Damage happens. For some of the most field-stressing sports, play takes place come rain, shine, snow, or hail. As facilities strive to meet community needs and generate sufficient funds to continue operations, potentially damaging events continue to be held on playing surfaces.

After damage occurs, the job of providing a safe, playable surface intensifies. All too often, there is a very short window of opportunity in which to accomplish this task. Sports turf managers need to evaluate the situation, consider all available options, and select the solution that's most effective, least disruptive, and within the budget.

To sod, or not to sod

Sometimes there's no way to bring existing turf into playable condition within the available time frame. Turf may also be damaged beyond repair. In these cases, sod offers a fast solution.

As a means of repair, sodding isn't necessarily an easy answer. The disruptive procedure involves removal of existing turf and replacement with another section of turf. Time and expense come into play each step of the way.

You must identify the section of turf to be removed, and select the most efficient, least damaging method of removal. Replacement sod must be selected, procured, and transported from its growing site. Installation must be performed carefully to protect surrounding turf from damage.

Ideally, the seam where installed sod meets existing turf is minimal. A smooth, even transition protects the players.

The seam issue becomes greater when multiple sections of replacement sod are needed within the same area. The type and quality of sod and the skill of those doing the installation are major factors.

The match game

Field damage seldom happens in small, barely noticeable parts of the field. High-traffic, high-visibility areas experience the greatest wear: the soccer goal mouth, between the hash marks of the football field, in front of the pitcher's mound, etc.

In any of these areas, a section of sod with discernible difference in color or texture stands out like a coffee stain on the front of a clean white shirt. Every eye focuses on it.

Replacement sod grown on a soil profile that exactly matches the soil profile of the field provides the ideal match. Marked differences between two soil profiles pose layering problems that may affect water infiltration and percolation rates, effectiveness of fertilization and pesticide applications, depth and development of turf roots, and compaction rates.

Unmatched segments of replacement sod respond differently than the established turf to basic maintenance procedures, and differences in turf color and texture increase. If the sod is to remain in the field, maintenance procedures must be adjusted to fit turf needs and to reduce barriers between different soil profiles.

The perfect match can be achieved. Some sports turf managers grow their own replacement sod in on-site nurseries. The sod consists of the same turfgrass varieties and the same soil profile as the playing field turf, and it's managed with identical maintenance practices.

Other sports turf managers work with the producer who supplied the
field's initial sod to arrange for a continuing supply of replacement sod. The producer agrees to set aside a predetermined area of matching sod, and to follow the program developed by the sports turf manager to maintain that sod.

The sod farm must be near the field to reduce time and expense of transportation. The sod producer must be capable of cutting and delivering replacement sod as needed and on short notice. There will be a cost for this on-going service, but the end results can be as effective as those achieved with an on-site sod nursery.

In each of these instances, the length and width of the sod sections and the depth of the attached growing medium can be specified within the limits of those doing the harvesting, transporting, and installation of the sod.

**Washed sod**

When the sod's turfgrass varieties and turf vigor match the field's existing turf, but the soil profile is incompatible, washed sod may be a repair option. Standard sod rolls can be processed through equipment that washes the growing medium from the root system. Sufficient time is required for the bare-roots to knit into the field's soil profile before adequate stability is achieved to support play.

Washed sod is most commonly used on sand-based fields, where irrigation and nutrition can be closely controlled to promote rapid rooting into the soil profile. Initial costs are defined by the special handling involved in the washing procedure, transportation, and installation.

**Which sod?**

If matched sod isn't available and washed sod isn't a workable solution, sports turf managers still have several options. Turfgrass varieties, texture, and color do matter; but for sports activity, such factors as the soil profile of the growing medium, turf vigor and density, and depth and development of the root system are of equal or greater importance.

To solve problems of aesthetics, colors can be blended with turf dye. The sod can also be over-
This machine helps lay big-roll sod. 
*Courtesy: Trusty & Assoc.*

seeded or sprigged with the turfgrass varieties found in the existing field.

Stability is always an issue. Sod roots need time to grow into the underlying soil profile to provide stability and solid footing. Before that knitting occurs, standard-cut rolls of sod may be too small and insufficiently anchored by their depth of soil to stay in place during the heavy wear of competition. Such sod can slip under an athlete’s cuts and turns.

The position of the repaired area and the type of sport played on it will also affect the suitability of the sod: the more aggressive the activity, the greater the stability level needed.

**Thick-cut sod**

There’s seldom enough time for solid knitting in emergency field repair, so sod producers have developed options to provide a greater degree of temporary stability.

Thick-cut sod is one of these options. It increases the depth of the attached growing medium according to the anticipated level of play. This helps hold the section of sod in place for at least one game.

Thick-cut sod is often used to repair relatively small, but important sections of the field, such as the goal mouth area of a soccer field. Sections of thick-cut sod may be no larger than those of standard-cut sod, but they’re heavier. Again, precision installation to reduce the seam factor is a major issue.

Unfortunately, added stability comes at the cost of extra effort and expense. Special machinery is required to harvest the sod, production time can be increased, extra material may need to be removed from the field, and the technique can produce greater transportation and installation costs.

**Big-roll sod**

Big-roll sod is another option that increases immediate stability. This technique increases the length of the sod strip dramatically to add weight to the sod section and to reduce the seams.

Special equipment is required for the harvest, transportation, and installation of big-roll sod. The depth of the attached soil depends on the equipment used.
The same factors that give big-roll sod its stability make it difficult to move once it's rolled out. Generally, it's rolled into place directly from the harvested roll, while a large number of individuals steer the sod strip into place as tightly as possible.

Again, costs increase due to additional equipment, transportation, and labor costs.

Big-roll sod often works well when you totally resod a field. It's also appropriate when concentrated areas of an existing field have been damaged, such as the area between the hashmarks on a football field from goal line to goal line.

**Use it again sod**

Movable blocks of turf are an option for areas that are subjected to nearly constant wear. These blocks are comparable to sections of thick-cut sod, but they're much bigger.

Additional materials are often used in the soil profiles of these blocks to increase root development and resistance to compaction. The blocks may be enclosed in some form of edging material, holding it together tightly and providing a mechanism to which cable can be attached to move the block.

Two or more blocks of equal size and shape are then used as interchangeable modules for a specific section of the field. While one module is in place on the field, the other modules are actively growing in the nursery, recuperating from the last stint in the field and preparing for the next one.

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