The final blending operation is for 1 man and a front end loader to move all material into a pile as high as the loader will reach. This should take about 3 hours. This pile is then moved to a second location, further mixing the material. Both steps take some 6 hours (loader and operator at \$5.00 per hour)

30.00

6. Storage

The material is now loaded into a dump truck and taken to a suitable storage area (preferably a sheltered area) to keep it dry and prevent contamination. Normally, this operation will take 1 man with a loader and dump truck 1 day

50.00

7. Cost

The total cost of this entire operation amounts to about \$1,225.00, including all materials and labor. This breaks down to \$12.25 per ton of topdressing material that is tested, fumigated, blended, and available when you need it. Compare these figures to any prepared mix that you can purchase.

No further handling is necessary until the topdressing is taken to the green or turf area. When using topdressing on greens, we shovel the material onto a 1/4" mesh screen fitted over the topdresser. This gives us a trash-free material which mats in smoothly and requires no further handling or cleanup.

In summary, your topdressing program should be geared to the soil conditions and problems on your particular course. No prepared material available for purchase can meet all requirements. The time and money you invest in preparing your own topdressing will provide you with the type of material tailored to your needs.





WOODEN
TREE PLAQUES
LOW MAINTENANCE
CUSTOM DESIGNS


RECENT INSTALLATIONS

BENT TREE
AVENTURA
QUAIL RIDGE
WILDERNESS

FOR INFORMATION

Masterwork Studios
Woodcarvers and Signmakers

506 19TH AVE WEST
BRADENTON, FL 33505 813-747-8936



Superior Fertilizer & Chemical Company

MAIN OFFICE:
P.O. BOX 1021, TAMPA, FLA. 33601
813.247.3431

FT. PIERCE PLANT: 305.461.2230

LAMAR "SUNNY" SMITH
Mobile: AC305 655-2072
Unit 3317

ED HAITHCOCK
Mobile: AC305 581-6123
Unit 2425