

To Seed or Not to Seed?

That is our question

Q&A



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Questions?

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We need to renovate our park's soccer field. The field needs some minor drainage work and then a new grass surface. The field currently has a bermudagrass that we seeded many years ago and it has not performed very well. We are prepared to spray it out. Someone suggested that we should re-establish this field using sprigs. What is the benefit of sprigging over seeding? And would that provide a better surface than the seeded bermudagrass that we currently have? The other issue is that we are ready to start (end of May) and we will need the field in early September. Will one of these establishment methods be better considering our time limitations? We have a really good irrigation system.

North Carolina

Embedded in your questions are implications related to cultivar selection. I would like to keep this response independent of cultivar issues but will have to mention a few points just to prevent any misunderstandings. The cultivar you mentioned to me in our phone conversation is an older cultivar. Today's seeded cultivars are greatly improved over those released years earlier.

For specific cultivar information, review data on the National Turfgrass Evaluation Program website (www.ntep.org) or talk with your state's turfgrass extension specialist. That is me in your case. And I would tell you that many of the modern seeded cultivars can produce a field with turf quality similar to many of the hybrid bermudagrass cultivars currently sold. It is easy to find a grass with dark green genetic color, high density, and good recuperative potential.

I should also remind you that not all cultivars can be established via seeding. While technically, all bermudagrasses could be sprigged, the rules of marketing, production, and economics are largely going to relegate seeded types to only being available for seeding.

Your larger issue is establishment.

While your timing may seem tight to you, May to September should be plenty of time to establish your field assuming you get the soil preparation finished promptly. Full establishment is a function of time but is also dependent on sunlight, temperature, rainfall/irrigation, and fertilization. You are doing this project in the heart of the bermudagrass growing season, which should take care of most of the environmental factors.

With an appropriate fertilization program and supplemental irrigation, full turf coverage can be achieved in 60-75 days with either seeding or sprigging. The fastest sprigging establishment I have seen is 42 days from sprigging to first game. I have found seeding to be a little slower because of the wait for seed germination. But once germinated, the seedlings can grow at a rate every bit as fast as those from sprigs.

In terms of establishment methods, the benefits to seeding are generally convenience and economics. Seed can be purchased in advance of planting and then sown immediately after construction. The labor and equipment needs for planting are minimal. One can use a rotary spreader to apply the seed evenly and at the proper rate. Carefully rake the seed into the soil or lightly topdress, and then lightly roll to improve seed-to-soil contact.

One of the old complaints with seeded cultivars is excessive seedhead production. Today's best seeded cultivars do not produce as many seedheads as the older seeded cultivars and may be similar to some of the vegetative cultivars. Seedhead production is partially triggered by environmental conditions, so some years the occurrence may be worse than others.

When planting bermudagrass vegetatively, material must be harvested and planted within a short time period. Optimally, the turf is planted the same day it is harvested. The availability and

condition of the planting material is subject to change. The labor and equipment requirement to plant is slightly more specialized than that required for seeding. This means the coordination of finishing construction, sprig procurement, and sprig planting is critical to successful establishment.

Sprigs are normally soil-free, resulting in a consistent soil surface without the layering issue introduced with sod. With a wide range of seed cost among cultivars and current economic market for sod/sprigs, sprigging may be more cost effective than seeding.

Erosion and weed control will be a greater issue with seeding than sprigging. Sprigs can disperse light rain whereas seeds are normally planted in a clean seedbed. Erosion control measures such as hydroseeding and strawing is sometimes practiced when seeding but these practices add to the costs and may increase establishment time. When sprigging, oxadiazon (e.g. Ronstar) can be used as a preemergence herbicide. When seeding, only postemergence weed control products can be used, limiting your control options.

So the final decision comes down to one of cultivar, convenience, and cost. Both methods can be effective and successful.

There are a couple of other points I would also make related to new fields. A first season field is generally not as durable as a second season field because a young turf does not have the rhizome development compared to a more mature field. So, if possible try to limit its use as much as possible the first season. There is sometimes a tendency to overuse new fields just because of the excitement of having a new field. Also, first year fields do not handle overseeding with ryegrass as well as more mature fields. So, if you normally overseed at this location, try to at least avoid overseeding this field the first year. ■