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Head to Head

in Chicago



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

"I want to seed a new baseball field and also oversee the worn-out parts of my football field. Both fields have automatic irrigation systems. My boss and I are arguing about the amount of seed needed to do a good job. What do you suggest for seeding cool-season grasses in the Midwest?"

Let me first encourage you both to keep open the channel of communication that you have already established. A good debate shows that you both are willing to share your opinion, as well as listen to others - even if they seem to be wrong.

Recommendations usually provide a range of seeding rates. For example, under non-traffic areas and in places that have a full growing year to establish turf, Kentucky bluegrass is generally seeded at 1.5 to 2.5 lbs. per 1000 sq.ft., and perennial ryegrass at 7 to 9 lbs. per 1000 sq.ft.

For your newly constructed baseball field, these rates may be sufficient if you plant in September and don't open the field until June. However, most programs need the field as soon as possible, and this is why many sports turf managers use the higher range of the seeding rate recommendation.

I have actually had good success on some fields by using even higher rates than the ones I've mentioned. Here are a few good arguments for using higher than normal seeding rates:

• Spring seeding where weed competition is anticipated: A healthy population of knotweed and crabgrass seed can exist in high-traffic areas, where turf is worn away. One way to give the edge to turf establish-

ment is to plant more seed that competes for space during germination and helps crowd out the weeds. An application of the preemergence herbicide Siduron is safe to use on new seedings, and is very helpful in reducing crabgrass competition.

• Late spring seeding where summer mortality is expected: Spring seeding of cool-season grasses can sometimes be a disaster because of the high seedling mortality caused by summer drought, heat, disease and weed competition. If this is the only time that you get the field for renovation, you don't have a choice. Making the best of the situation with higher than normal seeding rates just might make the difference by providing some type of reasonable turf cover before the start of the next season. Expect a quicker turf canopy cover that shades the ground and reduces excessive soil heating, which accentuates drying and direct heat stress.

• Short window for renovation: High seeding rates are beneficial when you only have one or two months to complete renovations before play resumes.

In all of these situations, I have produced turf cover noticeably faster by seeding Kentucky bluegrass at 3 to 4 lbs. per 1000 sq.ft., and perennial ryegrass at 10 to 20 lbs. per 1000 sq.ft. At these seeding rates, you can afford to lose as much as 50% of seedlings that germinate and still have enough plants to completely cover the ground. Seeding rates higher than these usually result in too many seedlings that compete with each other. This can actually delay maturity of individual

plants, and can result in a juvenile stand of grass that is easily damaged by traffic.

Kentucky bluegrass is usually mixed with perennial ryegrass. Ryegrass has better wear tolerance and establishes quickly, while bluegrass produces rhizomes that spread, fill in bare spots, and create a more sod-bound mat of grass.

The old rule of thumb was to not use more than 20% perennial ryegrass (by weight) in a mixture with bluegrass. The thinking was that the aggressive-establishing ryegrass would 'out compete' the bluegrass and dominate the stand.

We have had good success with as little as 40% bluegrass in the mixture with ryegrass. A mixture of 40% bluegrass (1.6 lbs.) and 60% ryegrass (2.4 lbs.) seeded at 4 lbs. per 1000 sq.ft. will contain 24 bluegrass seeds and 3.8 ryegrass seeds per square inch. There is plenty of bluegrass at this rate and ratio to allow for establishment of both grasses.

Fields are dominated by ryegrass in the high-traffic areas because they have been continually overseeded with only ryegrass. I suggest that you keep at least 30% Kentucky bluegrass in your overseeding mix to prevent ryegrass from dominating the stand. □

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