TURFGRASS CULTURAL PRACTICES AND THEIR INTERACTIVE EFFECTS ON ROOTING

UNIVERSITY OF NEBRASKA Lincoln Nebraska

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1988 Research Grant: \$25,000 (fifth year of support)

This research project has taken a significant change in direction in the past year. It is now more in line with the Research Committee's original goals for cultural practices studies. The University of Nebraska's Mead Experiment Station, about 50 miles north of Lincoln, has 30 acres now in turfgrass research plots and an additional 11 acres have recently been acquired. It is obviously a growing research center. There is a good spirit of teamwork between university staff members and an excellent turfgrass graduate student program has been developed.

The specific new research projects funded by the USGA include:

- 1. Creeping Bentgrass/Poa annua Fairway Management (nitrogen, clipping removal, irrigation, traffic)
- 2. Seeded Creeping Bentgrass/Nitrogen Nutrition (six different popular bentgrasses are being evaluated for playability, wear, traffic tolerance, nitrogen rates, vertical mowing and topdressing effects)
- 3. Seeded Creeping Bentgrass Cultivars and Potassium Interaction Studies (three different levels of potassium and two different nitrogen levels are being investigated)
- 4. Bentgrass Syringing x Nitrogen x Potassium Study (verticutting and topdressing practices are also included)
- Creeping Bentgrass Mowing Height and Vertical Mowing Frequency Studies (three different mowing heights and three different frequencies of vertical mowing are being investigated)

The plots are well organized and established on quality turf. Dr. Sherman will determine bentgrass root system distribution and bentgrass water use rates on the plots under study.