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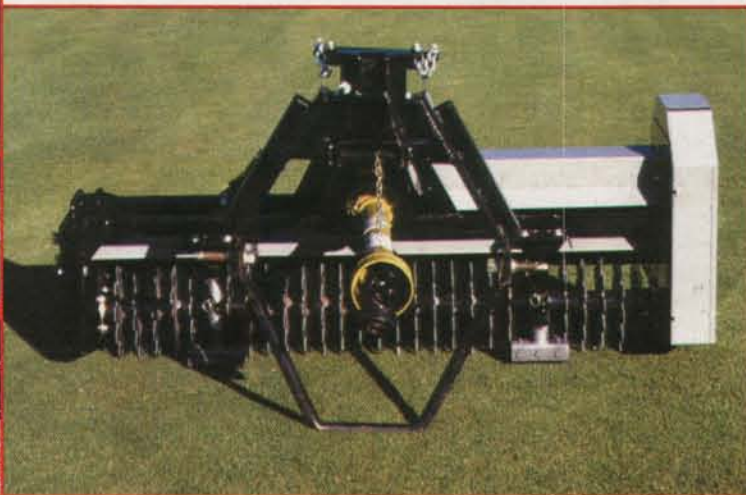
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Problem fields

Synthetic turf a possible solution

BY PATRICK MAGUIRE

Every shining high school athlete dreams of recruitment by a top college. Every college athletic director dreams of scooping up these budding talents before anyone else. Every facilities director dreams of the shimmering green fields that will catch the prospect's eye on his or her campus visit. But the sight of mud, bald spots, and compacted grass during a campus visit can quickly deflate the star-studded recruitment dream. Faced with a patchy, compacted field despite the best efforts of a talented facilities crew, the athletic director on one urban campus was too embarrassed to show the field to the recruits who she hoped would one day play there.

Today, more than ever, colleges are competing to attract leading athletes. Offering them the chance to play on the best fields possible is paramount. Yet bare fields damaged by overuse, rough play, and weather conditions plague many of the country's athletic fields. Despite the hard work of dedicated facilities directors and their crews to keep their fields in shape, they often lack the resources to make their vision of a top athletic field a reality.

Even with a tremendous amount of time, energy, and care, the best crews cannot always fight the harsh effects of weather and use on natural grass playing fields. In cases where field space is limited, constant use makes proper maintenance virtually impossible. Even when field space is ample, human and financial resources, especially in a tight economy, can be spread too thin to keep all of the fields in ideal shape. It's no wonder, then, that the world of athletic fields is ready for a new player. Enter

infilled synthetic turf fields made from smooth polyethylene fibers filled with a mixture of sand and recycled rubber.

Field for all seasons?

The only surprise about the infilled synthetic field trend is that it is not moving even faster. One reason may be the misconception that an infilled polyethylene field shares the characteristics of its predecessor, nylon grass: abrasive, expensive, artificial looking, and creating unnatural ball reactions. Unlike its predecessor, however, an infilled polyethylene field, with its dark green blades that stand tall and feel natural to

the touch, seems quite real. While a well-maintained natural grass field will always be the optimal surface for play, infilled polyethylene fields, which use a technology developed on tennis courts and golf greens, look like grass to the naked eye, play truer than nylon for most sports, and don't hurt when athletes come into contact with them.

But what has really turned the heads of facilities directors and field managers everywhere? Infilled polyethylene fields never need to be mowed, watered, or aerated. Permanent boundaries added to the grass save crews from the time-consuming task of lining the field before every game. The fields are ready to use the day they are laid down, eliminating the time required to wait for proper growth. The installation of even one synthetic grass field lets facilities managers and grounds teams devote more resources to tending to their natural



Nice turf is a recruiting tool for many colleges and universities, and synthetic turf looks good all year.

grass, a craft that takes time, dedication, and skill. Because a lighted synthetic field can easily withstand the wear and tear of constant, day-until-night practices and games, the natural grass fields used in conjunction with synthetic fields also benefit from being reserved for fewer functions.

Infilled polyethylene fields have begun the transformation of sports fields throughout the country. In the town of Belmont, MA, for example, the upkeep of community fields became overwhelming. With a high clay content that made them hard to care for, the natural grass fields felt the strain of daily practice for a variety of local sports teams and were often unusable. When the time came to rebuild the high school track and field, Belmont's design consultant proposed infilled synthetic turf. Initially skeptical about the change, the town's leaders voted for its installation after learning about the financial and timesaving benefits. Now, the high school's football, field hockey, soccer, and lacrosse teams share the new synthetic grass playing field for practices and games, allowing facilities crews the time to properly care for the remaining natural grass fields.

Even fields with rich soil cannot always combat the effects of extensive wear and tear. At the Buckingham Browne and Nichols School in Cambridge, MA, the worn, muddy athletic field needed a major re-vamp. The school used the field in all seasons, for everything from recess to sub-varsity practice, literally preventing the growth of even one blade of grass throughout the year. Both the facilities manager and the athletic director saw that something had to change. After much consideration, the school's administration and buildings and grounds department supported the conversion of one of the playing

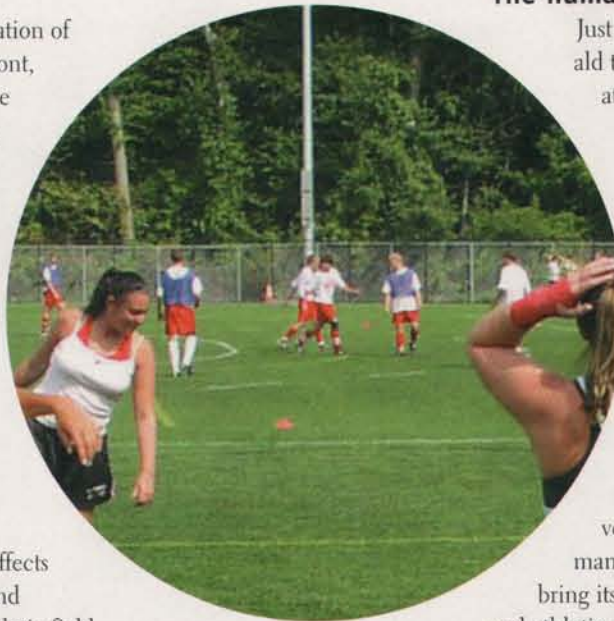
fields to infilled polyethylene. One year later, the field still looks the same—lush, green, pristine—as the day it went in. The grounds supervisor reports being asked what he does to keep the field so green in winter.

The human touch

Just as the introduction of synthetic grass in 1965 did not herald the end of facilities management, neither will the proliferation of infilled turf. Nothing can replace the human touch and vision when it comes to planning for and executing the care of athletic facilities. Well-maintained fields that withstand extensive use reflect highly on facilities directors and staff, but few have the resources to achieve these results with natural grass alone. Far from posing a threat to the tenure of facilities managers and grounds crews, incorporating infilled polyethylene can help maximize their skills by redirecting the time and resources they need to focus on continual improvement rather than constant repair. It is estimated that within 10 years all cities and towns across the nation and every major college or university will have at least one synthetic grass field. Facilities managers who understand the value of synthetic grass can bring its merits to the attention of school or town boards, officials, and athletic directors who are seeking viable, feasible solutions to creating a true field of dreams.

ST

Patrick Maguire is the president of Geller Sport, Inc., a division of Geller Associates, Inc., focusing on the design of premium athletic fields and recreation facilities. He can be reached at pmaguire@GellerSport.com.



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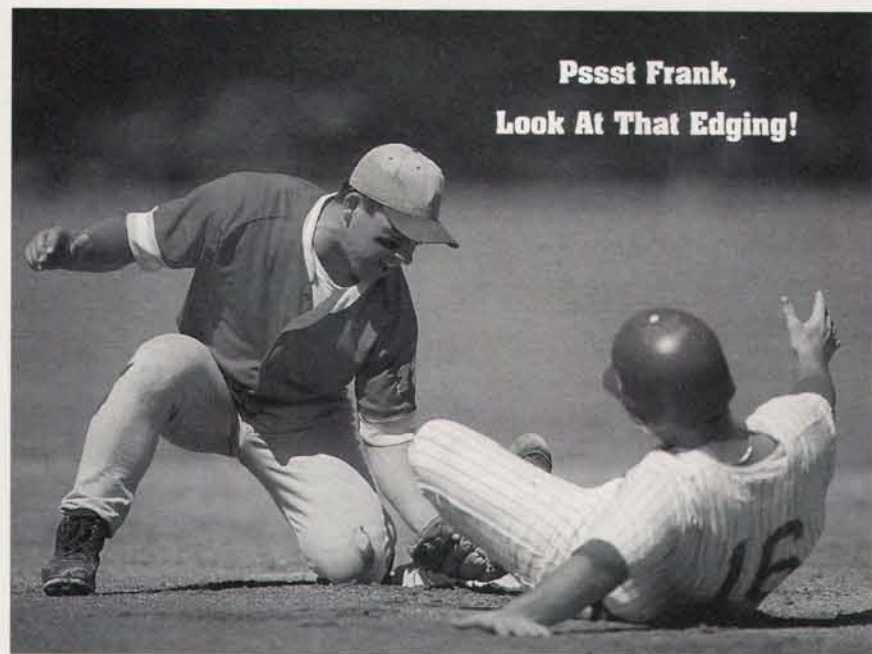
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In & On the Ground

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GreenTech/804-965-0026

For information, circle 159 or see www.OneRS.net/211sp-159



PAINT BOOM

Tru Mark Athletic Field Marker has updated its E-100 Paint Boom accessory for lining hash marks, boundary lines, and block lettering. "I now line our football field in 2

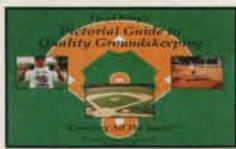
hours including all boundary lines, yardage lines and four sets of hash marks. The E-100 with Paint Boom is easy to use and does a good job," says Norm Frady, grounds maintenance chief, Park and Recreation Dept., Norfolk, NE.

Tru Mark Athletic Field Marker/800-553-6275

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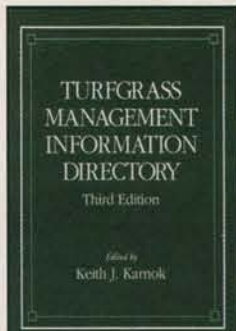
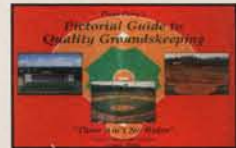


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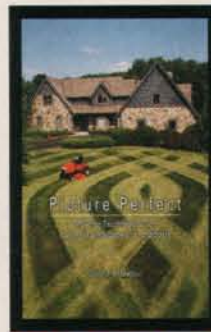


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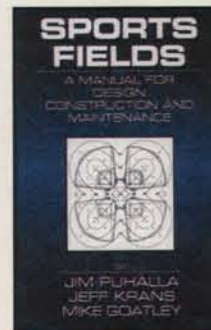
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NJ turf manager takes a holistic approach to field maintenance

BY DEBBIE CLAYTON

The lawn care industry was just coming of age when James Hermann started his own turf-management company in 1986. His objective was not to conform to the standard five-application program, but to provide residential service on a commercial level.

"I wanted to take care of homeowners' lawns the same way companies take care of their properties," says Hermann, owner of Total Control, Inc. near Clinton, in northern New Jersey. "My concept of total control includes lawn mowing, fertilizing, pest control, and shrub pruning on an as-needed basis. I never believed in the rigid program most lawn-care companies were promoting. It doesn't make sense to fertilize in July when the grass is brown."

After spending his early career managing a thoroughbred horse-breeding farm, Hermann became fascinated with turf when he helped build a turf racetrack. "If you think kids tear up a soccer field, you won't believe the damage five horses running down the middle of a turf racetrack can do," says Hermann. "I was intrigued with learning the ins and outs of how to maintain turf."

Since he enjoyed being independent and wanted more of a challenge, Hermann went out on his own as a turf manager. His first account, a commercial contract for a telephone company with 16 half-acre sites, is still with him and has grown to 60 sites. Despite his original desire to focus on residential customers, his business has evolved into 75 percent commercial accounts, 20 percent athletic fields and 5 percent residential customers.

One-man operation

Currently, Hermann works for three local municipalities, maintaining soccer and baseball fields, as well as a Little League complex with four fields. As a one-man operation, Hermann does all the mowing himself, which allows him to view the effects of his program on a weekly basis. "If I fertilize with the wrong product, I'm the one who has to maintain it," he says. "As a result, I have much more respect for fertilizers than a lot of people do. I like to use slow-release fertilizer products because they are more forgiving than quick-release products."

When Hermann takes on a new athletic field contract, his number one concern is balancing soil nutrition. This generally requires bringing phosphorus and potassium up to optimum levels. Once that is accomplished, he applies a straight nitrogen product.



"If you think kids tear up a soccer field, you won't believe the damage five horses running down the middle of a turf racetrack can do," says Hermann.

Hermann fertilizes athletic fields a minimum of three times a year. He follows soil test recommendations, putting down one-third of the nitrogen required in the spring and two-thirds in the fall. He uses slow-release nitrogen sources such as Nitroform and Nutralene because they allow him more flexibility in application timing, among other advantages.

"I'm particularly impressed with the way those fertilizers are released by microbial action in the soil." He says, "In both products, the carbon to nitrogen ratio is approximately one to one with nearly all the carbon available for microbial utilization. Microbes consume the carbon for energy and then release the nitrogen. The nitrogen release mirrors the needs of the turfgrass plant. If I don't get around to fertilizing right on schedule, it doesn't matter. The nitrogen is there when the plants need it. You just

can't time the release as well as Mother Nature does."

For example, Hermann's area experienced a severe drought in 1999. It didn't rain from the beginning of June through early August. But Hermann had fertilized the athletic fields using Nutralene at the rate of 3/4 lb. nitrogen per acre in the springtime. "Those fields came back with a vengeance," he says. "The microbes didn't need energy during the drought, so they conserved the nitrogen and used it later. The fields came back strong and lush."

In addition to providing proper fertilization, Hermann recommends aerating athletic fields four times a year. He actually advises municipalities to buy the equipment and aerate themselves for cost and time efficiencies. "I can teach them the best times to aerate, but it's usually cheaper and more timely for them to do it themselves," he says. "For instance, it's best not to aerate at the beginning of the season. Through the winter, the turf has been heaving through frosts and thaws, and typically is already opened up. But spring soccer fields should be aerated midway through the season, and all fields should be aerated at the end of the season when compaction is at its worst."

Constant communication necessary

Athletic field management involves constant communication between the leagues, the coaches, and the teams. Communicating to everyone about weather-related conditions and when to play and not to play on the field is an essential part of successful field maintenance. "I've learned this from being on the mowing end and from being on the maintenance end," says Hermann, who serves on the board of directors of the