Best Management Practices for Athletic Fields

Best management practices for athletic fields follow standard health and safety guidelines as well as enhance the health of the grass plant by understanding and reducing stresses to its environment. A diligent regard to these suggestions will go far to reduce pest incidence and provide safe footing.

Best Management Practices for Athletic Fields	٢	Action Points
GENERAL		
District has an IPM plan in place		
District has a grounds team in charge of turf IPM decisions		
Team has established, communicated expectations of field conditions during sports seasons		
Team communicates with administration and field users in a prompt manner		
Team presents various management scenarios and their costs when budgets are under consideration and ties these to the desires of field users and realistic expectations		
Annual review of contracted applicators is done		
Team consists of at least one employee trained in pest scouting—or willing to learn		
Turf manager or pest scout makes efforts to attend turfgrass workshops or training; follows turfgrass news via associations or publications		
Team uses established thresholds for turf pests		
Team uses resources to identify and understand turf pests		

Team keeps track of past pest problems, "hot spots," their treatment and uses this information to monitor for pests	
A reliable source for weather conditions is used to determine timing of cultural practices and predict pest activity	
Scouting for weed, insect and disease pests is practiced using degree-days and/or bio-indicators (e.g., shrub bloom)	
Machinery is maintained per manufacturers' manuals	
Thorough fertilizer application records are kept and are easily accessible	
When compaction is contributing to plant stress, appropriate measures are taken to relieve it	
Mower blades are kept sharpened—as often as after 8 hours of use	
Mowing practices that minimize compaction are used when possible	
Clippings are managed according to turf species, fertility, soil type, time of year.	
Equipment that has the potential of moving weed seeds, vegetative plant parts or turf diseases is washed between sites and after use	
To avoid spread of disease pathogens, mowing order is modified	
Timing of fertilizer applications and seeding is done at optimal times of the year and with regard to weather	
Fertilization is based on turf species, soil tests, demands on turf, and time of year	
Aeration is done to reduce compaction and improve root, water, and nutrient infiltration	
Aeration is timed for plant recovery and to minimize weed infestation	

Late season aeration is followed by top-dressing or dragging cores to protect roots from drying out	
Top-dressing is done in conjunction with overseeding	
Top-dressing materials are tested for physical and chemical properties and specification results are kept on file	
Compaction is minimized by field rotation and moving field layout, goals and practice areas	
Fertilizer and/or pesticide application equipment is calibrated on a regular basis as determined by manufacturer	
Excessive thatch is managed by mechanical removal and adjusting fertility levels	
Endophyte-enhanced cultivars of perennial ryegrass or fescues are used whenever appropriate and where animals will not graze	
Site maps are used to note concerns such as drainage issues, turf wear, pest flare ups	
Site maps show irrigation and drainage system	
Irrigation is initiated at the onset of mild drought stress rather than later	
Hand watering is incorporated into irrigation program if appropriate	
Fertilizer and pesticide materials are watered in according to directions	
Regulations regarding water use are known and complied with	
Records are kept on types of and amounts of grass seed used for establishment and overseeding	
Adequate water is supplied for establishment, repairs, and overseeding	

Field management practices are implemented to provide time for turfgrass establishment and recovery	
Field use is timed for best turf recovery and new grass establishment	
Weeds are knocked back/mowed to reduce seed head formation and seed distribution	
Traffic/play are reduced or eliminated on areas with active disease infestation whenever possible	
Turf is allowed to dry before mowing or mowing is skipped on disease hot spots	
Diagnostic laboratory testing is obtained to confirm incidence of disease or insect infestation	
Aeration is avoided in spring during crabgrass germination	
Fertilization and liming are timed to avoid critical periods for spread of disease (not early spring, nor before hot, humid weather)	
Irrigation is timed to minimize duration of leaf wetness	
Nearby waterways are taken into consideration or protected by barrier plantings to reduce runoff of fertilizers and pesticides from applications to turfgrass	
Irrigation is timed to prevent moisture stress	
FOR "HIGH-END" OR "A" FIELDS	
Landscape is modified where needed to improve air circulation and reduce shade on high-end fields	
If sod is used for refurbishing, it is checked for weed and insect pests	
Soil tests are conducted on a determined schedule	

Soil tests for phosphorus, potassium, calcium, magnesium, and pH are done annually on high priority fields	
High priority fields are top-dressed to improve root zone and smooth surface	
Irrigation system is maintained and adjusted to weather conditions to avoid moisture stress	
Irrigation water is tested for pH	
Irrigation system is audited for proper coverage on an annual basis	
PESTICIDE RELATED	
Pre-emergent herbicides are used when overseeding is considered	
Different herbicide groups are used whenever possible, not relying on a single "group" or mode-of-action	
Herbicides are applied at most vulnerable growth stages of weeds	
Weeds are spot treated when appropriate	
Pre-emergence herbicides are watered in as appropriate	
Herbicides that are applied preventively are used only in areas where weeds occurred and were documented the previous season	
Applications of herbicides are avoided at time when they contribute to plant stress	
Fungicides are rotated based on chemical group	
Irrigation is applied as necessary after fungicide applications	

Caution is exercised when applying DMI fungicides with growth regulations	
Fungicides that are applied preventively are used only in areas where diseases occurred and were documented the previous season.	
When selecting a fungicide, consideration is given to pesticide characteristics	
Irrigation is applied according to label directions before and/or after insecticide applications	
Broad spectrum insecticides are avoided when possible to reduce impact on beneficial insects	
Insecticides are used only when insect presence has been documented and those insects are in a susceptible stage	
Insecticide chemical classes are rotated as appropriate	
Insecticides that are applied preventively are used only in area where severe insect damage occurred and was documented the previous season	
If used, a certified pesticide applicator is employed or under contract, and expected to communicate clearly and respond promptly about pest control options within district and municipal guidelines.	
Team understands the district, local, and state laws regarding pesticide use (regardless of whether they apply in house or hire contractor).	
Thorough pesticide application records are kept and accessible	
Pesticide applications are posted in compliance with state and local regulations	