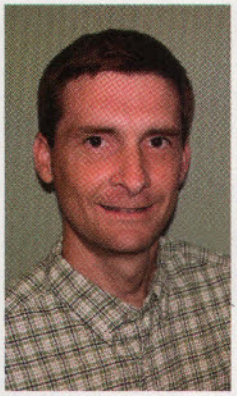
Back to school (gulp!)

What can I do to get my [neglected] field ready for this fall's football season?



BY DR. GRADY MILLER
Professor, North Carolina State University

Questions? Send them to Grady Miller at North Carolina State University, Box 7620, Raleigh, NC 27695-7620, or email grady_miller@ncsu.edu

Or, send your question to David Minner at Iowa State University, 106 Horticulture Hall, Ames, IA 50011 or email dminner@iastate.edu.

That is the short version of the question from a recent phone call. A site visit was helpful to determine the full extent of the situation before suggesting a likely path of action. Unfortunately this question has been replayed several times this summer. For most of you this is not a question you would have for your own fields, but I imagine many of you get similar questions.

In my years of visiting "school fields," I have concluded that the range in field management is greater for these fields than any other field category. Of course not all school fields are on the low end of the scale. We also have great school athletic fields managed by knowledgeable and talented people. Just look at the annual "Field of the Year" award recipients. But there is no denying that there are some very poor athletic fields managed by people with little or no resources and often with very limited turf maintenance knowledge.

It really troubles me to use the word "neglect" in terms of field maintenance. But I have seen several fields this year that were abandoned for months – no irrigation, no aerification, no pest control, and no mowing. That constitutes neglect in my book. While some fields may only require minimum maintenance in the summer, all fields will require mowing.

At this high school, I was walking across a grassy area when I was asked what I thought of their football field. At the time I would have sworn I was standing in a hay meadow that needed fertilization rather than on the 50-yard line of a football field. The grass was at least a foot high. It was mostly bermudagrass but was also peppered with various annual and perennial weed species. I asked the school representatives that were walking three steps behind me about their mowing practices. Their response was that after the football season ended (8 months ago) that the field was not needed so they saved money by stopping all maintenance practices. They said this allowed their grounds person to concentrate more time preparing and maintaining the baseball field in the spring. They had just one person to maintain all their school grounds, with field maintenance labor supplemented with volunteers.

As we stood knee deep on the football field they asked, "So what do we need to do to get the field ready for football practice in 4 weeks?" This group was lucky that they had a decent stand of bermudagrass, since the grass is so resilient to neglect. The plan of attack was to get a local farmer to come cut the grass down to about 4 inches using a Bush Hog mower. Luckily, it had been a dry summer and they had not irrigated, so the field was firm enough that the chevron type tractor tires on a large tractor would not cause rutting. The larger equipment was necessary to remove the excessive growth that a smaller turf mower could not handle.

After the initial mowing, volunteers hand raked the field and removed the debris. There were some other, less labor intensive options, but that is the one they decided was easiest (perhaps cheapest) for them. Then they used their smaller mower with three rotary blades to provide a finishing cut at about 2 inches. This is the same commercial riding rotary mower that is used for all the school grounds. Because the turf had grown so much vertically there was virtually no leaf tissue down in the canopy at 2 inches. So, they were left with bermudagrass stem tissue. The field looked like straws stuck in the ground and they were spaced far enough apart that a good bit of ground was exposed. This was alarming to the school representatives, but I assured them all would be fine in just a few weeks.

The field had an irrigation system and most heads worked. After a few repairs and adjustments the coverage was adequate to reach most of the field. A 1-year old soil test indicated that the pH was a little low (about 5.8), but not to a level that caused me too much concern. The phosphorus index was high but the potassium index was low. I recommended they get a new soil test but for now to go ahead and add a fertilizer with about equal parts nitrogen and potassium, which they did immediately after mowing. They added 1 lb. N/1,000 sq. ft. that day and I suggested they add a similar amount about 3 weeks later. The grass had an excellent root system before we scalped it down. Now we just needed to grow it new shoots.

After a few days the bermudagrass began putting out new leaves. I went ahead and suggested they use their roller-type aerifier to loosen the soil and then drag the field to break up the cores. Within a couple of weeks the field was mostly green with about half a dozen areas that still looked thin. These were mostly areas that had heavier weed populations back before it was mowed. I believe with another fertilizer application, regular irrigation, and a couple of more weeks, the field will be in good shape. It won't be perfect, but it will be a much better than playing football in a hay meadow.

In the end, the school was lucky that: 1) They decided to ask for help and then followed the suggestions in a timely manner; 2) started with a decent stand of bermudagrass; 3) had a working irrigation system; and 4) had good weather and adequate time for the grass to recuperate.

Hopefully next year they will be able to keep up with a minimum maintenance program through the spring and summer rather than undergoing an extreme makeover. But based on their current infrastructure and the success they had this year with a last-minute effort, I am a little afraid they may try to repeat it again next year. ■