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Long before the shift from hot summer days to cool autumn breezes begins, sports turf managers begin planning for the challenges the change of seasons will bring. SPORTSTURF recently asked several industry experts to share their insights on preparing football and soccer fields for the fall season.

Tim White, Fairfax County director of park operations, Fairfax, VA

To prepare a natural turf rectangular athletic field for a fall season, take these steps. Hopefully when your spring season was over you inspected the field, amenities, and all support systems. Walk the entire field and make notes of any areas of special concern, such as overly wet, rutted or heavily damaged areas. These areas may require additional seed and topdressing to have maximum turf cover by fall. Also, make note of any weed or pest problems. Install “field closed” signage at strategic points of access. If possible, remove the goals to further discourage use of the field during the turf grow-in. To further discourage play, remove goals from the field.

After the spring season, the irrigation system (pump station, sprinklers, valves, lines and controllers) should be thoroughly inspected and tested. Inspect all main and lateral lines for leaks. Ensure all sprinklers are at grade, are turning properly, and are distributing water to specification. Ensure all valve boxes have lids and are at grade. Run an automatic cycle and ensure the proper operation of the controller and valves. Make all necessary repairs before implementing the turf program. The irrigation system is the key to a successful grow-in.

Playing surface
Planning for a post spring season turf renovation begins before the start of the spring season. To determine the amount of limestone, potassium, phosphorous and other secondary and minor nutrients the soil requires, soil samples should be taken at least every 2 years. If you have not sampled the field in a couple of years, take samples early in the spring so you will be able to act upon the soil report during renovation. Ensure all sources of potassium are sulfate. The maintenance turf program must be managed accordingly: knowing that there will be a late spring seeding/sprigging and a summer grow-in dictates the general spring turf program, especially weed control. Post-emergent strategies need be used to control both grassy and broadleaf weeds. As always, refer to the herbicide product labels for the safereseeding interval.

Deep tine aerate the field. Core aerate two directions. Fill in low areas, depressions and divots with topdressing/rootzone to bring back the original grade.

For cool-season turf (Kentucky bluegrass/perennial ryegrass/tall fescue) power-seed the entire field one direction, and a second direction down the “center third” of the field where the heaviest wear typically is. Sodding goalmouths and other worn to bare ground areas is an option worth considering. Your budget and the amount of time between the end of the spring season and the start of fall will help determine the type of seed to use and if sod is the best option. After seeding, bare areas should be mulched to help retain moisture and stabilize the area. For warm-season turf...
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(Bermudagrass), re-establishing it in heavily worn areas is best accomplished vegetatively with sprigs or sod, but seeding may be an option for you depending on your region. Proper turf management of Bermudagrass in between spring and fall seasons will allow moderately worn areas to heal completely. If your Bermudagrass field will be over-seeded in the fall with a cool-season turfgrass, fit that step into your schedule now as well.

Topdress the entire field, and lightly roll. Apply limestone(s) and other nutrients in accordance to the soil report. Make split applications during the grow-in if large quantities are called for. Be sure to account for the amount of nutrients that will be applied with the maintenance applications of fertilizer during the grow-in.

Apply a composted, natural organic fertilizer to help stimulate soil biological activity. Apply light, frequent applications of a readily available starter-type fertilizer throughout the grow-in process. Water in all fertilizer applications.

Irrigate as often as necessary to maintain soil moisture. Depending on natural rainfall and daily environmental conditions, light, frequent irrigation may be necessary to optimize germination and establishment of the seed, sod or sprigs. Sod and sprigs may be more effectively hand watered supplementally, depending on the size of the area. Inspect the irrigation system at least weekly during the grow-in, as it cycles through a syringe cycle, and repair any problems immediately.

Frequently scout the field and monitor for weeds, insects and fungal diseases, and implement control strategies accordingly. Weeds and insect control should be part of an on going program and have been largely addressed during the spring season, as touched on above. Additional broadleaf and grassy weed control may be necessary during the grow-in and prior to fall play. Refer to product labels for safe application interval after seeding. The control of fungal diseases such as Pythium and Rhyzoctonia is critical. Preventive applications of fungicides are often the best approach to minimize their potential damage.

Applications of other turf management materials such as wetting agents, sprayable nutrients and biostimulants will aid the turf grow-in and rooting, and should be considered as budget allows.

Continue mowing on regular cycles. The height of cut can be raised slightly during the grow-in. Maintain at least a twice-per-week frequency and be flexible with the schedule to account for the field conditions of the day and what turf management practices are scheduled.

Before the start of the fall season, inspect, test and repair the lighting system (controls, lamps, timers and the standards themselves). Inspect and repair all amenities, such as spectator bleachers and player benches. Tighten all fasteners, inspect planks and hand rails for sharp edges and cracks, inspect framing for bent components and welds for cracks, and ensure mounting is solid and stable. Inspect goals and repair any defects noted. If removed, re-install goals or uprights just prior to the start of the fall season. Ensure they are mounted and installed to manufacturer's specifications. Inspect and repair walkways, fencing and parking areas. Inspect refuse containers and ensure there are no sharp edges and are properly secured. Replace or repair as necessary.

The field should be re-measured and surveyed to ensure proper dimensions for the fall season, and must be done if transitioning from spring soccer to fall football or establishing a fall rectangular field overlaying a spring ball diamond.

Layout, stencil and paint all touch lines, hash marks, and yardage numerals just prior to the start of the fall season. Mixing in a turf growth regulator with the paint mix will decrease the frequency of re-painting during the season.

Jeff Hintz, supervisor of grounds, Bethel College, St. Paul, MN

The development of a strategy for sports field management is influenced by many environmental and economic factors. Therefore, it is impossible to devel-
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op a single set of recommendations that will result in acceptable playing surfaces on all sports fields. The dates may vary depending on the start date of the football and soccer seasons and weather, turf condition and events scheduled.

We begin fall field preparation after the last fall event of the previous year. Preparation becomes more intense, however, during the end of July and August. It is during this time, based on how the fields look, that we can determine if we were effective in planning and executing our field maintenance plan.

Two weeks before the beginning of fall practice we begin to lower the height of the cut for the field by slowly adjusting the mower height down to a final height of 1.5 inches. It is important to never cut more than 1/4 inch of the plant at any time. We keep the grass height longer during June and July to hold moisture and help with new growth.

Aerating is a good practice that opens the ground. We aerate two weeks prior to the season opening and every three weeks thereafter.

Over-seeding with our slit seeder or just spreading seed will occur right behind aeration.

Fertilization is done throughout the growing season. We push the grass to provide a thick and quality playing surface. During each growing season, 4 to 5 pounds of Nitrogen in total are applied from April to November during 4 to 5 applications.

Pesticide and herbicide application is used as needed. Any broad leaf plants, fungus or pests that may set the turf back will be addressed. It should be noted that herbicide application might be harmful to new grass.

Irrigation management and monitoring is very important during the summer months. Two or three short waterings each day works well to establish new grass in areas that may have been worn out from the previous season. Allowing the grass to be somewhat dry going into the night hours lessens the chance for fungus and disease to occur.

Watering through the summer on good established grass occurs once every other day with occasional syringing on very hot days. Fall watering is also once every other day so that the turf gets a chance to dry on top and the root follows the water down. The right plan for each field will vary depending on drainage, condition of turf and weather/climate.

Painting of the field happens in August. Our turf grows fast and we paint lines every week. To keep the lines looking good and the turf growing well, we mow two to three times per week on average. Our game height of cut is 1.5 inches. We keep our fields at 3 inches most of the summer and work down to 1.5 inches over a three-week period as late as possible prior to the football or soccer season beginning.

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