A361



Professor, North Carolina

State University

Questions?

Send them to **Grady Miller at** North Carolina State University, Box 7620, Raleigh, NC 27695-7620, or email grady_miller@ncsu.edu

Or, send your question to **David Minner at** Iowa State University, 106 Horticulture Hall, Ames, IA 50011 dminner@iastate.edu.

Sowing thoughts for fall sports

What is the lowest rate of overseed I can use? How early can I overseed?

From a recent NC STMA meet-

Well, I was a little surprised but happy to be getting questions about overseeding considering I was standing on field in a 100 degree temperature. With sweat dripping down my back, I was thinking more about a cool drink than planting a cool-season grass. Obviously, my audience was already thinking one season ahead

In a group of turf managers, when the topic of overseeding comes up, it normally results in an interesting discussion. You have managers that love it and those that hate it-both with equal passion. Some managers have realized that it can really dress up their field. It can hide splotchy bermudagrass stands and worn areas very well. A dense stand of ryegrass with a nice mowing pattern will get oohs and aahs from players and coaches every time. So, what is not to like about overseeding?

Ryegrass is pretty easy to grow, but it is not totally foolproof. Sometimes an overseeded field just does not come together very well, whether from management practices or Mother Nature. Clumpy ryegrass spread across a dormant bermudagrass field looks like a big weed patch. Once those clumps mature, they can become ankle-breakers. And getting these renegade ryegrass plants to die in the spring can be difficult.

Thinking about what we want in an overseeded surface takes me back to a freshman agronomy class. I remember the professor talking about planting agronomic crops and how row width and plant spacing were so important.

This is because the farmer needs to give the plant adequate space to mature rapidly so the plants can set seed and produce the greatest yield possible.

So, there is all this research on agronomic crops to determine how to maximum seed yield of the plant per unit area. But what do we want with planted turfgrasses? We want to pack them in as tightly as possible so that they grow upright, stay vegetative, and not produce a seedhead.

The primary way for a turf manager to control these parameters is through increased seeding rates. Of course the results after seeding may be further influenced by a number of pre- or post-plant factors. For instance sports turf managers may need to seed earlier or later than ideal because of the playing schedule. And the wear on athletic fields will kill a lot of seedlings. We often try to compensate for these factors by further increasing seeding rates or by putting out seeds several times during the season.

But a field manager should also consider their normal winter conditions as a factor that comes into play when deciding how little seed can be used. For instance, a field manager in a climate like Florida may apply a small amount of seed to augment off-colored bermudagrass. Since the bermudagrass may retain much of its green color, the overseed is just to increase the green color. And since the bermudagrass continues to grow, it is competitive with the ryegrass so the ryegrass may remain more immature. In a climate like North Carolina, where bermudagrass will turn cardboard brown and stop growing most of the winter, the overseed must be thick enough to cover the brown and be competitive with itself or there is the risk that the field will not look very healthy.

So, 4-5 pounds of seed per 1,000 square feet may work ok in the Deep South, but it can be a dismal failure farther north. Use a seeding rate that low and you are almost sure to have a brown field in the winter and clumpy ryegrass come spring. Granted, a lower the seeding rate may improve the spring transition bermudagrass. But, if you go too low the grass will mature and transition will be more problematic. I generally advise North Carolina field managers to use at least 7 to 8 pounds of seed with most using 10 to 15 pounds of seed to ensure good coverage of dormant bermuda-

A field manager may want to adjust their seeding rate for specific reasons. For instance, use 7 to 8 pounds perennial ryegrass seed per 1000 square feet on football fields since the season is almost over when bermudagrass goes dormant, versus about 10 to 15 pounds per 1000 square feet on baseball fields since the entire season played during time when bermudagrass is 50 to 100 percent dormant and has poor color.

Timing of seeding is a little more difficult to suggest as we never know what Mother Nature is going to throw our way. I suggest managers plan to overseed when daytime temperatures in late summer to early fall are consistently in the 70s. This is usually late September to mid-October for most of North Carolina. Where fields are heavily scheduled, it may be necessary to overseed when there is a break in the events. In these cases, it is best to schedule overseeding earlier in the season to provide future opportunities to apply more seed if necessary. Remember, you reap what vou sow.