Spring Conditioning for Autumn Games

By Jim Puhalla

With the long, cold winter finally turning into a chilly memory, and the warmth of the sun starting to bring back traces of green to the barren landscape, it's hard to focus your mind on the fall. In fact, there's something downright unfair about skipping past the long hot days of summer and thinking about the time of year when leaves are falling and days are growing short once again.

But if the active fall sports schedule is to be played out on turf that gives the athletes their best shot at greatness (and looks great, too), it's time for those of us in the turf management business to get to work on the football and soccer fields. University programs may be holding spring football practice in coming weeks, and in some areas soccer competition includes spring games, but most of us have the opportunity to perform at least some of the renovation operations that lead to lush, beautiful turfgrass in the autumn.

Soil Testing

If you haven't done a soil test in the last three years, that's a good place to start. Before you apply any fertilizer, send your soil sample to a reputable lab. Without the kind of information these test results can supply, you're "flying blind" on your fertilization program, and on issues like the pH balance of your soil.

In a surprising number of cases, correcting soil deficiencies and pH levels with the appropriate nutrients will play a major role in turning a barren, weed-infested field into tough, durable sports turf. Take 30 samples — every ten yards down the middle of the field and at each hash mark. Mix them together and submit a pint (or whatever the lab requests) for testing.

If you haven't been testing regularly and find your soils in need of substantial nutrient improvement, make a note to test again next year. Some nutrient problems can take up to three years to correct.

Renovation

Assuming that the condition of the field is good enough to allow for renovation instead of complete reconstruction, a good first step is to inspect the field carefully. I like to have a rough diagram of the field with me as a worksheet, and I'll draw in any problem areas I discover in performing the inspection.

By the time the inspection is done, you should have a diagram that shows areas of thin or worn turf; low, rough or uneven surfaces; areas of thatch or compaction; outbreaks of weed, insect or disease infestation; and elevated sprinkler heads, quick couplers and catch basins. It's a good idea to continue this inspection for about 20 feet beyond each field boundary, since players frequently end up outside the field boundaries during the course of a football or soccer game.

The high-stress areas in the middle of football fields and at the goal area of soccer fields should almost always be overseeded a few months prior to the start of competition. And in many cases, those areas also have been worn into low spots, which will need the addition of soil to bring them back to proper contour in time for the season.

With the luxury of some time to plan, you can also make prudent decisions about how to allocate your budgetary resources for the field. Unless a crisis of some kind has struck the field, you should probably deal with the problems in the same order we used when talking about things to look for during an inspection, beginning with thin, worn turf and working your way down. (Obviously, elevated irrigation fittings must be corrected to prevent a safety hazard.)

Once you've identified the problem areas, start your field renovation (and we could just as well refer to this step as "rejuvenation"). We like to aerate first, but since this operation should be performed when the turfgrass is actively growing, aeration may need to be postponed in some areas of the country. Before seeding, it's a good idea to verti-drain or sub-aerify to relieve the deep, heavy compaction that's often the cause of water that lies on the surface.

Fill any low spots with appropriate soil and level to match the surrounding contour. You can perform this operation by hand or by using a tractor with a level bar. Remember to account for settling.

A good next step is slit-seeding to strengthen the turf. The normal practice is to match the existing grass, but you might want to consider introducing a new, complementary variety to build resistance to insects and disease. Choose a variety that's fairly close in color and texture to the existing turf, and you may see a rather striking improvement. A starter fertilizer like 18-24-12 will also help.

When it comes to weed control, we would seldom use a pre-emergent, because we are usually slit-seeding or overseeding at this time of year. If your field has a serious weed problem, you may consider a pre-emergent product labeled for new seeding, but post-emergents are more efficient — and cost-efficient — because you can be target-specific.

If the turf has had substantial insect infestations in the past, this is a good time to plan a treatment for those. There are now products designed to be applied at this time of year to prevent outbreaks in

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August and September. That kind of treatment will give your new plants a better chance to get started, and will dissipate into the soil well before you have athletes rolling around on it. Be sure to follow label instructions carefully to time your applications correctly.

If disease has been a problem on your field in the past, now is a good time to think through the cultural procedures you’ll follow all the way through the end of the season. A little planning at this time of year will allow you to decrease the pressure that lets these diseases gain a foothold.

And while you’re planning, it’s a smart move to take some time at this point to draw up a written maintenance program to run through the end of the competitive season. At this point, while the details of

It’s important to inspect all catch basins around the field. This kind of situation endangers players.

your renovation program are fresh in your mind, it’s a good time to get down on paper the steps you expect to take to strengthen the turfgrass continually throughout the summer and fall.

Reconstruction

If you’re planning to reconstruct a field completely, this is the time to do it, so the facility will be fully settled and mature before the first game.

No matter how long you’ve worked with a field, and no matter how well you know it, it’s still a good idea to survey the entire playing surface (and 20 feet beyond the field boundaries) before you begin work. If you don’t, the work you do may cause more problems than it solves.

One example is a field that was originally designed to slope side-to-side. When wet spots appeared, the field manager thought it was too shallowly crowned, and built up the middle of the field. The result, of course, was a full half of the field that turned into a quagmire when it rained.

On a surveying worksheet my company uses in the field, we write down the existing elevation; then, back at the office, we’ll plan out our proposed elevations. You can draw up your own worksheets to use both for surveying and for your pre-season inspection.

Once you’ve come to a good understanding of how the field is contoured, you can decide how it should be reconstructed and set your contours. In a dry climate, a ten-inch crown can be used, representing a one percent slope. In moderate to wet conditions, a 17-inch crown amounts to a 1.75 percent slope. For soccer, of course, the flattest possible surface is preferred.
A worksheet for field surveying. The existing elevation can be marked on the top of each box, and proposed elevations inside the box.

Use grade stakes and string lines (or laser grading, of course) to control accurately your construction process. Using a dozer for rough grading, we try to get within one inch of the contour plan. Then we use a tractor for final grading and seeding.

Again, remember to account for settling, so your final, settled contours reflect your plan. Expect about one inch of settling for each six inches of new or loosened soil.

Once your renovation or reconstruction is complete, it's nice to have the luxury of completely shutting off traffic from the turf until the season begins. That's particularly important for the thirty days after the work is completed, when the soil is still settling and the turfgrass is getting established. Game fields are obviously easier to control than practice fields in this regard.

On many soccer and football fields, springtime provides the ideal time to lay the groundwork for safe, competitive, easy-to-maintain turf during the late summer and fall. It's easy to become so focused on baseball and softball fields in the spring that there's little time left over for the fall sports fields, but taking time for some pre-season conditioning can pay big dividends when the games of autumn begin.

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