ATHLETIC TURF MANAGEMENT

John E. Zink, Sr. Grounds Maintenance Department, M.S.U.

The main MSU campus is the home and educational facility for about 40,000 students. The campus covers an area of 2,000 acres, of which 80 acres are used for athletic turf areas. This includes soccer, football practice, track, softball, baseball, lacrosse, field hockey, intramural and band practice fields.

The goal of my staff is to perform the annual maintenance on these areas in the very short time span between when the facilities are being used by the different groups and when weather and time allow.

I have a budget of \$186,000 which comes mainly from the athletic department as well as some funding from the Grounds academic budget to cover intramural sports and teaching classes. I have a staff of four full-time Groundskeepers, with the additional help of approximately 100 student hours of labor a week during the "growing season". I might mention that this budget doesn't just cover turf areas as we are also responsible for all indoor sports during the year. This is not just labor, all of my supplies, fertilizers, chemicals, garage and fuel charges, and new equipment come out of these funds. Any of our overtime pay comes from special funds from the Athletic Department.

All of our turf areas are used by groups from various varsity sports, intramural sports, recreational services, sports camps, club sports, band and health-physical education. Many of these same areas are also used by the public during certain times of the year. Depending on the season, many of the fields are used for more than one sport which creates different maintenance problems for the field. For instance, the field used for field hockey in the fall is used for lacrosse in the spring which means changing the mowing patterns, different liming of the fields and, most important, different wear problems.

The IM fields are used for different sports so they have to be set up to facilitate the particular sport in season. During the spring, these fields are set up for 10 lighted and 1 unlighted softball diamond. This entails backstops, laying out bases and base lines and marking with Pure Line. We don't use lime anymore because of the hazards and also the burning of the grass. Remarking the fields throughout the spring is an ongoing process because the fields are used daily and late into the night. There are 765 teams with spring term being ten weeks long, so they are playing a very tight schedule.

Summer term we are down to 60 teams, so we cut down to 3 fields. This is the best time for us to rejuvenate these fields. We will start out with a 5tooth scarifier, going down as deep as the grounds conditions will allow us. Next we will disk it to break up the clumps. Then bring in processed soil to fill in the low spots. After that we level it out with a Roseman rake, then drag it with a chain harrow and mat. From there we go to picking stone, seed and fertilizer it and mulch it with straw. These fields are irrigated with an underground watering system and portable irrigation. Last summer, around mid July, we did a complete renovation of our west IM fields, which was about 10 acres. University Farms Department disked the area several times with a large farm tractor and disk, then went over the area with a cultimulcher. After they finished, we graded with an Austin-Western grader. The final grading was done with a Roseman rake and chain harrow. We then seeded, mulched with straw, and started watering every day. We used an all ryegrass blend, so we had grass coming up in a little over a week.

By the time the grass is established, fall approaches and these same fields are converted into 10 lighted touch football fields and one soccer field. There is constant play on these areas during fall term with games being played late into the evening. These areas have to be lined continually because students play in the rain, snow, or whatever weather conditions exist. To add to the wear on these areas as well as our secret football field, there are about 3,000 cars parked there during our fall home football games.

All of our varsity sports are held on fields other than the IM fields. These fields are all maintained at a very high level, along with taking care of special requests from the head coaches and their assistants. These requests range from special mowing heights, when to water (or not water), when to cover, and constantly checking for depressions and holes to try to avoid having injuries from falls. The coaches will always work with us when it comes to any major repair work that has to be done.

MSU has the largest sports school program in the nation. The program runs from mid-June to mid-August. There are over 8000 students high school age or younger participating in all sports, anywhere from one to four weeks. We also have four weeks of band clinics and all of these events are taking place on our athletic fiels.

All of our turf areas are treated with 3 lbs of actual nitrogen per year. This is applied as one application of urea in the late fall, complete fertilizer in June, and another urea treatment in August. Aeriation, which we feel is one of the most important things, is done at least three times during the summer with some of our special areas being done more often. At this same time we will overseed most of the areas with a mixture of mostly ryegrasses, Manhatten, Citation and Prelude. On our main varsity fields, we will use some Bluegrass, Cheri, Glade or Baron. Late in the fall we will spray all of the areas with 2,4-D. Many problems come up trying to manage a complex area as we have, but most things will work themselves out because we have the cooperation of the coaches and teaching staff, the aid of the turf experts we have on campus, which I can assure you is a tremendous help, and the great Weatherman in the sky.

Much of our maintenance is not always done at the right time or under ideal conditions, but every effort is made to try and grow grass on the playing surfaces.