MICHIGAN STATE UNIVERSITY LIBRARY - Dr. Richard Chapin, Project Leader

Funds Granted \$5000 USGA Turfgrass Literature Project.

The purpose of the USGA Turfgrass Literature Project is to provide efficient and effective access to all published and processed materials reporting the results of research affecting turfgrass and its maintenance. The access will be provided for the research community, for practitioners, for extension-type services, and for commercial concerns.

A preliminary proposal has been developed based on three goals; a collection of research data, a bibliographic and physical access to the collection. The Green Section Research Committee further outlined the need for cataloging and computerizing all turfgrass research data. Thus, in a central location, a reference source of all turfgrass research data from throughout the world would be collected and made available to all interested parties.

Funds Granted \$3000
This is MICHIGAN STATE UNIVERSITY - Dr. Paul E. Rieke, Project Manager

Soil compaction and cultivation.

This is a new 3-year research grant initiated in late June, 1983.

Soil compaction has long been of major concern on many turfgrass sites. The use of core cultivation for overcoming compaction has had many beneficial effects. However, through the use of a computerized tomography (CT) scanner, there is concern over the potential for development of a "cultivation pan" at the bottom of the coring hole. Recently, the practice called "shatter core aerification" has received attention and many new questions and considerable interest have developed. It is apparent that controlled field research studies are needed to substantiate or disprove the development of a "cultivation pan".

TEXAS A&M UNIVERSITY - Dr. James B. Beard, Project Leader

Funds Granted \$84,500 Mechanisms in physiological stress.

This research project is the first step in development of the USGA Green Section's long range Minimal Maintenance Turfgrass Research Program. The purpose is to identify plant stress mechanisms involved with drought tolerance, heat tolerance, temperature tolerance and wear tolerance. Initial funding took place in May, 1983.

The first phase in implementation of the research project involved the selection of project personnel. The development of proper physical facilities was next in order. By July 1, 1983 both the Turfgrass Field Laboratory Building and plots, as well as the Stress Physiology Lab, have been refurbished and reorganized to meet the requirements of the planned research. There were three priority items; Water-Heat Stress Simulator, a rain out shelter and development of a Cultural Systems Field Study area.

The preliminary work has now been completed and the study underway. The first annual report is due on May 1, 1984.