

Buying quality sod 101

BY JOHN R. HALL III

Though many readers of *SportsTurf* have purchased sod before, many of you have not. And hopefully when your organization or school district next prepares to buy sod, you'll be the lead person they turn to for answers. Here are some questions to consider:

1. What variety or varieties are in sod? With more than 125 cultivars of Kentucky Bluegrass, 100 cultivars of Tall Fescue, 20 cultivars of Bermudagrass and Zoysiagrass, it is very important to know if the varieties in the sod have performed well in your area. Most land grant universities conduct National Turfgrass Evaluation Programs (NTEP) and make specific variety recommendations. Pay heed to the experts.

2. Are the varieties in the turf from certified seed or sprigs? Certification insures genetic purity. It provides assurance that the product you are purchasing contains the varieties indicated. Quality sod growers should be willing to provide copies of the seed or sprig certification labels or documents upon request.

3. Is the sod certified? Some states have sod certification programs that ensure genetic purity and certain levels of quality.

4. If it is a mixture of grasses, what was the ratio of the planted mixture? You cannot know how to properly manage a turf unless you know what turfgrass you purchased. Kentucky Bluegrass sod is sometimes grown with creeping red fescue or perennial ryegrass as a minor component. Bluegrass is also blended in small amounts with Tall Fescue. It is important to know the dominant grass in the mixture so an appropriate management program can be put in place. Tall fescue sod is normally planted with 80 to 90 percent Tall Fescue and 10 to 20 percent Kentucky Bluegrass on a weight basis. These ratios perform very well and are predominantly Tall Fescue at the time of harvest.

5. What is the actual grass content of the sod mixture? Tall Fescue-Kentucky Bluegrass mixtures, although planted 90% Tall Fescue on a weight basis, are almost a 1:1 mixture on a seed count basis. Tall Fescue requires a much warmer soil than Kentucky Bluegrass to germinate. Therefore, 90-10 mixtures planted early in the summer or later in the spring on warmer soils, tend to contain significantly more Tall Fescue than 90-10 mixtures planted late in the fall or early in the spring when soil temperatures are cold. If you want Tall Fescue sod and you end up purchasing a sod that has a high Kentucky Bluegrass content, it may not perform as you would expect.

6. How old is the turfgrass sod? Old sod is not necessarily bad sod. However, some turfs such as Kentucky Bluegrass, Bermudagrass, and Zoysiagrass tend to produce thatch with age. Excessive thatch leads to crowns that are elevated in the thatch and predisposed to drought stress. If you are purchasing a sod with excessive thatch, it may be slower to root and you will want to include extensive aeration in the maintenance program to reinvolute the thatch with soil, increasing decomposition. Most sod is produced in 9 to 18 months without netting. Production time is generally shorter when netting is used.

7. Does the turfgrass sod have netting? Some sod is grown with netting to increase sod strength and shorten the production time. This netting can be troublesome in situations where cleats are used, but in most other situations it is no problem. Netted Tall Fescue sod is sometimes grown without Kentucky Bluegrass and if you manage turfgrass that is going to be heavily trafficked, you want to be sure it does have the Kentucky Bluegrass in it to ensure you have lateral healing potential provided by the Bluegrass.

8. At what depth is the turfgrass sod cut? Sod is normally cut with 3/4 inch plus or minus 1/4 inch of soil attached. Thick sod roots slower, but obviously has a less frequent watering requirement than thin sod. Sod producers obviously don't want to send any more soil with sod than is necessary to ship a quality product. On a daily basis, they vary the thickness of the cut, based on age and quality of the sod, soil moisture, etc. Knowing the sod cutting depth will help you determine adequate irrigation frequency and how fast the sod will become rooted.

9. What type of soil is the turfgrass sod grown on? Large differences between soil types of the sod and the soil it is laid on can lead to layering interfaces that promote rooting problems. Laying traditional soil or organic matter sod on sandy media has been noted to restrict rooting into the sandy soil. Most problems have occurred where heavier mineral soil sod has been placed on lighter, sandy soils. It is best to try to purchase sod grown on soil that is reasonably close to the texture of the soil at the installation site. If significant textural differences exist between the sod and the installation site soil, it would be beneficial to plan several core aerifications and draggings as early as possible during the establishment phase to minimize the impact of layering upon rooting.

10. What will be the lag time between turfgrass sod harvest and delivery? Significant delays between harvest and delivery waste stored food reserves in the grass plants in respiratory survival processes. Delay is particularly harmful during hot weather when respiration rates are maximum. In addition, it is known that higher mowing heights, higher nitrogen levels, thinner cut sod, and returned clippings all contribute to faster sod heating on the pallet. It is desirable to get sod installed within 8 hours of harvest. Sod that has been delayed, will have lower stored food reserves, less potential to develop an immediately, aggressive root system and is likely to be predisposed to disease activity.

11. What was the mowing height at the turfgrass sod farm? It is important to know what mowing height the sod was produced under as this would naturally be a stable mowing height to continue. Lowering the mowing height at the time of installation is not advised as this is a time when the grass actually needs maximum photosynthetic potential to compensate for the drawdown on stored food

The game must go on.

No more wet, muddy or frozen fields. Ever. Whether you play on grass or artificial turf, the Airfield® sports drainage system is for you. We move water 13 times faster and reduce irrigation requirements by up to 70% over any other system, with a Gmax rating up to 15% lower for enhanced player safety. And if that wasn't enough, our Airforce® system keeps your field cool during high temperature play and warm to prevent snow and ice buildup. With all that you have going on above your turf, isn't it time you thought about what you have going on beneath it?

441 S. Fretz
Edmond, OK 73003
Office: 405.359.3775
Toll Free: 888.287.9657
Web: airfieldsystems.com



Circle 135 on card or www.oners.ims.ca/5067-135

reserves associated with the shock of sod harvest and transport. Slightly higher mowing heights at installation are beneficial to establishment rooting.

12. Is the turfgrass sod rolled or folded on the pallet? Rolled sod generally is hand carried from the pallet to the site of installation with less tearing than folded sod. If a lot of handling of the sod is going to be necessary at the installation site, you may prefer rolled sod. If the sod is mature and strong either type handles well.

13. Has the turfgrass sod been treated with a preemergence herbicide? If you are getting the sod in the spring, you need to know if it needs an application for crabgrass or goosegrass control. If it has already received an application, an additional application may be harmful to root development. If it has not received an application of preemergence herbicide you may need to apply one, especially if the area to be planted has the potential for crabgrass or goosegrass between the sod pieces. Some preemergence herbicides tend to have a negative impact on sod rooting when applied at the time of sodding, therefore controlling breakthroughs with postemergence materials may be the best approach.

14. Has the turfgrass sod been treated with a growth regulator? Some sod growers may be using growth regulators to reduce mowing and increase sod-rooting potential. It would be important in these instances to know how recently the material has been applied, and what residual effect might be expected. This would assist in setting up a reasonable mowing schedule.

15. When was the turfgrass sod last fertilized? It is particularly important to know when the last nitrogen application was made to the sod, how much was applied and what was the source of nitrogen. If you are using cool season sod like

Kentucky Bluegrass or Tall Fescue, and the sod just received soluble nitrogen at the farm, you may be providing too much nitrogen with establishment fertilization. A similar problem could occur with Bermudagrass being installed late in the season.

16. Has the turfgrass sod received any applications of iron or biostimulant in the last 30 days? Researchers have demonstrated substantial root and shoot stimulation and significant increases in sod shear strength with applications of seaweed extractable cytokinins, iron, and "cytokinin like" fungicides to Kentucky Bluegrass. Sod installation rooting 4 weeks after harvest is increased with seaweed extracts, and some fungicides. These applications, if applied, would not need to be repeated. If they have not been applied, they could prove beneficial to sod rooting at establishment.

17. What pesticides have been applied in the last 30 days? Have fungicides, broadleaf herbicides or insecticides been recently applied? Some systemic fungicides give up to 28 days control of common diseases like Brown Patch, Dollar Spot, etc. In addition, some insecticides have extended residual control potential. Therefore, reapplication before they are needed would be a waste of money. If broadleaf weeds are present in the sod it is possible they have already been treated and additional treatment could be detrimental. Some sod growers use materials that provide extended residual broadleaf weed control and this could have an impact on the post establishment broadleaf herbicide spray program. **ST**

John R. Hall III is professor and extension specialist, turfgrass management, at Virginia Tech. He can be reached at JRHALL3@VT.edu.

NEW PRODUCT!

ALL-NATURAL SOIL AMENDMENT

"Twice the root depth with half the water" is how George Toma has been describing his experience working with the new Lassenite ATS soil amendment. Toma has personally overseen its placement at a number of demonstration areas.

The "ATS" in the product's name comes from Toma's "And Then Some" catch phrase. Lassenite ATS is available in a variety of sizes depending upon application and soil type. Western Pozzolan/303-681-3655 For information, circle 058 or see <http://www.oners.ims.ca/5067-058>



SYNC ACTIVATOR ADJUVANT

Precision Laboratories, Inc. has introduced, SYNC, the first activator adjuvant specifically designed for the turf industry to enhance the performance and lengthen the disease control of systemic and contact fungicides, at reduced spray carrier volumes. Unlike ordinary adjuvants, SYNC's proprietary adjuvant technology is comprised of a two-part surfactant system with a pH buffer to ensure optimized fungicide uptake and increased fungicide performance.

Precision Laboratories/800-323-6280 For information, circle 060 or see <http://www.oners.ims.ca/5067-060>

NEW PRODUCT!



SCOTTS PROSEED'S SOLAR GREEN

Scotts Proseed and its partner Landmark Seed have introduced Solar Green, a new variety in the Scotts Hybrid Bluegrass Series. Developed to meet a wide range of turf management challenges, Solar Green has proven its ability to thrive under normal professional turf maintenance programs in the South, as well as under low to medium-input maintenance in traditional cool season Kentucky bluegrass areas.

Wayne Horman, director of Scotts Proseed said Solar Green is an ideal complement to Thermal Blue; both are the products of an intensive research program designed to provide high performance turf grasses that can take the challenges of heat and drought under a wide range of inputs.

Landmark Seed/The Scotts Company LLC/800-268-2379 For information, circle 059 or see <http://www.oners.ims.ca/5067-059>