Q&A with Dr. David Minner
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‘Tis the Season

My football and soccer coaches have asked me to determine which sport causes the most damage to the field they share in hopes that the athletic director will “kick one to the curb.” Football argues that the field was fine until a spring soccer program started and soccer argues that their cleats are shorter and large divots are seldom removed like they are in football.
— You’ll never get my name
Kentucky bluegrass Country

I do know who sent me this question and after a laugh we agreed to just answer the question like this. Most AD’s I know would not kick either team to the curb since they realize the benefit that all competitive sports play in high school life. The net result from this type of dispute usually pushes an AD to replace natural grass with synthetic turf so that the problem of complaining coaches simply goes away; in fact, I suggest that in the past 10 years a major reason AD’s have replaced grass fields with rubber infill fields has been to stop the complaining and make the problem associated with poor playing conditions simply go away.

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Whatsoever their reason I want to shed a little more light on how playing season and growing season impact turf injury from too much traffic. This may sound a little crazy but sometimes I picture myself laying on my back as if I were a field looking up at all the commotion occurring right on top of me. As long shanks start the football season near the beginning of September, shorter days and cooler temperatures are just starting to make my Kentucky bluegrass rhizomes turn toward the sky forming terminal shoots. This natural period of turf thickening is blindsided by fall football’s bigger, heavier, longer-cleated players that just seem to mill around in the center of the field pushing and shoving on each other while digging those cleats dig deeper into my face. Thus, fall traffic thins out existing plants and additionally keeps new shoots from forming.

Even worse, right in the middle of the season frost sets in and my leaf blades no longer grow in length. By the end of the fall football season I’m ripped open in the middle with bare soil exposed. Even though the kindly sports turf manager tries to patch me up at season’s end with a sprinkling of seed and dressing of sand, I will lay cold and dormant without an ounce of recovery until spring. Bless you if you cover me up and extend my growing season. If left alone, short days and warming temperatures of spring again cause me to produce new tillers that help close the scars from autumn long cleats chasing the oblong orb.

Let us pause here and restate the obvious: a high school football field will usually recover from the traffic associated with a normal 10-game season provided there is a sufficient recovery period with no play in the spring and summer. Some sports turf managers are able to recover fields with 50 game fall schedules provided the fields are rested in the spring and summer. There are several extenuating factors such as muddy games, pest damage, and extra non-football activities that can cause field decline, but the main point is that most cool-season grass football fields can recover by the following football season, if they are given reasonable care and are allowed to recover in the spring and summer.

Unfortunately, spring soccer starts in April just at the time when bluegrass plants are again starting their natural push for recovery through tiller production. Even though the nature of the traffic is less (less divoting with shorter cleats) it occurs at a time when new tillers will be damaged and when it is too cool for grass blades to outgrow the pace of treading. With both sports, about half of their seasons occur on grass that is growing very slowly. In fairness to the round ballers, if soccer alone were played from April through May with no football season, those fields would easily repair themselves with moderate care and a resting period during the summer and fall.

Another form of seasonal grass repair occurs when rhizomes begin to form in early summer. Spreading rhizomes grow underground during the summer filling in areas where grass has been thinned. Limiting irrigation during a summer recovery period will greatly reduce spread of rhizomes into areas void of turf, especially if summer dormancy is allowed to occur. Fall football, spring soccer, and summer turf dormancy is a formula for complete and utter failure of high school athletic fields. I’m not saying which sport causes more turf damage; just realize that “To everything there is a season, and a time to every purpose under the heaven”: love, war, football, soccer, rhizomes, tillers, traffic. Now go figure it out and share it with somebody when you do.