

# SUCCESS WITH SOD: FROM SELECTION TO INSTALLATION



Laying sod at Anaheim Stadium. Photo courtesy Pacific Sod.

**W**ith sod, you're buying establishment time," says former Rutgers professor Dr. Henry Indyk, now with Turfcon, a professional turfgrass consulting group in Horsham, PA. "You're buying a mature product. Given the correct conditions and circumstances, a field can be ready for play a month after sodding."

Whether you're sodding a Little League Diamond or resodding a long fairway, sod is the quickest way to establish a natural playing surface. Speed and maturity, as Indyk points out, are what you're paying for. You can make the investment pay big dividends both now

and in the future by paying attention to a few of the sod fundamentals.

## Selection: Use And Maintenance

Through a process of genetic manipulation, turfgrass breeders at seed companies improve grass color, wear-tolerance, disease- and insect-resistance, texture, growth habit, and more. A handful of these constantly improving varieties will be marketed nationally. Some will only be sold regionally. Others find their way into blends or mixes without ever being sold under a separate brand name. The best find their way to sod farms around the country.

The development process is painstaking. A Kentucky bluegrass can take 10 years or longer to develop. Tall fescues and perennial ryegrasses can take one-third less time, and work is continual on developing improved common bermudagrass and zoysiagrass. The improved varieties of tomorrow are being evaluated at universities and research farms today.

Sod growers often have priority when the first seed of a new variety or blend is released. Many seed companies market a high grade of seed for sod producers. Therefore, sod producers have the opportunity to offer a continuously changing selection of sod. They also have the ability to purchase a seed mixture that will produce sod adapted to growing conditions in your area.

"One of the first things to consider is whether a particular sod is appropriate for its intended use," emphasizes Indyk. "You also have to consider the level of maintenance it will receive."

Indyk says that among the cool season grasses, bluegrasses tend to provide the best wear-tolerance. He also recommends some of the newer tall fescues for high-use areas.

"From a standpoint of high-quality aesthetics, bluegrass is a good choice," he notes, "but some of the newer tall fescues have an appearance comparable to that of bluegrass."

Among warm season grasses, Indyk suggests bermudagrass for high-use situations. However, he offers a warning for bermudagrass in heavy-use conditions. If the field receives the bulk of its play while the bermudagrass is dormant, the installation will most likely fail.

Another factor in selection to watch is compatibility of soils—the type of soil in which the sod is grown should match, as closely as possible, the type of soil in its new home. Indyk calls this the "soil differential." Sod grown in a clay soil, for example, will most likely have rooting and drainage problems on a sand-based field.

"One of the most common mistakes I've seen is to take a sod grown in a heavy-textured soils and place it on a field modified with sand," says Indyk. "If the field had a heavy soil, it would be less of a problem. In a field modified with sand, you want to find a sod grown in a similar type of sandy soil, and in roughly the same type of coarse or fine sand. That can pose a problem since sod grown in sandy soil is not always readily available. If necessary, sod washing can remove the heavy textured soil."

There are special circumstances, however, where a heavy-soil sod could be appropriate for a sand-based field. In an "emergency" mid-season resodding situation, Indyk notes, a heavy-textured soil-grown sod could be used on a sand-based field to lend stability for immediate play. However, he emphasizes, this would be a stop-gap measure to keep the field in play, and resodding with a compatible sand-based product would eventually be necessary.

"Another important aspect is to have the sod cut as thinly as possible," he adds. "That will minimize the amount of amount of soil differential. One of the problems we see is people having sod thick-cut to gain topsoil, but if you need topsoil, it's much better to simply buy it and spread it before you put down sod."

Regional strengths of turfgrasses are being studied at more than 30 locations throughout the country as part of the National Turfgrass Evaluation Program (NTEP). The program is sponsored by the United States Department of Agriculture's Beltsville Agricultural Research Center and the Maryland Turfgrass Council.

NTEP data is helpful for sod growers and sports turf manager who buy sod regularly. Knowing the regional strengths of turfgrasses can be vital in selecting a turfgrass for your area.

#### **Installation: Right From The Start**

Sod is a living thing—one under the stress of having its root severed. Therefore, timing, from harvest to installation, is critical, especially in the hot summer months.

"Programming, timing harvest and placement of sod to minimize the time between them, is important," says Indyk. "Sod should be scheduled to be cut quickly, delivered quickly, and placed quickly to prevent damage from heating up on the palette or in the roll."

There are four steps for successful sod installation. Following these steps will ensure a turf that thrives. Neglecting any of them know can set the stage for future disaster.

**Measuring and Estimating.** Measure the area where you plan to install the sod. Mark the figures on a site sketch. In addition to width and length, note any unusual features or grades. Determine in advance the direction the sod will be laid in relation to sidelines, cart paths, and other features.

**Soil Preparation.** Determine what amendments the soil will require. As previously mentioned, it's important to know the type of soil in which the sod was grown on the farm. At best, the soil types of the sod and the existing field will match. If not, amendment is a must, whether that comes in the form of nutrients, modification of the soil structure, sod washing, or something else.

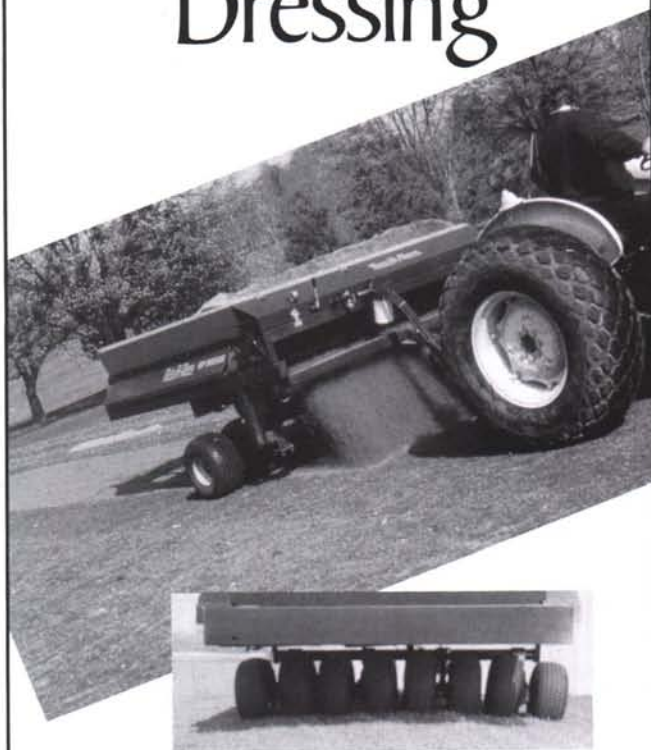
"Proper soil preparation is key," says Indyk. "That includes drainage, which means more than putting a drain line in a trench and covering it. Drainage systems have to be properly engineered and programmed in terms of depth, spacing, and physical properties of the soil above the drainage line. I've seen drainage systems fail where the same soil that was taken out of the trenches was used to fill them in after lines were installed.

"You also want to make sure the soil has the proper nutrients and is graded correctly, because it is very difficult to make great corrections in these areas after the sod is laid.

*continued on page 34*

# TURFCO

## A New Angle on Athletic Field Top Dressing



Since 1961, Turfco's **Mete-R-Matics** have been setting the standards in the top dressing industry, and now we're expanding that expertise to your athletic fields. The **Large Area Top Dresser** is an innovative breakthrough in technology for any playing field that seeks a thicker, plusher turf.

Benefits of the **LA2** include:

- **Front Spread Design** blankets 6 feet wide; better soil penetration and easy monitoring of flow and sand level.
- **Unique 8-wheel design** evenly distributes weight and contours to terrain, **resulting in low PSI.**
- Thatch reduction for healthier turf.
- **Evenly spreads top dressing 1/16" to 1/2".**
- Levels turf in high playing areas.

**Call for a free demonstration and video tape.**  
Patent Pending

**TURFCO MFG., INC.**

1655 101st Ave. NE, Mpls, MN 55434-4420 U.S.A.  
(612) 785-1000 • Fax (612) 785-0556

## Success With Sod

continued from page 33

And of course, no sod should ever be laid without provisions for watering."

For optimum results, rotary till the soil to depth of four to six inches. Add the necessary soil amendments and blend to a depth of three or four inches. Grade and level for a smooth surface. Remove any large clods.

After rolling to firm the soil surface, water the prepared area to settle the soil and provide a moist base for the turf. On most soils, irrigate to a depth of six inches.

**Turf Installation.** Sod needs water to survive and should be installed upon delivery. Begin irrigating sod within 30 minutes of installation. In hot weather, protect unlaied sod by placing stacks in shade, covering the sod with moist burlap or sprinkling with water.



Forklift-attached sod installer from Cygnet Turf & Equipment.

Begin installing sod along the longest straight line, such as a fence or cart path. Butt and push the edges against each other tightly without stretching. Avoid gaps or overlaps. Stagger the joints in each row in brick-like fashion,

using a large, sharp knife to trim corners and edges. Avoid leaving small strips at the outer edge, because they will not retain moisture. On slopes, place sod across slope and install staples until the sod has rooted.

To avoid creating indentations or air pockets, refrain from repeatedly walking or kneeling on the sod while you are installing it. After installing the sod, roll the entire area to improve sod-soil contact and remove any air pockets.

**Irrigation.** Immediately after installation, apply one inch of water. The turf should be kept moist until the sod is firmly rooted. This means irrigating daily, even several times a day, depending on the weather. Hot, dry, windy conditions will create a greater need for supplemental irrigation than cool rainy periods. Also, keep in mind that turf near buildings or pavement will dry out faster than other areas. Once the turf is rooted, reduce frequency of irrigation, while increasing duration for deep watering.

### Post-Installation Pointers

During the first three weeks after installation, avoid heavy traffic on the new sod. This will give the roots an opportunity to knit firmly with the soil, helping to keep the turf smooth.

Mow turf at an acceptable growing height for the species you select. The general rule of thumb is to mow frequently enough so that you're not removing more than one-third of the grass blade. And, of course, always make sure your mower blades are sharp to limit turf damage.

Aerating the sodded area in the fall prior to fertilization can improve rooting and resolve any compaction problems resulting from traffic. Topdressing may be necessary to correct uneven settling and help protect turf in traffic areas. Use sterilized topdressing to avoid bringing weed seed onto the site.

By paying attention to selection and installation fundamentals, you can ensure the success of your sod investment. And that makes good sports field management, not to mention financial, sense in the long run. □

*Editor's Note: The American Sod Producers Association in Rolling Meadows, IL, assisted with this article. For information about the National Turfgrass Evaluation Program contact: Kevin Morris, Director, Agricultural Research Center West, Building 001, Room 333, Beltsville, MD 20705.*

## UNIQUE PRODUCTS FOR THE GOLF COURSE AND TURF INDUSTRY

- \* LevelEEZ - Raise Sunken Sprinkler Heads
- \* Aqua Quick Couplers
- \* Moisture Sensors
- \* Digital Thermometers
- \* Infiltrometers
- \* Soil Profile Samplers
- \* Penetrometers
- \* pH Meters



Aqua Quick



REENSTATE INTERNATIONAL, INC.

P.O. Box 21663 Fort Lauderdale, FL 33335

1-800-654-8492 FAX 305-524-6431

