

# 56th Turf Conference & Annual Meeting

November 30, December 1 & 2, 1983



## Sheraton Inn-Northwest

SHERATON HOTELS & MOTOR INNS WORLDWIDE  
INTERSTATE 94 & U.S. 52, BROOKLYN PARK, MINN. 55426

### Featured Speakers

DR. HOUSTON COUCH  
DR. CLINTON HODGES  
DR. WALT LYONS  
DR. JOE VARGUS

MR. STAN ZONTEK - U.S.G.A.  
DR. DON TAYLOR  
G.C.S.A.A. REPRESENTATIVE

WEDNESDAY AFTERNOON - Pesticide Seminar and Spraying License Renewal

### Special Events

WEDNESDAY AFTERNOON - Seminar for Assistants and Mechanics featuring Hydraulics, Spin Grinding, Truckster Maintenance and Fertilizer Slide Show

WEDNESDAY, NOVEMBER 30  
THURSDAY, DECEMBER 1

ANNUAL MEETING 4:00 P.M.  
ANNUAL BANQUET  
COCKTAILS 6:30 P.M.  
DINNER 7:30 P.M.  
DANCING 9:00 P.M.

### Registration

NOVEMBER 30  
DECEMBER 1 & DECEMBER 2

10:30 A.M. - 1:30 P.M.  
7:30 A.M. - 9:00 A.M.

NOTE: Special Advanced Registration mailing will be sent to all members in October. Lodging at the Sheraton Inn Northwest should be handled directly with the Inn. See Reservation Blank below.

## AN UPDATE ON SANDS FOR TOPDRESSING GOLF GREENS

by DON TAYLOR  
Assistant Professor, Social Science  
University of Minnesota

Two years ago we published in the HOLE NOTES a chart listing the particle sizes of some sands available in Minnesota. Since that time some new sands have become available and some questions about the other sands have been raised. Consequently, I collected new samples from several companies this summer and determined the particle size and pH of the sands. I also check for carbonates by applying some hydrochloric acid. The presence of carbonates is the main reason some of the sands are in the alkaline pH range. The results of the measurements are shown in Table 1 on Page 13

Even with these figures, choosing the best topdressing sand is not easy. Opinions of superintendents, as well as researchers, vary widely. For whatever it's worth, I will give my opinion on

what to look for in a topdressing sand or mixture.

1) Particles with diameters greater than 1.0 mm are too large. These are the ones that are most likely to interfere with putting and be picked up in the mower. I would keep the percentage of these particles as low as possible.

2) Particles between 0.25 and 0.50 mm are the best. I would make sure the sand I used had a high percentage of these particles.

3) I think sand with a small amount of soil (80-80% sand and 10-20% soil) is preferable to either straight sand or sand-peat mixtures. For the soil, I would use a topsoil with a high clay content and as low a silt content as I could find. In research done by Cooper and Skogley in Rhode Island (Putting Greens Responses to Sand and Sand/Soil Topdressing, USGA Green Section Record, May/June 1981, pages 8-13), sand-soil mixture topdressing led to better fall color, earlier spring green-up, and better overall quality than topdressing with straight sand.

Table 1.

## Sand Samples for Topdressing Golf Greens in Minnesota

| Source   | Particle Size, Diameter in mm |                      |                        |                      |                           |              | pH* | Carbonates Present |
|--|-------------------------------|----------------------|------------------------|----------------------|---------------------------|--------------|-----|--------------------|
|  | Very Fine Sand or less, <0.1  | Fine Sand, 0.10-0.25 | Medium Sand, 0.25-0.50 | Coarse Sand, 0.5-1.0 | Very Coarse Sand, 1.0-2.0 | Gravel, >2.0 |     |                    |
|  | % of total                    |                      |                        |                      |                           |              |     |                    |
| Arsenal (finer of 2 mortar sands), Arden Hills, MN | 1.6                           | 22.5                 | 51.7                   | 21.4                 | 2.4                       | 0.4          | 7.4 | yes                |
| Cemstone (mortar), Lakeland, MN                    | 1.2                           | 15.1                 | 47.0                   | 30.3                 | 5.4                       | 1.0          | 7.7 | yes                |
| Hardrives (mortar), St. Cloud, MN                  | 2.1                           | 29.7                 | 46.2                   | 19.1                 | 2.6                       | 0.3          | 8.2 | yes                |
| Minnesota Frac (sand 4070), Jordan, MN             | 1.0                           | 25.1                 | 73.0                   | 0.9                  | 0.0                       | 0.0          | 7.2 | no                 |
| Minnesota Frac (sand 3560), Jordan, MN             | 0.0                           | 0.9                  | 95.7                   | 3.7                  | 0.0                       | 0.0          | 7.3 | no                 |
| Sniely (mortar), St. Paul, MN                      | 0.8                           | 12.8                 | 21.8                   | 38.5                 | 21.5                      | 4.6          | 7.7 | yes                |
| Steneman (mortar), Roberts, WI                     | 0.8                           | 9.6                  | 39.6                   | 36.6                 | 13.0                      | 0.4          | 7.6 | yes                |
| Unimin (Granusil golf sand), Ottawa, MN            | 0.1                           | 5.5                  | 89.7                   | 4.6                  | 0.0                       | 0.0          | 7.6 | no                 |

\*pH values were determined by the University of Minnesota Soil Testing Laboratory, St. Paul, MN 55108