Year in and year out, Palmer III Perennial Ryegrass has outperformed the competition. It's an annual headliner at the NTEP trials and sworn to by turf managers at major courses and across the south for overseeding. With its dark green color, especially low thatch tendency and high wear tolerance, it has become the centerpiece of any seed program.

Palmer III performs even better when matched with partners such as Prelude III Perennial Ryegrass, which exhibits slower and lower growth for a cleaner cut and good winter hardiness and Phantom Perennial Ryegrass, an improved variety with a medium texture that is extremely wear tolerant but transitions easily. The rich, dark green color of all three make them perfect for use on tees, roughs or fairways, especially in cool season climates and winter overseeding in southern states.

Best of all, they all come with the Signature Pure Seed Tag™ assurance of quality.

Palmer III and Prelude III are available alone, blended together or under the well-known MarvelGreen Supreme blend name. Phantom is sold alone or in blends as well.

For more information, contact your local UHS representative

www.uhsonline.com

United Horticultural Supply

Circle 108 on card or www.OneRS.net/209st-108
**MID-MOUNT MOWERS**

Land Pride's new 72-in. Accu-Z Mid-Mount mower offers large capacity fuel tanks, choice of seats, adjustable steering control, turf type drive tires, and a fuel-efficient Kawasaki gas engine. Also available in 52- and 60-in. models, this zero turn radius mower features a foot operated deck lift with adjustable spring assist and heavy-duty pusher arms to stabilize the cutting deck. Adjust cutting height in 1/4-in. increments, while mowing at a forward speed up to 11 mph and a rear speed of up to 5 mph.

Land Pride/785-823-3276
For information, circle 140

**DEERE TURBO MOWER**

The John Deere 1600 Turbo Wide-Area mower provides commercial cutters with the high power, maneuverability, traction and cut quality needed for any mowing condition. Equipped with a 22-gal. fuel tank, the 1600 is powered by a 64-hp, turbo-charged Yanmar diesel engine with high torque, providing power for tough conditions. With a cutting width of almost 11 ft., the 1600 Turbo accommodates three commercial 7-gauge mower decks.

This mower also includes a hydrostatic, dual transaxle that achieves a mowing speed of up to 8.6 miles per hour, for increased productivity. All John Deere commercial equipment includes an exclusive two-year, bumper-to-bumper warranty.

John Deere/800-537-8233
For information, circle 072, or see www.OneRS.net/209sp-072

**CAN APPLY WET MATERIALS**

The Turf Tiger from Millcreek Manufacturing is a large capacity topdresser for sportsturf that applies topdressing and bulk materials even when wet, giving you added flexibility in scheduling. The unit has a 7500-lb. capacity and can apply a variety of materials. The Saber Tooth attachment is standard equipment and has a series of steel plates mounted on a rapidly spinning bar so it is more aggressive in handling wet or clumpy material, in a consistent path ranging from 8 to 12 ft. wide depending on material conditions. Flotation tires help reduce compaction even with heavy loads.

Millcreek Manufacturing/800-311-1323
For information, circle 145, or see www.OneRS.net/209sp-145

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TOP-LINE TOROS

The Toro Groundsmaster 4500-D and 4700-D mowers incorporate Contour Plus floating decks with full rear rollers to deliver precision cut and turf striping for sports fields. The 4500-D unit (pictured) has five floating cutting units producing a 9-ft. width of cut; the 4700-D unit has seven units and 12.5-ft. width.

Both units are powered by a Kubota 60-hp, turbo-charged, 4-cylinder diesel engine and feature full-time, bi-directional 4-wheel drive. Other features include spacious operator area, rugged frame and drivetrain, and easy access for service.

Toro/952-888-8801
For information, circle 143, or see www.OneRS.net/209sp-143

LARGE TURF EQUIPMENT LIFT

The Heftee 4000 safely accommodates equipment up to 87 in. wide, can lift 4000 lbs. to 6 ft in less than a minute, and needs no special installation. Techs can stand comfortably with unrestricted access to service areas using this lift, and it is easily moved to other shop locations.

A ramping system eases loading and unloading, and there are no crossbars or twisting cables, while all jacks, booms, supports are integrated into the lift.

Heftee Industries/800-755-7540
For information, circle 146

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NEW JACOBSEN ROTARY MOWER
Meet the All-Star team in sports turf maintenance, from Jacobsen, Ryan, Bob-Cat, Bunton and Cushman. Smooth-cutting reel mowers, zero-turn rotaries, aerators, infield rakes, utility vehicles, power rakes, seeders, topdressers, sprayers, blowers, and sod cutters. They’re rugged design and quality construction means durability on the field with easy servicing off, says Textron Golf & Turf.

Textron Golf & Turf/888-922-8873
For information, circle 142, or see www.OneRS.net/209sp-071

VERTI CUT MACHINE
Thatch Master verti cut machines help world class football fields like Invesco at Mile High keep their fields in top condition. In addition to de-thatching, Thatch Masters can be set shallow to cut runners and stimulate new growth, and also to prepare for overseeding.

Turf Specialties/800-201-1031.
For information, circle 142

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Turf Tiger
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For under $13K, the Turf Tiger is a rugged, reliable, 7,500 pound capacity topdresser for all types of sports turf, golf course, and park and rec maintenance applications.

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Millcreek
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Circle 112 on card or www.OneRS.net/209sp-112
Whether you work with high school, college, municipal, or professional sports, maintaining your field properly is imperative. It can get you back on the field after a rain and minimize player injury by providing an even, resilient playing surface.

While a professional groundskeeper may have a crew of more than 20, many of their tips can improve sports fields at any level. Roger Bossard, head groundskeeper for the Chicago White Sox, has been in the sports field business for over 35 years. He is a world-renowned designer and builder with several prominent projects throughout the world, including six of the last 10 Major League fields in the U.S.

He suggests, "There are two main factors in the success of any sportsfield project. First, that the right decisions are made during construction. Second, that it is properly cared for and maintained. Building and maintenance is really a partnership. Sportsfield builders and groundskeepers work hand in hand. Either you both look good or you don’t!"

You can research, plan, and design the best field around and if it's not maintained properly, you've got a problem. You can have the most talented groundskeepers in the game and if your field is improperly built, you'll always be fighting a losing battle, which can cost hundreds of thousands of dollars to fix.

"While research data and turf science are important to the design of a sportsfield," Bossard added, "you have to use it in the context of athletics. There's nothing worse than a field architect who never stepped foot on a ball diamond."

Every ballpark is unique. The geographical region, irrigation system, type of grass and habits of the players all have an effect. Bossard works with a team of experts like Dr. Hank Wilkinson of the University of Illinois and Andy Wright of Muller Mist Irrigation. Through their years of experience, they have become the undisputed experts on sports fields and retractable dome field installations.

"When we start a project, our approach revolves around three considerations," said Bossard, "These concepts don't just work at the Major League level. If anything, they're even more important to consider on municipal and academic projects."

"Never forget the purpose of the field—athletics. The decisions you make will affect its ability to be available on game day. Games that have to be rescheduled or cancelled cost money. Inadequate turf and infield can also cause poor playing conditions, which can lead to injury."

Common sense goes a long way in designing a field. Keep it simple. Once it's built, someone is going to have to take care of it. His success depends on the decisions you make. In Seattle, the team spent 3 years finding a grass that would proliferate in the Pacific Northwest climate, under a retractable dome, no less.

The original design concept must not only keep the construction budget in mind, but the maintenance budget as well. Even the best designs will suffer if you can't afford to take care of them.

Keeping that thought process in mind, there are four keys that will ensure the field stays in top-notch condition. "In baseball it's important to remember," said Bossard, "70% of the action takes place on the infield, so that's where your resources should be focused. Don't forget the turf though, proper maintenance will prevent more expensive repairs down the road."

Know your athletes wants and needs. At the Major League level, that means making sure that the franchise players have conditions that optimize their talents. At other
Bossard advises to look for a soil conditioner with good granule sizing, a deep red color and minimal dust. He's even helped develop his own special product.

levels you need to ensure the field is safe and ready when needed.

Choose the best base clay and soil conditioners for your needs. There's no such thing as one perfect infield mix. Of all the soil structures out there, only about 10% are even suitable for a baseball field. You have to find what's best for your situation.

Verify that your drainage options meet your needs. The number and placement of your watering heads is critical to good irrigation. Your clay should be moist to a depth of 1/2-3/4 inches at game time. Of course, weather factors like wind and humidity will play a role in the amount of water needed.

Find a knowledgeable/skilled groundskeeper. There are many good resources and a pool of knowledge out there to help you. The best resources are often other groundskeepers.

If you want to create the perfect medium for playing ball, you have to do your homework. "We've tested as many as 20 different soils before finding the optimum infield mix for a site," said Bossard. "There are some Major League stadiums, including Comiskey, that have even brought the infield clay from the old stadium to the new facility. It can be one of the most valuable assets you have.

"Most Major League groundskeepers prefer a soil conditioner made of calcined montmorillonite clay," said Bossard. This will optimize the conditioning and moisture management effects on your field. These products are super-heated to provide stable granules that are durable and don't break down into dust. Find a granular size distribution that best meets your needs and your budget. For your turf areas, a hard, irregular-shaped material will give you the best performance. "For the infield, I recommend choosing one with the redder color and the least dust," added Bossard.

On the infield, the more uniform the granule size, the more professional the infield will look. Of course, you'll also pay a premium price for that sizing. Calcined montmorillonite soil conditioners with a larger range of granule sizes still provide the best conditioning features at the most economical price.

"Through years of trial, I've even come up with a special blend that I think works the best for me," advised Bossard. "You want the granule size to be fairly large and uniform to optimize the stability of the playing surface. You also need a certain amount of small material in the blend to quickly soak up moisture. But I'm careful not to allow too many small granules, because they start to settle, giving less traction. I've worked extensively with Pro's Choice to develop my specially formulated conditioner 'The Bossard Blend'."

Of course these considerations are of crucial importance at the Major League level. For the average ballfield, choosing a good calcined montmorillonite clay that best manages moisture and keeps the infield mix non-compacted can go a long way toward maintaining a field that is playable, rain-delay resistant and reduces player injury.

One of the biggest challenges on the field can be maintaining adequate moisture. Trying to water enough to keep the grass from wilting in the hot summer heat, while working around batting practice and game time is hard. The more moisture the soil can maintain, the better. Soil conditioners can ensure the best moisture management for hot, dry days and during rainy conditions. Montmorillonite soil conditioners aren't only used in the infield, they can also help you improve your turf. "Aerifying three to four times a year promotes gas exchange. The conditioner can break up compacted areas and promote stronger rootzones and healthier turf," adds Bossard.

"Over the past 20 years there have been great strides in agronomy, like chemical supplements and even high-tech mowers," added Bossard, "but in reality, the principles of maintaining good turf haven't changed that much. The goal is to create a field that looks and plays great, and is easy to maintain."

This article was contributed by Oil-Dri Corp., manufacturer of The Bossard Blend soil conditioner.

Roger Bossard's Professional Sportsfield Institute

For three days in December, you can work with Roger Bossard, Head Groundskeeper for the Chicago White Sox and world-renowned sports field builder. As a third generation groundskeeper, he will share his expertise while you get on-the-job training in Athletic Field Design, Construction and Renovation. This is a one-of-a-kind educational opportunity for anyone interested in maintaining high-quality sportsfields at any level of play. You'll even help re-construct three fields at Tucson Electric Park, home to White Sox spring training camp. For more information on this course and how to register for the Dec. 5-7 program please call or check out our website, space is limited...

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“The Tru Mark E100 is very simple to operate, very efficient, and very easy to use. It’s lightweight, making it easy to handle and easy to push. The design is simple which makes it a low maintenance product,” says Darrell Carlson, maintenance supervisor, Fremont High School, Fremont, NE. Tru Mark says it has solved the time-consuming task of applying hash marks, blocked lettering and boundary marking without using stencils. The Marker E-100 with its optional paint boom now provides sports turf and grounds maintenance staff a means to quickly applying a 24 x 4 hash mark, boundary stripes and lettering. The two nozzles paint boom with painting box ensures a quick and professional looking wide line for striping football fields, sidelines, end lines, end zones and coaches/player boxes.

The grounds maintenance staff at Lewis Palmer High School, Monument, CO extensively uses the spray boom for their herbicide applications with great results, reports Tru Mark. The optional spray boom on their RS-500 Rider can function as a field marker (end zone marking), herbicide sprayer, and fertilizer applicator for large sport fields.

Recent upgrades to the two 3.3 gallon per minute 12 volt electric pumps ensure speed and pressure. The spray wand with 20 feet of hose comes standard for spot spraying in restricted areas. See www.athleticfieldmarker.com.

A crew member (left) marks a one-piece, 6 mil poly stencil’s color-coded half moon cutouts. When the stencil is removed, the crew (right) connects the dots and fills in with the proper color spray paint. Partac/Beam Clay produces one-piece stencils designed by the same art department that handles many NFL logos; custom cut from your specifications. A 30 x 160-ft. endzone stencil typically weighs about 70 lbs. and can be used for years with proper care.
ATHLETIC FIELD SIDELINE MAT

Strong and durable Enkamat teamed with a tough polyester fabric can provide maximum protection for your natural turf athletic field. EnkamatPlus is a unique product made of a 3/4-in. nylon matting that has been heat bonded to a polyester fabric. The 95 percent open, three-dimensional matting provides an airspace and a structure that flexes as athletes and coaches continually walk over the sideline area. The polyester provides a smooth walkable surface that allows rainfall to penetrate through to the turf below.

Colbond, Inc/828-665-5016
For information, circle 161, or see www.OneRS.net/209sp-161

SIDELINE COVERS

CoverSports USA’s FieldSaver football sideline cover will save your sideline turf whether it’s natural or artificial. Its durable polypropylene fiber allows for passage of air and water, and its heavy-duty construction can handle any football team.

Five stock sizes are available from 14 x 50 ft. to 14 x 150 ft., or custom sizes can be made. School names and logos can be imprinted.

CoverSports USA/800-445-6680
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There's a new bench tarp material on the market called EnkamatPlus and according to its manufacturer, Colbond, it is capable of withstanding continuous pounding from the feet of athletes, coaches and spectators while protecting natural grass.

Ross Kurcab, Turf Manager of the Denver Broncos, was one of the first to put the new tarps to the test and declared that the decision to purchase the tarps proved to be the right one.

"When compared to the geo-blanket, which we installed side by side with these bench tarps, the difference was significant, with less damage to the grass under the tarps. They honestly exceeded my expectations. After a game, when we rolled them up, we saw the grass in much better shape than the grass outside the tarped area where a lot of foot traffic occurred. We were very impressed with the condition of the grass."

EnkamatPlus consists of durable Enkamat bonded to polyester geotextile. Enkamat is a geomatrix matting that provides an air space underneath the cover, which results in a reusable cover that preserves natural grass.

"We're very confident that EnkamatPlus will play a dominant role in a groundskeeper's quest for natural turf protection, particularly at the player's bench," says Bob Curry, president of Covermaster Inc., exclusive marketer of the product in North America.

The product is available in 16 feet width, in rolls up to 150 feet in length. It is also highly recommended as a concert cover suitable for seating, stage and sound set-ups. For more information call Covermaster at 800-387-5808.

In & On the Ground

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