

UNIQUE MAINTENANCE PRACTICES
ON UNIVERSITY OF MICHIGAN INTRAMURAL FIELDS

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There are many concerns in turf management that can cause failure in cultivating quality turf. This presentation will deal with two of them. Soil compaction and turfgrass variety selection.

While cultivation is an important management tool which the turf manager can use to deal with compaction, the technique used can greatly change the results. The University of Michigan has been using deep tine aerification (with both solid and hollow tines) for the past two years. While our results do not represent scientific method the empirical evidence suggests that this program is producing significant results. In the past, athletic fields have been aerified to a depth of 3"- 6" twice each year. This was followed by overseeding with a P.T.O. driven disc seeder. Results were consistent but poor in the areas of heaviest compaction. These areas included the shallow outfield on softball fields, and the center areas on soccer, rugby, and intramural football fields. With a shift to deep tine aerification a noticeable improvement in drainage and seed germination was noted. Solid tines are used for this program because they penetrate deeper (12" - 18") without breaking, a major problem with hollow tines in rocky soils such as ours.

Another significant area of importance is in the selection of turfgrass varieties for athletic field use. Traditional methods have included the practice of using improved kentucky bluegrass blends or mixtures including improved perennial ryegrass and even fine fescue varieties. Our experience suggests that blends of perennial ryegrass or blends of improved tall fescue varieties used alone produce the most durable playing surfaces. Both of these varieties are extremely wear tolerant and in the case of the improved tall fescue varieties also tolerant to drought. The University of Michigan has been planting improved tall fescue varieties in selective areas for 5 years with substantial success. The major issue of cold tolerance does not seem to be a problem for us to date, especially considering the fact that we must overseed large areas yearly to repair damage from over use. We seeded a major new intramural facility with an improved tall fescue blend during the spring of 1988 and will be carefully monitoring its' success or failure as a stand-alone turf cover in Michigan. With extensive use other problems such as insect and disease management may become obstacles to more widespread use. The results of our program will be shared as more data becomes available.