3. Michigan State University Library will provide loans and/or appropriate photocopies to all users who have reason to need access to the turfgrass collections. MSU Library is in the process of preparing a descriptive brochure that explains the project and services available. The brochure will explain how to acquire and use software to access the file with an IBM compatible personal computer. Also, the Library will continue to search telephone requests on demand.

MICHIGAN STATE UNIVERSITY - Dr. Paul E. Rieke, Principal Investigator

Comparing Core Cultivation with Hollow and Solid Tines

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Core Cultivation (or aerification) of a creeping bentgrass putting green with traditional hollow tines was compared with the use of solid tines. Solid tine coring (also called "Shattercoring") removes no soil, reducing interference with play. But there is concern about compactive effects when no soil is removed from the rootzone. Both hollow and solid tine coring caused some loosening of the surface 2-inches of soil, but a zone of greater compaction tended to develop just below the bottom of the coring hole. There was also some indication that this compactive influence was enhanced if the soil was cored while wet compared to treatment when the soil was more dry, although differences were small. Data taken during the fall of 1985 should enhance our understanding of solid tine coring.

Based on evidence to-date, coring with hollow tines is still considered the standard practice to be used in the industry, particularly when there is need to fill the coring holes with topdressing, when larger coring holes are needed to alleviate surface compaction or when the topsoil from the cores is considered an important part of the thatch control program. But there may be a place for the use of solid tine coring during the summer when relief from surface compaction is needed, especially when runoff of irrigation water occurs. The use of small diameter solid tines will leave small openings which will heal over quickly and do not leave the turf as open to rapid desiccation. This practice could result in more efficient water use on sloping greens. Additional research is needed to determine the long term effects of regular use of solid tine coring on soil properties.