

Dormant seeding — to seed or not to seed

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Questions?

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I have several questions concerning dormant seeding of athletic fields. We do contract maintenance for soccer, football, baseball, softball, hockey, lacrosse, and many practice fields. Dealing with the various sports departments can be challenging as they all have their own ideas, agendas, and schedules.

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First, develop a specific renovation and overseeding program to fit the specific activities on each field. Develop a separate, more intense seeding program for the high traffic areas. Concentrate your resources in worn areas where it is needed; seed seldom develops in areas where there is already 100% turf cover. This seeding guide (<http://turfgrass.hort.iastate.edu/extension/seed.pdf>) shows at least six critical times during the year when fields can benefit from seeding; if you are seeding only once a year then you are behind the times.

My general philosophy is to fill worn areas as fast as possible and that generally means having seed in the field and germinating even before the wear patterns develop. Dormant seeding is just another means to insure that bare soil is covered with turf as soon as possible in the spring. Dormant seeding implies that seed is applied late enough in the fall so that germination does not occur; seed then germinates as soil temperature warms in the spring.

Our research trials and experience provide answers to some of your questions. We evaluated seeding Kentucky bluegrass, tall fescue, and perennial ryegrass from late September until early December in an effort to evaluate fall seeding of athletic fields. Like you, we wanted to know what is the date when seed will no longer germinate, what happens to seed applied after that date, is there a period of time that we should avoid seeding (grass germinates but is killed by winter), and how effective is dormant seeding and when should the seed be put down.

Here is the take home message "Under the conditions of our study a definitive high-risk period that should be avoided when autumn seeding could not be determined because it varies from year to year. Seed planted anytime during the autumn playing season could produce 30 to 93% turf cover by the following summer."

From my perspective here are some effective seeding windows. So what if you lose some grass to winter, just keep replanting to stay ahead of the game:



- Seed in late August or early September because this is the most successful time to get Kentucky bluegrass established; October 1 is our cutoff date to guarantee germination. We switch to perennial ryegrass after October 1 if we need to see plants establish.
- Seed the high traffic areas before each game and let the players cleat in the seed.
- Seed at the end of the season immediately after the last game in combination with aerification and topdressing. This is usually a dormant seeding.
- Visible seed laying on the surface does not develop into plants; be sure the seed is planted by some method that covers the seed with soil, i.e., drill seeding, aerify-topdress-drag, etc.
- One-year-old Kentucky bluegrass seed germinates faster than new crop seed that is planted in the same calendar year that it is harvested.
- Try doubling your fall seeding rate in a test area to see if higher than normal seeding rates produce more turf cover for you during the following spring.

Fall seeding that results in plants with at least one tiller will generally make it through the winter. Seedlings that reach the 2 to 4 leaf stage have a very good chance of making it through the winter, while those that have just a single shoot are most susceptible to winter injury. The benefits of producing plants in late fall or early spring (from dormant seeding) far outweigh the risk of losing a little grass seed to winter injury. Because we are in the business of rapidly recovering worn fields it is necessary to take every advantage possible to produce grass. Seeding any time in the fall, including dormant seeding, is a practice that provides more consistent turf cover and should become part of your routine sports turf management program. ■