

Establishing Bermudagrass

Our school board is trying to finalize the construction specifications for a new football/soccer field. We currently have issue with the best way to establish the turf. I know you have the option with Bermudagrass to seed, sprig, or sod. During our last meeting it was apparent that no one understood why anyone would want to sprig versus sodding (assuming you have the money). One board member also suggested we plant using a tractor-mounted plugging device that uses large rolls of sod. This sounds like a cost savings over sodding, but is it better than sprigging? Your comments would be appreciated.

Central Florida

I am glad that the board is having open discussions on constructing this new field. It seems too often that decisions are made by one person and often at the last minute. It is a good plan to have the field construction completed in the spring so that the summer months can be devoted to establishing a nice playing surface.

It is also good that the group is considering all the major planting options: sodding, plugging, sprigging, and seeding, since each has its strengths and weaknesses. What you may not have realized is that not all Bermudagrasses can be established via seeding. With maybe one exception, hybrid Bermudagrasses must be established vegetatively. The best example of this is Tifway Bermudagrass (sometimes called "419"). This commonly used grass must be vegetatively established since it does not produce viable seed. I mention this up front since some groups select the grass cultivar they want and then consider the establishment method. Generally, the "seeded Bermudagrass cultivars," especially the newer ones on the market, will be seeded rather than vegetatively established.

In terms of establishment methods, the benefits to seeding are generally convenience and in some cases economics. For many years we considered seeded Bermudagrass cultivars to be inferior in terms of color and texture compared to the best hybrid cultivars. In the past 10 years, more high quality cultivars that can be seeded have been developed. Our national cultivar trials have shown that quality of these seeded types can match our commonly used vegetative cultivars. The great thing about seeding is that you can purchase the seed well in advance of planting and then sow the seeds 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 using a leaf rake or lightly topdress, and then lightly roll to improve seed-to-soil contact. With good weather and cultural practices, the field should be ready in 8-10 weeks.

When planting Bermudagrass vegetatively, material should be purchased from a reputable grower that can provide quality planting material free of noxious weeds and pests and entirely true-to-type. I think it is always a good idea to inspect the sod field before you purchase the grass. Vegetative material must be harvested and planted within a short time period. Optimally, the turf

will be planted the same day it was harvested. The availability and condition of the planting material is subject to change. Depending on the vegetative planting material selected (sprig or sod), the labor and equipment requirement to plant may be significant. This means the coordination of finishing construction, turf procurement and turf planting/installation is critical to successful establishment.

So, you may still be wondering about the advantage of sprigging versus sodding? Since most sod has soil attached and the ground surface is totally covered when it is laid, it does not take a long period of time for the sod to take hold. But this also causes some problems. If the sod is not grown in a soil that is physically and chemically similar to that of the field on which the sod will be installed it may result in maintenance headaches. The effects from layering of dissimilar soils can take years of aerification and topdressing to minimize. Also there is sometimes this thought that by using sod the field can be used immediately. While this might be the case with unusually thick-cut sod, most of our sod has far too little soil to allow for immediate use. Generally the sod should have 4-6 weeks to mature before it gets significant foot traffic.

On the other hand, sprigs are normally soil-free, resulting in a consistent soil surface without the layering issue introduced with sod. With optimum growing conditions and good cultural practices, I have seen Bermudagrass fields ready for play eight weeks after sprigging. In addition, sprigging is often more cost effective than seeding. Erosion and weed control will be a greater issue with sprigging than sodding.

Chopping sod into plug and pressing them firmly into the seedbed is not new. The ability to use large sod rolls and tractors is the main advancement. This method has most of the disadvantages of sodding and sprigging with few agronomic advantages. The big advantage is usually cost. The sod goes further since it is cut and space planted. The labor costs are reduced since it does not rely upon hand labor to place the sod; instead using large equipment that can cover an area very quickly. Erosion and weed control are similar to those encountered with sprigging. Establishment timing will vary depending on planting density, but will generally be comparable to sprigging.

So the final decision comes down to one of cultivar, convenience, cost, and consistency. Each method can be effective and successful. Unless you choose to go with a seeded cultivar, my suggestion is to sprig unless you simply do not have the time. If you must sod, be aware of the potential layering problem and address it proactively by selecting a turf grown on a similar soil type compared to your new field. **ST**

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