

# Q&A



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## Questions?

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# Not happy!

*The athletic director was not happy with the football field at the end of the season and he wants to replace it with synthetic turf, but they just can't afford it. I've been able to reseed and get a reasonable stand of grass back before football season each year but it quickly wears down to dirt by the middle of the next season. He wants a plan and some assurance that the plan will grow better grass before he spends the money. He's not happy, can you help?*

I frequently get this type of call throughout the north central region of the US and here is how the conversation goes. Always ask specifically what they don't like about the field and, just as importantly, what field meets expectations for their level of play. Go to that field manager with the better field and find out what they are doing differently than you. The answer almost always involves controlled traffic, better drainage, or more inputs.

Once you identify some targets then you can develop a plan to meet everyone's expectations. Jeff Salmond, CSFM at the University of Oklahoma gave a lecture to my class this week about several of his field upgrade projects. He thinks about field construction projects as being from the bottom up (aimed at solving drainage issues), while renovation projects are from the top down (fast establishment for dense grass).

Below are some of the construction, renovation, and management costs that I have used to improve high school football fields in Iowa; costs may be different in your location.

For \$200,000-\$300,000, a 4-6 inch sand pad system with drainage and irrigation can be seeded in the spring and ready for football by September. The drainage is comparable to a USGA-style field but doesn't carry the \$600K to \$800K price tag. It is a great choice for high school fields. It should be able to handle at

least 30 activities a year and games can be played during rainy conditions. Because it is sand-based, this field should not be used where traffic levels are sufficiently high enough to break through the grass surface and expose the unstable sand.

For \$70,000-\$100,000 there are various types of sand slit systems where narrow 1-inch bands of sand are trenched on 1-foot centers into existing native soil fields to collect water once it begins to puddle on the field. It is important to achieve a 1-inch layer of sand topdressing over the entire field to prevent the sand trenches from closing during soggy conditions. Expect some puddles during heavy rain events but anticipate cutting your rain out time in half.

If they are not looking for a construction project that directly removes water from the field then I go through the following checklist to be sure they are covering all the necessary inputs to maximize turf cover in the high traffic areas of the field (field center and sidelines, 20,000 sq. ft.):

- Automatic irrigation system. Traveling guns (\$3,000-\$6,000) are useful for fields that never wear out, but to force grass growth and re-establishment from seed frequent watering is necessary. If you are putting in a new irrigation system (\$18,000-\$25,000) arrange blocks and heads to complement separate watering of the high traffic areas. If you can't afford an entire system then put a row of heads down the center (\$3,000-\$5,000 not the best choice because heads are in high traffic areas) of the field and you can add the rest of the system when funds become available. If you are installing an entire irrigation system then don't place heads in the center of the field, that's where most of the traffic is; start with heads near the hash marks and then design the rest of the system from there.

- Aerify at least six times a year

with at least three from hollow coring. Seed in conjunction with at least three of the aerifyings to incorporate seed.

- Most of the field will require 2 to 4 lbs N/1000 sq. ft./yr, but you should be applying 4 to 6 lbs N/1000 sq. ft./yr in the high traffic areas to force growth and maturity of turf.

- Seed at least six times per year in high traffic areas to maximize turf cover. If you are a fan of ryegrass then budget for 600 lbs seed per year (\$750) and if you like Kentucky bluegrass plan on 150 lbs seed per year (\$500). Most likely you will be using a combination of perennial rye and Kentucky bluegrass. The point is to seed heavy and seed often to minimize persistence of bare areas on the field.

- Topdress with sand and in some situations with compost. I suggest that you buy into sand topdressing for at least 3 years with the goal of adding 1.5 tons sand/1000 sq. ft./yr to the entire 65,000 square foot field (approximately 100 tons of sand, \$2,000). Incorporate sand with deep tine aeration (\$1,300) and with your own conventional aeration. If you can't do the entire field then just do the 20,000 sq. ft. high traffic area.

So if they're not happy with the field then ask yourself and your boss if you have been honestly doing all you can to grow grass. If the numbers above don't suit you then just use your own interpretation to this strategy; bury it with sand, bury it with seed, add some fertilizer, poke enough holes often enough to replant anything bare, and keep it wet enough to make everything grow. Most of the fields I visit are using the right practices; they're just not putting enough resources into the important worn out area of the field that exists within the whole field. If your budget has been cut then learn to concentrate your resources by managing the "field within a field". ■