

Proper Installation of Sod for Repairs

by Dr. Tony Koski

It happens to all sports turf managers eventually—the need to repair a damaged field during the season. Mid-season sodding can be a quick and effective solution for repairing damaged turf, but many factors can affect the quality of the installation. The best repair jobs are unnoticed by the athletes using the field, because playability and safety should be of utmost importance to the sports turf manager. In a perfect world, sod repairs would blend in with the surrounding turf and would hardly be noticed from the stands.

Quality turf replacement involves planning, proper timing, careful site preparation, quality control during sod harvesting and installation and sensible post-installation care.

Anticipate the Need for Sod

The need for sod can come most unexpectedly. It is important to have not only an established plan for conducting repairs, but also a ready source of sod that is of sports turf quality. Sod that would otherwise be fine for a home lawn will perform poorly—and look bad—when installed into a sports turf situation. Imposing lower sports turf mowing heights will scalp sod intended for lawns, increasing the potential for poor transplant rooting and disease. Sod intended for lawns will not have the density of sports turf-ready sod because the higher mowing heights cause a turf to be less dense. Traction will not be ideal on sod intended for lawns—especially if it has been scalped down to a lower mowing height. Finally, the appearance of lawn-type sod will be unattractive for quite awhile after sports turf management practices have been used on it. Some ways to prepare for the inevitable, but often unpredictable, need for sod include:

- Maintain an updated contact list of sod producers within a few hours travel time of your facility that can provide sports turf quality sod at short notice; available species/varieties, sod types (thick-cut or conventional thickness, big roll or slab), soil types (compatible with your soil), transportation availability, and cost should all be documented.
- Develop a contractual relationship with a local grower who will routinely have a certain amount of sports turf quality sod in production, to include species or varieties similar to your own, maintained to your cultural specifications.
- Plant your own sod nursery and maintain it as you do your own playing fields.
- Identify sideline areas or other areas that could be used as an emergency sod source when a small amount of sod is needed for a quick, small-scale repair.
- Develop a resource list for extra labor, grading and installation equipment, trucking companies, root zone soil, etc. that must be mobilized at short notice to make a large replacement job go smoothly.

- Professional level turf managers generally recognize the need to have high quality sports turf sod available at short notice because of the obvious needs of professional sports teams should an emergency arise. Sports turf managers at all levels, however, should have a clear plan in place for sod replacement, including identified sources of good quality sod. When there is an annual need for sod replacement on certain fields, it only makes sense to contract with a local grower who can be a source for sports turf quality sod.

All in the Timing

The success or failure of a sod repair may depend on proper timing. When sod replacement is anticipated (goal mouth repair, for example), periods of field off-time should be identified or scheduled so as to allow sufficient time for proper installation. It is important that sod harvesting and installation not be so rushed that the final product is of poor quality. Even with thick-cut, big roll installations, some healing or grow-in time should be scheduled for the field if at all possible.

The amount of time required to perform sod repairs is best estimated by you. It comes down to previous experience, availability of sod, labor, and equipment resources, scheduling around other necessary activities and weather considerations. Of course, unplanned, emergency repairs will require you to call upon all available resources and for your labor crew to work long hours just to get the job done.

Site Preparation

The need for proper site preparation prior to sodding should be obvious. It is easier to correct grade problems before sodding than to attempt it after sod has been planted. High or low spots should be taken care of by grading or filling with root zone mix, in anticipation of sod cut to a specific depth, so that the installed product needs little rolling to attain a level field grade. Careful site preparation makes the rest of the installation process proceed more smoothly and helps ensure a good final product.

Quality Control Is Key

Superior sod installation involves quality control at two locations: where the sod is being harvested and where the sod is being planted. A key to quality control is communication. Frustration can occur when sod is not cut to the proper thickness or length, is not delivered at the right time or not enough (or too much) sod is delivered. While problems like these are often blamed on the sod producer, they generally won't occur if communications are clear and honest between the turf manager and the grower. One way to practice quality control at the sod farm—and to guarantee good communication—is to have someone from the turf manager's crew assigned to be at the sod farm when sod is being harvested. Sod quality factors

(which should be previously agreed upon) that can be monitored during harvest would include:

- Sod harvested from a previously agreed upon field
- Sod thickness, including uniformity of thickness throughout the harvest
- Soil moisture level
- Length of rolls (for big roll harvests)
- Correct amount harvested
- Sod properly covered for transport to the site

Quality control during sod transplanting is just as important as when harvesting. The best quality sod can be ruined if care is not taken during transplanting. The following should occur throughout the planting process:

- Avoid disturbing the soil grade with equipment or other field activity.
- Prevent stretching of sod as much as possible when sod is moved into place.
- Ensure that seams are tight.
- Provide immediate irrigation if conditions cause stress to newly planted sod.
- Protect sod from heat or drying wind if it can not be planted immediately.

Post-Planting Care

New sod must be carefully watched for signs of stress following planting. Watering practices suitable for the established part of the field may not be suitable for new

sod—especially under hot, dry conditions. The shallow root zone (even with thick-cut sod) of new sod will dry out more quickly than the more deeply rooted, established turf. Some hand watering will often be the rule following sod planting. Deep watering is not an effective irrigation technique for new sod.

Light to moderately heavy rolling will generally be necessary to produce a uniformly smooth surface, although intensive rolling should be avoided.

Mowing should begin as soon as the new sod has grown enough to require mowing. The top of the plant will grow even though the sod may not have begun rooting into the underlying soil. Of course, the sod should be dry enough prior to mowing to prevent mower rutting from occurring.

Fertilization may be performed if the rest of the field requires it. Some fertilization may be used to cause the newly sodded areas to blend in with the established turf. The use of foliar iron applications to either the new sod or the surrounding turf can help the new sod to blend in visually.

Long-term care of the sodded area will depend on whether or not it is intended to be a permanent installation. If the soils of the sod and field root zone are closely matched, then the sod could be expected to root normally over time. If the root zone and sod soils are mismatched (clay over sand, for example), the sod installation might be viewed as a temporary fix which will be replaced at a

WHY DO MAJOR UNIVERSITIES, THE MAJOR LEAGUES, AND N.F.L. TEAMS CALL CYGNET WHEN THEY NEED EMERGENCY REPAIRS OR NEW INSTALLATIONS? (not to play ball)



INSTALLED CLEVELAND INDIANS
IN 42" AND 48" ROLLS



STRIPPED JACOBS FIELD
CLEVELAND INDIANS

FOR fewer, tighter seams
stability and performance
when you are ready to install,
give **CYGNET** a call



INSTALLED OHIO STATE (AND
STRIPPED) 2" THICK TURF 48" ROLLS

...BECAUSE CYGNET PERFORMS!!!

NEW from CYGNET: We are able to prescription strip a sportsfield in hours (stripped Ohio States entire football field in six hours) with our new machine.

CYGNET is able to harvest 48" WIDE ROLLS consistently from very thin to over 2" thick. We can install these rolls without pulling or pushing them along the ground (no stretching or tearing). Our patented machines carry the rolls, turn them at ground speed, and install down a comfortable slide for tighter seams.

NO ONE ELSE CAN MAKE THIS CLAIM
U.S. PAT. #5,215,248 & 5,307,880

4711 INSLEY ROAD
NORTH BALTIMORE, OHIO 45872



YOU CAN'T INSTALL
TURF BETTER

Phone: (419) 354-1112
Farm: (419) 655-2020
Fax: (419) 352-1244

Call 1 (800) 817-1889 use **Fast Fax #1260500** and/or Circle 126 on Inquiry Card.

later time with either soil and seed or a more compatible sod. Alternatively, a clay sod planted on a sandy soil could be cultivated and topdressed to provide channels for water movement and root growth into the underlying sand root zone.

The Big Question: When Can the Field Be Used

The users of fields are almost always anxious to begin play again as soon as possible. How do you answer the question, "When can we play on this field?" The answer is determined by the age and species of sod, the thickness of the sod and if it is slab or big-roll sod. Generally speaking, the more mature the sod is and the heavier it is, the sooner it can be played on. When planning field repair, it is essential for the turf manager to have a clear understanding of how quickly play must begin again on the field. This knowledge should help determine the type of sod that will be used for repairs. Some general guidelines follow, based on sod characteristics:

- Thick-cut (1.5-2 inches), big-roll sod that is sufficiently mature can literally be played on immediately after it is planted.
- Conventional thickness sod (0.25-0.5 inches) should be allowed to root for 60-90 days before play begins.
- The rate of rooting (which determines stability underfoot) is affected by time of year, soil type, compaction level and cultural practices.

- Generally speaking, sod planted on heavier (higher clay content) soil will root more quickly and provide better stability than sod planted on a sand root zone. A more mature sod, with a well-developed thatch/mat layer, is more resistant to traffic effects than a younger sod.

The benefits of using thick-cut, big-roll sod for repairing a high use field are obvious. The ability to place a field back in use nearly immediately after repair can justify the substantially higher cost of using this type of sod.


Alternatives to "Conventional" Sod

Just as big roll sod production was an innovation a few years ago, other alternatives to traditional sod exist today. Washed sod, soilless sod, sod grown in moveable trays, sod produced with integrated stabilizing materials—all of these innovations should be considered by the turf manager for use in field repair. Depending upon the situation, these new types of sod may be a better solution for field repair than conventional sod.

Failure to Plan Is a Plan for Failure

This often heard adage applies well to the topic of field repair. The well-prepared sports turf manager will have an emergency plan in place for field repair that:

- Considers sources and types of available sod
- Details labor and material resources
- Outlines comprehensive quality control procedures for the sod farm and on site
- Provides all interested parties with realistic timelines for repair and when the field can be used again

Most importantly, the details of the plan are communicated to everyone with a vested interest in the final outcome. 

Dr. Tony Koski is assistant professor/extension with the Horticulture Department of Colorado State University, Fort Collins, Colo. He's an STMA board member, chair of the Education Committee and member of the Certification Committee.



Angel in the Outfield

Let Opti-Gro Guard Your Turf.

If your turf looks like it needs a guardian angel, give us a call. Opti-Gro athletic field specialists will have it looking better, playing better and easier to maintain than ever before. We specialize in state-of-the-art turf maintenance programs. Call us today for a free soil analysis and we'll take it from there.

 **Opti-Gro**
Growing Results!
www.opti-gro.com

Call for your free soil analysis.
1-800-527-9919, ext. 0021

Circle 130 on Inquiry Card.