

# To Roll or Not to Roll



**Have Questions? Send them to Dave at: ISU, Hort. Dept., Ames, IA 50011**

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**I**own a landscape company, but currently over half of our customers are sport facilities. We manage 62 fields comprised of baseball, softball, soccer and football. We have everything from beat-up practice fields to stadium competition fields that are in great shape. Many of our clients have asked about rolling the fields to make them smoother. What is your opinion on rolling athletic fields?

Anonymous  
Chicago, IL

**I**n my early days, like any good university turfgrass professor, I too would warn against the sins of rolling and the potential for overly compacting soils. But after knocking around with coaches and sports field managers I have come to the conclusion that field rolling is often a necessary and important part of making a safe and playable surface. Each individual situation will require the judgment and experience of the field manager. If you have never rolled a field then consider these examples of what to do and not to do.

## To Roll . . .

The baseball coach complains of a bumpy infield at the beginning of the spring season and he wants the field rolled to prevent any more bad hops and bloody noses like the one that happened yesterday. The coach has a good point and it is your obligation to make the field as smooth and safe as possible. Take the time to remind him that coring, topdressing, dragging, and use of reel mowers with rollers will produce a smoother field (see last month's Q&A).

The coach is interested in the here-and-now and you need to make a decision. You look at the field and agree that there is some unevenness and that the grass is just beginning to grow, causing some grass clumps that appear bumpy. I recommend rolling the infield or the

entire field if needed. This will please the coach and show your concern for player safety. Your goal is to reduce the bumps caused by winter heaving and uneven growth. Small turf rollers, usually weighing about 1/4 to 1/2 tons, can be used anytime without causing noticeable compaction of the soil. These light weight rollers are commonly used for rolling newly seeded and sodded areas.

If the 1/2-ton roller is not sufficient to smooth out the bumps on the field then you will need to use a larger and heavier construction roller. Construction rollers can weigh between 1 and 4 tons and may have a vibratory option. Construction rollers were not made for grass surfaces, but with a careful operator they work just fine. Turf rollers have rounded edges on the drums that reduces ruts and digging-in when turning. Construction rollers have a flat or square edge on the roller that will require operation in a straight back-and-forth motion with limited turning to avoid digging-in. It is not uncommon to use a 1- to 3-ton roller to smooth out a baseball field at the beginning of the spring season. If you are visibly squeezing water out of the surface then conditions are too wet to roll or the roller is too heavy. Once or twice over the field should be sufficient to make a noticeable improvement in surface smoothness.


I seldom use the vibrator option because it really shakes the ground and compacts the surface in the upper 4 inches. Beneficial rolling does not compact the surface more than 1/2 inch deep. On soft fields and sand-based fields a vibratory roller may sink 2 inches into the surface. Lips on ball fields should be taken care of by removing the excessive soil causing the lip; however the roller is a useful tool to make the skin area match up smooth with the grass area by using the roller to straddle the seam where these two surfaces meet.

Rolling soccer and football fields is no

different than rolling the grass areas of baseball fields. Perennial ryegrass is often used to supply quick cover on soccer fields. Unfortunately, the ryegrass can become very clumpy on worn areas of the field where the ryegrass bunches-up between areas of exposed soil. This can cause 1- or 2-inch bumps that are real ankle snappers. This is a desperate situation and if the field must be used then it makes perfectly good sense to use a heavy roller to temporarily smooth the surface and make a safer situation. This should be considered as a temporary fix and management should work towards regrassing the surface and resting the field so that this condition does not become routine.

## . . .Or Not to Roll

Rolling should not become a substitute for other good turf management practices such as coring, topdressing and re-seeding to supply sufficient turf cover. Soils that are wet and exposed to the surface are more prone to compaction from rolling. Areas that have 100 percent turf cover and a good mat layer are seldom compacted by moderate rolling. Heavy rolling should not be considered as a routine practice that is applied even when not needed. Use rolling as a once or twice a year tool to fix conditions that are otherwise unplayable.

More golf courses are using specialized light-weight rollers to improve green-speed and provide smoother ball roll. Elite soccer and baseball fields are also using more frequent and light rolling to produce an improved ball-to-surface action. As a general guide start with a light and less frequent rolling. Increase the weight and frequency until you achieve the desired effect. Rolling should be combined with a good cultivation program to avoid any compaction that may occur. If you don't have the resources to core aerify then you probably don't have any business rolling. 



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