IPM REPORT CARD FOR SCHOOL GROUNDS

Athletic Fields

A Self-Assessment Tool for School Administrators and Those Making Pest Control Decisions on School Grounds

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Thank you for requesting the School IPM Report Card - Athletic Fields. Use this document to evaluate your facility and its pest management activities. This exercise should also help learn about integrated pest management on school grounds (IPM), what it involves and how it varies depending on the outdoor areas at the school being maintained. Once you have completed this report card and made the necessary changes, additional report cards covering turf, landscape plantings and ornamental pests are also available for your use.

How the Report Card Works

The following material is designed to help you to make a self-assessment of your pest management practices that are use around the school. It is divided into six sections. Each section is designed to evaluate a different area of the school grounds.

As you answer the "yes" or "no" questions for each section you will be able to rate your performance as either poor, fair or good. If you answer "yes" to less than 50% of the questions in an individual section then you're doing a "FAIR" job with your IPM program and need to implement considerable changes. If you are between 50 and 75% then you're doing "FAIR" job and need to make a moderate number of changes. If your score is between 75 and 100% then you're doing a "GOOD" job and need to make only minor changes.

When you have completed the self-assessment tool, rate your overall performance. If less than 50% of your section ratings are "GOOD" you need to make considerable changes. If you score is between 50 and 75% "GOOD" you're on the right track but need to make a number of changes. If your score is greater than 75% "GOOD" you're doing great job, need only minor changes and are well on your way to implementing a successful school IPM program.

An IPM Approach to Managing Athletic Fields

Cultural Strategies

Are soils of athletic fields tested at least once every 3 to 5 years to determine pH and nutrient levels in order to guide specific lime and fertilizer applications? Y N

Apply limestone according to soil test results to maintain a soil pH in the range of 6.0 to 6.7, and select the fertilizer that will provide the appropriate balance of essential nutrients.

Has the soil structure (% sand-silt-clay) been determined for your athletic fields? Y N

Soil structure will have major impacts upon field compaction and drainage. These two factors alone will greatly influence turf rooting and durability.

Are fields under use rotated to help reduce overuse problems such as poor quality turf as well as safety concerns? Y N

Overuse problems are especially common on practice fields. It is especially important to rotate the use of practice fields as much as possible (i.e., wet soils are especially prone to compaction).

Are athletic fields irrigated sufficiently during a single irrigation event to wet the entire root zone? Y N

Are athletic fields provided with at least 1" of water (rainfall or irrigation) per week during the growing season? Y N

Athletic fields are considerably more difficult to maintain adequately without an automatic sprinkler system. A thorough watering once or twice a week during drought periods is preferable to light daily sprinkling. If irrigation cannot be applied properly during summer drought periods (to supply at least 1/2 inch of water per irrigation early in the morning - 1 A.M. to 8 A.M.), then let the turf go into dormancy rather than providing insufficient water levels.

Are turfgrass seed selections for athletic fields determined by their environmental tolerances to such stresses as drought, traffic, and compaction? Y N

Mature tall fescue and perennial ryegrass species have some of the highest traffic tolerances. Kentucky Bluegrass turf species, however, will provide the best traction. The vast majority of natural sports fields are composed of Kentucky bluegrass, perennial ryegrass, or tall fescue species and cultivars.

When seeding athletic fields with Kentucky bluegrass, are the improved, elite type varieties selected? Y N

Since Kentucky bluegrass is the grass species of choice for game fields (often mixed together with 10-20% perennial ryegrass), it is important to use the improved varieties that have greater tolerances than does common-type KBG.

For lower maintenance fields (e.g., practice fields) is at least 1.0 to 1.5 pounds of slow release nitrogen per 1000 sq.ft. applied each year during late summer or early fall? Y N

Fields requiring higher playability (e.g., game fields) will usually need at least three fertilizations (spring, late summer & fall) totaling 3.0 or more pounds of nitrogen per 1000 sq.ft.

During periods of infrequent use, athletic fields are maintained at a mowing height of 2.5 to 3 inches? Y N

This mowing height is critical to enhance stress tolerance of turf during the hot and humid weather of June, July, and August.

During seasons of active use, if the mowing heights of fields are lowered to enhance playing quality, is no more than 1/3 of the leaf blade removed per week? Y N

The first incremental reduction of mowing height may need to be initiated as early as six weeks before the first game.

Are the fields mowed frequently enough to avoid the need to remove grass clippings? Y N

Recycling grass clippings will provide numerous benefits to the turf (e.g., improved color, supplemental nitrogen, less labor), but may require 2 to 3 mowings per week during optimum growing conditions.

Are athletic fields aerified 1-4 times per year according to the amount and type of use? Y N

Regular aerification is usually necessary on athletic fields exposed to intense traffic.

Is hollow-core aerification equipment used that is capable of extracting ½ to ¾ inch diameter cores of soil? to a depth of 2 to 3 inches? Y N

The spring and fall seasons are the best times for aerification. High priority fields that receive intensive use will most likely benefit from two to four aerification treatments per season.

YOUR SCORE: (G/F/P)

Monitoring Strategies for Insects, Diseases and Weeds

Are maps of athletic fields developed noting turf species, maintenance history, past problem locations, soil types, and current practices?	Y	N
Are monitoring forms prepared that will enable organized written records to be maintained for fields and specific locations within each field?	Y	N
Are regular monitoring or visual inspections performed for grubs, chinchbugs, etc. on athletic fields at weekly intervals (i.e., during routine mowing schedules)?	Y	N

Check for signs of insect activity and scan for signs of disease infections (i.e., closely examine using "hands & knees" method).

Has the athletic field maintenance staff developed a working knowledge of local pests (e.g., insects/diseases/weeds)?	Y	N
Are boundary or transitional areas between healthy and damaged areas examined when an unknown cause of a problem exists?	Y	N
Are beneficial turfgrass insect predators/parasites recognized when observed?	Y	N

It is important to be able to distinguish between insect pests and beneficials within turfgrass.

When large populations of beneficial insects are present are control agents with reduced impact on their populations considered?	Y	N
Are endophyte infected turfgrasses used in order to provide natural resistance to billbugs, chinchbugs, webworms and greenbugs?	Y	N
Is a thatch management program practiced?	Y	N

Thatch is a prime habitat for many insect pests and may increase disease pressures also. In addition, thatch acts as a barrier to penetration of control agents. Best preventative control against thatch build-up is a healthy earthworm population. Avoid using unnecessary pesticides that are known to have a high mortality against earthworms.

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