

SPORTS TURF MANAGER

... for safe, natural sports turf

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STA ANNUAL FIELD DAY PHOTO GALLERY...

More photos than ever! Turn to pages 11-13 and 17 to catch a glimpse of who was present at this year's event. We also are proud to publish two articles from popular Field Day speaker Dr. Andrew McNitt. His second begins on page 18.

OTS 2007 KEEPING IT GREEN...

February 19-20 in Guelph. Stay tuned for more details in the winter issue of the *Sports Turf Manager*!

Prioritizing Your Sports Field Maintenance

DR. ANDREW MCNITT, PENNSYLVANIA STATE UNIVERSITY

As the end of the season approaches, it may be a good time to evaluate the condition of your athletic fields. "What," you say? "They're not in the best of condition!" How could they be with the constant demand for fields, regardless of weather conditions, tight budgets, and you being spread too thin with your many commitments?

I've visited hundreds of high school athletic fields over the past couple years and I have a few comments on common mistakes, misconceptions and misdirected efforts. I'm going to suggest spending a little more money and in most cases, I really do mean a 'little more.' Your administrators should remember that the local taxpayers view the sports facilities more than any other physical item in the district other than the façade of the buildings and one lawsuit over an injured player may

cost the district a hundred times the cost of some additional maintenance inputs.

Good Drainage is Necessary

So let's get started. First and foremost is drainage. If the crown of the field is worn out and the athletes are playing in a soup

If the crown of the field is worn out and the athletes are playing in a soup bowl, you need to fix the drainage.

bowl, no maintenance procedure is going to help until you fix the drainage. Don't be fooled into installing some expensive underground drainage system – they usually don't work in native fields. I've seen school districts waste hundreds of thousands of dollars this way with less than desirable results. Sand-slit trenching can help if the sand trenches are installed... **cont. page 14**

PRIORITIZING YOUR SPORTS FIELD MAINTENANCE

CONTINUED FROM THE FRONT COVER • FIRST OF TWO ARTICLES BY STA FIELD DAY SPEAKER DR. ANDREW MCNITT



... the whole way to the field surface and are properly maintained (note that they are rarely properly maintained). But the real solution is to bite the bullet and regrade the field. Either strip the sod or have someone Blekovate it. While you're at it, add some high quality compost and till it in. I've listed some web references at the end of the article to help you choose a high quality compost. Put a good crown on the field. A 1.5% slope minimum is recommended. This size slope will not significantly interfere with soccer and will move water off the field surface. Your high wear areas should be the on the high points of the field. Don't 'lean' the field from one side to the other. Have the field crowned so the middle section between the hash marks is the highest point.

You will have to resod. That's right – it's not cheap but it is the correct way to

do it. If you can limit play in the spring, you can sod in December and 'may' be able to have some light traffic (track) on it in the spring. I would strongly recommend 'thick-cut' big-roll sod where the sod soil layer is 1.5 inches or so. This is an additional expense but will allow almost immediate play.

You Can't Mow Too Often

OK, let's say your drainage is adequate. What's next? The answer is mowing. Mow often with good equipment. What is often? Three times per week is not too much. That's right, three times per week during seasons of active turfgrass growth. This is one of the most effective ways to increase the quality of your turf. If you can't mow at least twice per week (preferably three) there isn't much use in instituting the next couple items on the list. People

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Clean Up	Port on side of fan housing for complete cleanout	No easy access to fan housing



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often ask me, "How do golf courses keep the fairways so nice? They must be adding a lot of chemicals!" Incorrect, other than high-end courses, most golf courses can't afford chemicals for their fairways. They maintain that tight grass by mowing with a high-quality mower every other day and by fertilizing and watering.

Since mowing is probably the most labour intensive turf activity, get an efficient mower. I've visited many schools that still use a belly mower mounted under a tractor. Very slow! An out front rotary mower is typically the best fit for high schools. Keep the blades sharp! A sharp blade makes a clean cut and actually helps the grass to grow faster and after all that's what we're after – fast growing turf that can recover from all the foot traffic. You may need additional personnel to be able to mow this often. I know that personnel issues are tough with all the politics in a school district but see if you can get a couple volunteers to do some seasonal mowing for you or out-source your mowing. It's important. Now, what about mowing height. Two inches is a good height for high school athletic fields. Maybe you can go to 2.5 inches but no higher. Also, don't raise the mowing height in the summer and lower it in the spring and fall. Just pick a mowing height and stick with it.

Get an efficient mower and keep the blade sharp. A sharp blade makes a clean cut and actually helps the grass to grow faster and after all, that's what we all want – fast growing turf that can recover nicely from all foot traffic.

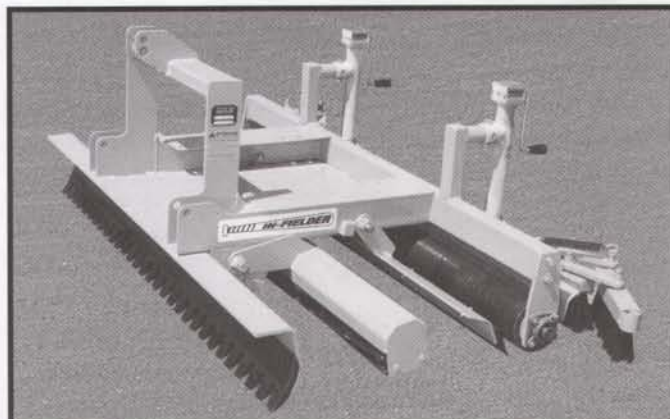
Nitrogen Fertilizer

After mowing, the most important item is fertilizing, especially with nitrogen. Very few school districts are applying enough nitrogen fertilizer. We recommend between 4 and 6 pounds of actual nitrogen per thousand square feet per year on heavily used athletic fields. That's a lot considering that if you follow the label on most turf fertilizers you are applying about one pound of nitrogen per application. I've found that most school districts average about two pounds of nitrogen on the high profile fields and less on lower profile fields. The reason? The field manager knows that if they apply more nitrogen, they will never be able to keep up with the mowing, that's why having the ability to mow often is critical. It's tough to get through a whole season of football when you're starving to death! For more information on fertilizer types and timing see the references below.

While we're at it, don't buy into all the silver bullet products being peddled to sports field managers. If it's too good to be true, it probably is. Spend your money on simple fertilizer and mowing.

Overseed Often

Next, seed – seed all the time! Should you overseed in February? Yes. Should you seed in April? Yes. Should you seed in May? Yes. Should you seed in August? Yes. Should you seed in



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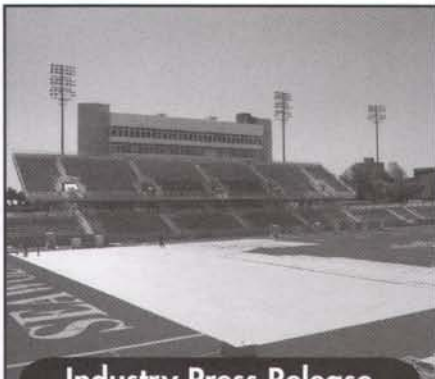
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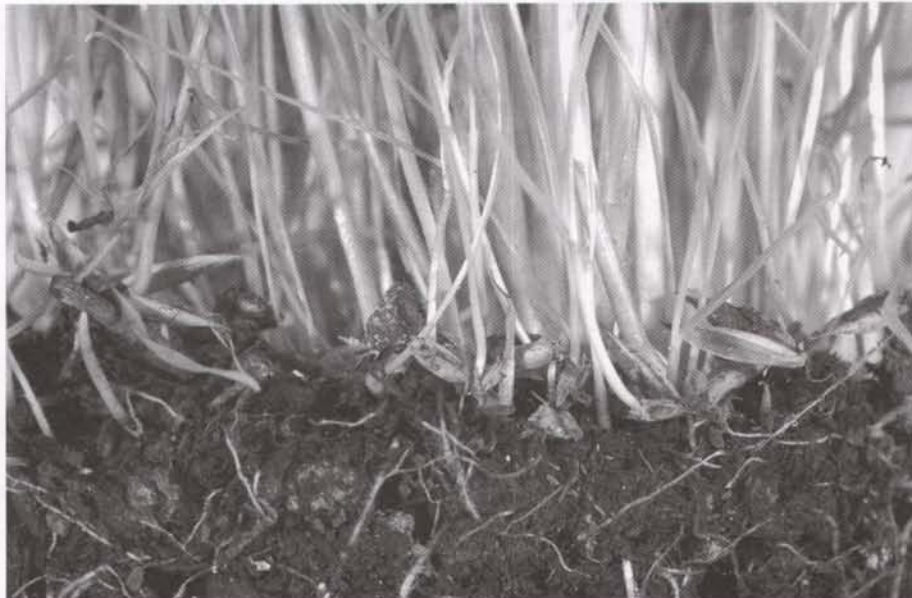
Industry Press Release

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between football games in the fall? Yes. Should you seed at Thanksgiving? Yes. Seed all the time! Use good quality 100% perennial ryegrass seed. Don't mix species. There is no reason to have any Kentucky bluegrass in a seed mix that is being applied to a field in use. It won't come up and it's expensive. Pick a top quality seed and buy a lot. Is 20 pounds of seed per thousand square feet per year too much? No. Seed.

Seed and fertilizer are not expensive, especially if you pick the right kind. Mowing is expensive, but there is no use fertilizing if you can't mow and there is no use seeding if there is no food present for the young seeds.

Irrigation & Aerification

Next, if you can afford it – install irrigation. Your fields are being beat in the spring and the fall. One of the only times you can get the grass to recover is during the summer (not an ideal time) if you have water. This will not solve all your problems and may create some new ones (insects and disease) if not done correctly but it can significantly increase your recovery and provide a dense strong turf heading into the fall season.

OK, we're finally on to aerification. Hollow-tine aeration (core aeration) is the best. Spikers are better than nothing but don't compare with removing a core. Use big tines (0.75 inch diameter). Go over the field until you have a hole on two inch centres. When should you do this? The text

books tell you to do it when the turf is actively growing (spring and fall) but that is when you have sporting events. You can't do it then. Many school districts have found that aerification after the last event in the fall works very well and that a 1/4 inch application of a high-quality compost just prior to aerification really helps. Again, check out the references below for proper compost selection and application.

There is no way I can cover everything you need to know when caring for a high school athletic field in this article. Hopefully, I've help you set some priorities and most importantly provide sources of information. Get educated! Finally, take some pride in creating safe and playable surfaces for your student athletes. ♦

References

(note that most are US-based)

- Keystone Athletic Field Managers Association: kafmo.org
- The Pennsylvania Turfgrass Council: paturf.org
- Penn State Cooperative Extension: <http://www.extension.psu.edu/extmap.html>
- Turfgrass Seed Varieties: ntp.org
- Information of compost applications, fertilizer and lime: <http://turfgrassmanagement.psu.edu/proturf.cfm>

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