General Guidelines for Athletic Field Maintenance

Cool-season Grasses

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These are very general guidelines and may need to be modified for your particular situation.

March:

Aerification (deep solid and/or shallow cores) anytime after ground thaws and firms. Deep-tine aerify with solids 10 to 12 inches (depth limited by irrigation lines). This breaks up clay pan layers and creates micro fractures for better water infiltration and root development. Shallow, hollow cores can be pulled at a 3 to 4 inch depth. Plugs can dry down enough to crumble between fingers, and then drag in with wire drag or piece of chain link fence with some weight added. Both aerification practices can be done under extreme conditions. At least one or the other should be done at this time. Deep-tine aerification will not disrupt play, however, coring with hollow tines will. You will need about three to five day of no activity to pull plugs.

First fertilization should follow immediately after aerification. Apply ½ lb. of N/1000 ft² in two directions of a 24-4-12 fertilizer or similar composition.

Over-seed with selected turfgrass specie all thin areas or entire field. Turf-type tall fescues should be seeded at 7 lbs./1000sqft. Ky. bluegrass should be seeded at 3 lbs./1000 ft². A 90/10 fescue/bluegrass mix should be seeded at 7 lbs./1000 ft². Use Perennial Ryegrass only as an overseeding material during the season in heavy play. Start early, as soon as thinning is noticeable. Spring seeding can be done prior to dragging in plugs from aerification, if seed is broadcasted. It is always best to use a slit-seeder for planting grass seed, otherwise surface will need to be scratched up to create a seed bed to cover seed slightly as with dragging in core plugs.

April:

Pre-emergence weed control for annual grasses should be applied the first two weeks of April (prior to April 15th). If early spring seeding is up and has grown to a height of 1.5 inches or more then a pre-emergence such as Dimension (dithiopyr) can be used. Dimension is fairly safe on newly established turf. If seedlings are just getting started or have not germinated yet, then Tupersan (siduron) is the product of choice. Tupersan is the only pre-emergence herbicide that can be applied at time of seeding. On established turfgrasses that require no overseeding then a number of other pre-emergence herbicides can be used - Ronstar, Barricade, Pre-M, Team and Balan.
Depending on the amount of use or wear on the field, additional fertilizer can be applied. Apply 0.25 to 0.375 lbs. of N/1000 ft² in two directions of a fertilizer that has 50 to 80% slow-release nitrogen.

Dollar Spot disease could occur in late April and is very easy to control with a number of fungicide products. Daconil, 26GT, Eagle, Banner, Bayleton, and others work well. Applications will need to be made every 14 days until weather conditions change and pressure ceases. Ky. bluegrass and ryegrass are good host plants for this disease.

Deep-tine aerification as needed. Follow with topdressing of sand as needed to help maintain level playing surface (3/8” medium sand/application).

**May:**

A final application of fertilizer can be applied by mid May if needed. Follow April's recommendations.

Broadleaf weed control including summer annuals and newly emerged perennials such as dandelion can be applied mid May. A number of products are on the market - Trimec Classic, Millenium Ultra, CoolPower, HorsePower, Three-Way, etc.. Control of perennial broadleaf weeds is best with herbicide applications in late September.

Deep-tine aerification can be done as needed. Topdress as needed.

Yellow nutsedge may appear with spring showers. Control is best when small and can be achieved with Mange, Basagran, or MSMA. Control of yellow nutsedge during the summer is best with Manage.

Keep an eye out for dollar spot pressure on Ky. bluegrass and ryegrass.

There is a potential for white grub damage as they emerge to pupate into adults and lay eggs again. Sevin is a good, safe product to use. As the May/June beetles emerge to lay eggs, it is a good time to apply preventative insecticides such as Merit and Mach 2. These are products with long residuals for full season control.

**June:**

Brown patch weather may start in. Use same fungicide listed for dollar spot. Dollar spot could still occur in June.

Deep-tine aerification as needed. No topdressing during hot weather.

Follow good irrigation practices. Do not put on more water than the soil can absorb.
July:

Brown patch weather.

Avoid aerification during stressful heat of summer.

White grub damage may appear in late July. Use Sevin if Merit or Mach 2 was not used in the spring.

Follow good irrigation practices.

August:

Keep an eye out for additional white grub damage.

Follow good irrigation practices.

Prepare for fall activities with a fertilizer application in late August (0.75 to 1.0 lbs. N/1000 ft² - slow release nitrogen fertilizer - split this rate for two directions). Do not use anything that will burn turfgrass in the August heat, such as urea.

September:

Aerification can be done perhaps prior to September fertilization and seeding. Deep-tine solids or hollow tines (pull plug, if play allows) prior to a light topdressing (cool weather permitting).

Fertilize with 1 to 1.5 lbs. Of N/1000 ft² pf a 24-4-12 type of fertilizer (50 to 80% slow-release nitrogen - split this rate for two directions). Use higher rate if August application was missed.

Seeding of desirable turfgrass is usually best the first week of September, however this is very difficult to have success while in season or play. If two to three weeks are available without activity proceed with seeding. Slit-seeder work best for quick and effective germination.

Over-seed thin areas early with perennial ryegrass. Concentrate on worn areas, rather than the entire field.

Perennial broadleaf weed control is best towards the end of this month. Avoid any hot days above 85 degrees F. Trimec type products and those listed in May work well.

October:

Aerification can be done again, topdress only as needed. Do this again prior to fertilization.
Fertilize with an additional 1 to 1.5 lbs. of N/1000 ft² of a 20-3-20 type fertilizer (100% slow release - split this rate for two directions). This may be the final application depending on amount of fall play remaining, soil temperatures and growth rate of turfgrass. If you are getting good clippings at mowing then no additional fertilizer is required. Clippings are usually a good indicator for growth and recovery throughout the entire season. As clippings decrease, fertilizer applications should be made. Be careful in the heat of summer. Growth may be reduced due to heat stress rather than lack of fertility. We usually do not recommend fertilizer applications during June, July, and early August.

Over-seed thin areas with perennial ryegrass, thin areas only. Most seeding should be completed by October 15th.

**November:**

Aerify only if needed. Usually required after football seasons as a final operation with fertilizer. Always split fertilizer rates and apply in two directions to avoid stripes.

**December:**

Take a break! However, in 1998 and 1999, we were still mowing!

**January, February:**

Dormant seeding if needed. Use primary turfgrass species to dormant seed. This is usually done when we start to have regular periods of freezing and thawing (mostly in February).