

Sports Field Maintenance Planning

BY JOHN NETWAL, CGCS

The planning of maintenance activities for sports fields is not an exact science or is it a simple task. There are usually far too many variables from one facility to another to even suggest that any one system of planning would work for everyone. However, we do believe that thorough planning is the key to good turf management and despite my inhibitions about writing, I will attempt to share with you a brief overview how we go about our planning process.

Normally, we begin our process by doing a little research on the facility we are intending to maintain. We examine the previous years' records, prior maintenance practices, and the last season's schedules for any clues about the facilities history. Then we accurately measure the field and identify what the field use or uses are. Then we investigate what the field is comprised of, we want to know if the field is of native soil origin or had it been modified in some way during its construction. Then we will study the drainage and irrigation systems to find out what we are working with and whether or not some improvements might be necessary. Finally, we review the soil and water test to see if there are any issues that may impact our ability to grow healthy turf. After we gather all this preliminary information about our field, we then can begin to formulate a few ideas of what it might take for us to maintain this field.

Our next step is to try to learn all we can about what the expectations of, and demands on, the facility are going to be. We have found it very helpful to visit with our coaching staffs, athletes, and officials to get this information. Our coaches have graciously provided us with their practice and games schedules, while our athletes and officials have shared with us many of the little nuances to their games. Through these conversations we have learned a lot about the footing requirements of our playing surfaces as well as the importance of a true and accurate roll of a soccer ball to an athlete.

Knowing what our coaches and athletes are looking for has gone a long way in helping us to design management programs to meet their needs.

One of the primary tools that we use in the early stages of our planning process is a system of separating our management levels into three different categories based on written criteria. These categories have helped us to decide what level of maintenance we are going to assign to any particular field.

Our category "A" fields are our best fields and they receive our highest level of

maintenance. Our category "B" fields represent our middle of the road facilities and they receive a slightly less intensive program. The category "C" fields represent our general grounds areas and they basically receive minimal input. The use of these categories has helped us to differentiate the maintenance levels for our wide variety of facilities that we maintain and assures us that each type of field is getting its appropriate allotment of resources (see sidebar).

Once we have selected the appropriate management category for our field, we then begin to develop "a field fact sheet." These fact sheets help us to outline our



Photo courtesy of John Mohr Photography.

intended maintenance activities and serve as our primary planning guide. We record the following information on our field fact sheets for each type of our facilities:

- * What type of field we are working with (baseball, football, etc)?

- * Program year

- * When was the field built (year)

- * Field size

- * Type of construction of the field and soil type

Field Maintenance Categories

We have based our management categories on the following criteria:

Category "A" Fields

- * Our Best Fields
- * Varsity Sports Only
- * High Level of Management
- * Source of Community Pride
- * High Fertility (5-6 #s N/m/year)

- * Automatic Irrigation System
- * Limited Use
- * Aggressive Level of Cultural Practices (multiple overseedings and aerifications etc.)

Category "B" Fields

- * Varsity Practice Areas
- * Junior High Game Fields

- * Limited Community Access
- * Medium Level of Management
- * Moderate Fertility (3-5 #s N/m/year)
- * Manual and Automatic Irrigation Systems
- * Moderate Level of Cultural Practices (annual overseeding and aerification etc.)

Category "C" Fields

- * General Grounds Areas
- * Junior High Practice Fields
- * Community Access
- * Low Level of Management
- * Low Fertility (0-3 #s N/m/year)
- * No Irrigation
- * Low Level of Cultural Practices, if any

North Scott Community Schools Field Fact Sheet

Sand Based Soccer Field

Program Year: 2005

Built: 2001

Size: 109,000 sq. ft.

Construction: Sand Based, USGA Golf Green Specifications

Turf Species: "Sure Shot" Low Growth Bluegrass

Expectation Level: Very High, Category "A" Field

Nutrient Target: 6 #s N, 1.8#s P and 4.6 #s K/m.

Annual Events: 23, Annual Events for both Boys and

Girls Programs

Practice: Everyday April 1-June 10

Special Events: Junior High Football, Two Games / Week, September - October

Irrigation: Automatic System, 56 Hunter I-40

Heads, Rain Bird Controller, and City Water

Over Seeding: Annual Program with "Sure Shot" Kentucky Bluegrass

Topdressing: Monthly

Aeration: Annually 5/8-in. Core and Periodic Slicing

Growth Regulator: Primo, Monthly During Growing Season

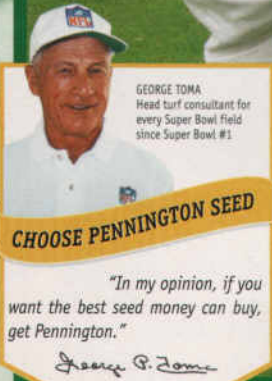
Herbicide: Broadleaf Control 2-year Rotation (2004), Pre-emergence Annually if necessary

Insecticide: Scouting Treatment if Necessary

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Phillip Jennings Turf Farms
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- * What is the desirable turf species?
- * The level of management category "A", "B", or "C"
- * Nutrient target
- * Number of annual events
- * Number of annual practices
- * Number of special events
- * Type of irrigation

Then we begin to look at what cultural practices we believe would be necessary for our plan based on our selected management category of either "A", "B", or "C" fields. We evaluate each of these cultural practices for their benefit as well as decide upon the timing and frequency that we would like to use them. Once we have made our selections we put this information

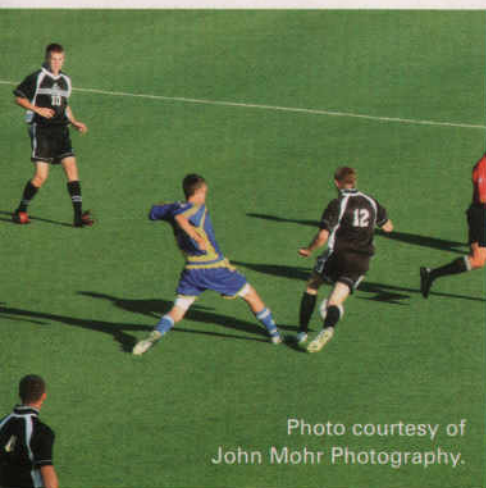


Photo courtesy of John Mohr Photography.

on our field fact sheet:

- * Aerification (solid tine, deep tine, hollow tine, etc.)
- * Overseeding & sodding (seasonal seeding, monthly or weekly etc.)
- * Irrigation & drainage (daily watering, deep infrequent or only after wilt)
- * Fertility (1-3#s, 3-5#s or 5-6#s annually, granular or spoon feeding etc.)
- * Mowing (in season and out of season frequencies, reel or rotary mowing)
- * Plant protectants (no program, curative or preventative)
- * Topdressing (bi-weekly, monthly or annually)
- * Amendments (soil, water, compost or other)
- * Other

With our field fact sheet complete, it then becomes our primary planning tool for all our maintenance programs. With this information at our fingertips along with our schedules of use from our coaching staff, we are now ready to build a management plan to fit our field (see figure).

Before using these methods of planning we were basically treating all of our fields the same. In many ways we were just not getting the most out of our resources despite the quality of

our fields. So when we implemented these systems in our planning process our programs have taken leap forward and the proof of that is the quality of conditions found on all of our facilities. So if the key to good turf management is good planning, then we believe that we are head down the right road. **ST**

John Netwal, CGCS, is Director of Operations for North Scott Community Schools, Eldridge, IA.



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