

Mowing for Speed?

Have questions? Send them to Dave at ISU,
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by Dr. Dave Minner

I often get asked if the speed of a field can be controlled by particular turf management practices. Immediately this topic brings to mind one of the greatest quotes that I have ever heard by a football coach, and I wish I could remember his name because I have used this wisdom many times over. We were discussing various types of field surfaces in a planning meeting to decide what type of field to build. After considerable discussion by the turf consultants concerning field speed one coach, who had said nothing, stood up and said "speed is in the player, not the field." Well, that promptly ended the field speed discussion and we ended up building the best type of grass field they could afford without regard for field speed.

Just remember, some coaches may be smarter than you think. Coaches may not know the grass growing part very well, but they sure know what they want out of a player and a field. Since they are the main user of the field you need to develop a good relationship with the coach that includes understanding their specific expectations in a field. If field speed is not an issue with the coach then don't worry about trying to manage for a faster or slower field.

Coaches that time players in the 40-yard-dash can probably give you a few pointers on what type of surfaces produce the fastest times. Players are often timed on synthetic turf, such as AstroTurf, because it produces the fastest times and provides a consistent

surface for comparison among players. A hard track surface would produce an even faster time, while most natural grass surfaces produce slower times. Likewise, different conditions produce various speeds on natural

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grass fields. Firm and dry fields are faster than soft and wet fields. The mowing height or length of grass has often been considered as a variable that can be managed to change the speed of the field. Most players and coaches think that longer grass produces a slower field. Consequently, if they have a fast team and want to gain an edge for their team, they may request that the field be managed at a lower than normal mowing height, (ie, one inch). On the flip side if a coach is playing a faster opponent then they may request that the field be mowed at three-plus inches. This perception, and resulting change in grass management, is rather common in sports. But is it true?

I thought so, until I ran into Kevin Trotta last month at the New York State Turfgrass Conference in Syracuse. Trotta is the Head Grounds Manager for North Rockland Central School District in Thiells, NY. He conducted a study with 20 high school athletes ranging from 13 to 17 years

of age. Students were timed in the 40-yard-dash on grass growing at three different heights: one, two, and three inches. Surprisingly there was no significant difference in player speed for any of the three mowing heights. In

this study mowing height did not effect player speed. Like the coach said, "speed is in the player, not the field." Trotta's study on mowing height and player speed is currently under review for publication by the *Journal of Turf Management*.

I'm sure that some grass fields are faster than others. However, if this study holds true then speed is influence by factors other than the length of the grass. In this case, player speed should not be a factor in determining mowing height. Choose a mowing height that grows the best grass and leave the speed to the players. Grass length can have a dramatic effect on ball speed in sports like soccer and baseball. So don't worry, the home field advantage is going to be around for a while.



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