

Table 11.

**Long Term Topdressing Study - 1996**

Initiated 1986. Sampled May 21

Topdressing material &  
frequency

	Root weight, grams		Air Filled Pores	Total Pores	Bulk Density
	1-3"	3-6" depth	%	%	gm/cc
Sand every 3 weeks	1.69 a	.42 a	27.2 ab	49.3 ab	1.34 b
Sand spring & fall	1.39 ab	.32 ab	22.6 abc	46.9 bc	1.35 ab
80 sand : 20 peat every three weeks	1.34 ab	.31 ab	24.0 ab	50.4 a	1.27 c
80 sand : 20 peat spring & fall	1.63 a	.41 a	29.2 a	50.2 a	1.26 c
60 sand : 20 peat: 20 soil; every three weeks	1.19 abc	.30 b	22.5 abc	50.4 a	1.26 c
60 sand : 20 peat: 20 soil; spring & fall	1.28 ab	.28 b	21.2 bc	49.2 ab	1.27 c
Check Plot no topdressing	0.58 c	.15 c	16.1 c	44.9 c	1.41 a
Sand; aerified spring & fall	0.79 bc	.29 b	23.4 ab	47.3 bc	1.40 a
Probability	.02	.00	.05	.00	.00
LSD @ .05	.063	.119	7.16	2.67	.055

\*Both topdressing frequencies totaled 24 cubic feet per year.

**MANAGEMENT OF SOD GROWING ON SUBSOIL**

The project to evaluate management practices to maintain sod grown on compacted subsoils was initiated during summer, 1996. There are nine blocks in this study with three irrigation treatments and three replications. Kentucky bluegrass sod was laid on these plots in 1995. Treatments include nitrogen rates of 0, 2, 4, and 6 lbs. per 1000 sq. ft. annually; core cultivation treatments applied 0, 1, or 3 times annually; organic nitrogen or urea as the nitrogen source; and composted yard waste as a source of organic matter. The 3 irrigation treatments are none, daily, or irrigation on the appearance of wilt. Limited data were collected in 1996. The most obvious result is the rather rapid loss of turf color when no nitrogen was applied. This was expected as the subsoil has essentially no organic matter that could serve as a source of nitrogen for the sod.

A companion study on native soil was established in 1996 as well. This project is being supported by the TruGreen/ChemLawn Corporation. The objective is to evaluate the effect of various lawn care management practices on the biological life of the soil. An initial report on this is presented elsewhere in these proceedings (Ravenscroft). Both of these studies will continue for several years to determine the long-term effects of turf maintenance practices.