



Major League Baseball's *"Turf Goddess"*

Detroit Tigers head groundskeeper Heather Nabozny laughs when you mention that she has a Turf Goddess fan club. But she is very serious when it comes to the business of professional grounds keeping. Practically born into this industry, she began her journey toward making

history as Major League Baseball's first female groundskeeper in the small farming community of Milford, MI.

Heather got her first taste of grounds keeping while helping her father with his lawn care business. Working during the summers, she never imagined that her time enjoying the outdoor air would lead her down a path that

would change the face of professional grounds keeping. But it was inevitable.

During a summer seminar on turfgrass programs, Heather realized that she truly enjoyed getting her hands dirty and wanted to have a career doing something she loved. Heather embraced the art of turf maintenance and began taking classes at Michigan State

"YOU DON'T WANT THE MOUND TOO BRITTLE OR ON THE OTHER HAND, SLIPPERY," SAYS HEATHER. "YOU WANT YOUR CLEAT TO GO IN AND COME BACK OUT."

University. Upon graduating from MSU in 1993 with a degree in Sports and Commercial Turf, Heather took her first major step toward making a name for herself and opening the door for other women interested in professional grounds keeping.

Heather credits many people with her success, including her MSU advisor, David Gilstrap, who helped her get her first professional job for the Toronto Blue Jays. She later became head groundskeeper for the West Michigan White Caps, where she had the opportunity to experiment with creative mowing patterns, some of which are highlighted in a book published by Boston Red Sox groundskeeper David Mellor.

In 1999, Frank Feneck, head groundskeeper for the Detroit Tigers announced his retirement, and Heather received a call to interview for the job. "It was an honor to be considered for the position," said Heather. "I am follow-

ing in the footsteps of a great professional groundskeeper."

Being the first female in a male dominated industry hasn't intimidated Heather. "There is a great network of people I work with," says Heather. "We are a close knit community and everyone helps everyone. I don't feel treated any differently from my colleagues."

During the season, Heather and her crew work an average of 65 hours a week. This leaves little time for personal recreation, especially since days begin at 9am and end close to midnight. "Preparation of the field at Comerica Park begins in March and sometimes doesn't end until early December. This year was especially long considering the team played in the World Series," says Heather.

Regular field maintenance includes mowing, painting the foul lines, and dragging the warning track. Heather uses Pro Mound in the pitcher's mound and batter's boxes and has



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Heather, second from left, and her crew at the 2005 All-Star Game.

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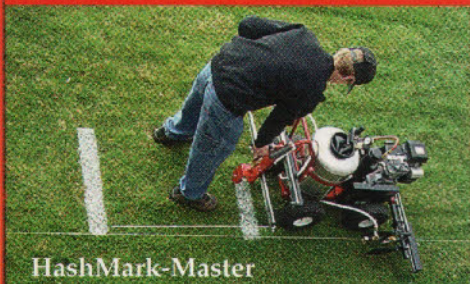


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developed her own special "toe test," to monitor the moisture in these areas. "You don't want the mound too brittle or on the other hand, slippery," says Heather. "You want your cleat to go in and come back out."

To keep on top of her game, Heather regularly consults with many of the industry's most celebrated experts. She is grateful to George Toma, NFL turf consultant and Ed Mangan, NFL Field Director, for mentoring her and allowing her the opportunity to serve as part of the grounds crew for the Super Bowl, which she has been participating in for several years.

Heather has also worked with Roger Bossard, head groundskeeper for the Chicago White Sox. Bossard led the reconstruction of the Detroit Tigers Comerica Park that was completed in 2000. While working on the field reconstruction with Heather, Roger stressed the importance of clay on the infield and offered maintenance tips for keeping the ground firm but soft.

"Roger taught me how to work the infield dirt and the importance of 'getting to know the skin,'" says Heather. "By hand dragging the nail and screen drags, you can feel the infield moisture, the texture of conditioner, and the thickness of the conditioner. That is one important tip that Roger passed on to me."

"Roger also is adamant about the importance of particle size in your soil conditioner. He uses Pro's Choice Pro Blend which I also use on my field," says Heather.

Just as others have mentored Heather, sharing and passing along knowledge is important in this business. "I've received a lot of support from my peers," says Heather. She, in turn, shares what she has learned with her grounds crew and numerous interns who come her way. "I have received lots of support and want to help others coming up in this industry."



**"I HAVE RECEIVED LOTS OF
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While Heather holds the responsibility of overseeing all field maintenance at Comerica Park, she does not do it alone. She works with a four-member full-time seasonal grounds crew, her assistant Gail DeGennaro, Charles McGee, Ryan Silva, and Riley Paquet. Her team also includes two full-time seasonal interns, Noel Brusius and Matt Gerhardt. In addition to her full time staff, Heather works with an event staff of about 20.

The 2006 World Series was an exciting time for Heather, as this was her first World Series as head groundskeeper for a competing team. "We didn't do anything especially different to the field for the World Series," says Heather. "However, the weather during the games was quite rainy. The field had to be covered more often and monitored for moisture. We had a lot of Pro's Choice soil conditioner on hand."

"We topdressed the field prior to one of the games to control the moisture," says Heather. "Between games we made sure things were moist but not slippery, we really had to monitor this because of the rain."

"When we mow during the months of September and October, we collect our clippings

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because they take longer to decompose during the fall season. Removing them helps to prevent the slime layer that can add to slickness of the turf," said Heather.

Now that the 2006 baseball season is over and the cold has settled in, Heather is looking forward to once again participating in the Super Bowl as part of the grounds crew. She also can't wait to relax for a while and hit the slopes for a few weeks with friends. But as Heather reminds, grounds keeping is year round work. "Over the winter, I'll catch up on paperwork and work the Super Bowl in January." It's then back to work in March preparing for what she hopes is another winning season for her home team.

So, whether you consider Heather a Turf Goddess or not, one thing is undeniable, she has earned her place among the few distinguished Major League Baseball professional groundskeepers. Heather's commitment to excellence and professionalism in the industry can be witnessed every time you watch the Detroit Tigers play a home game, and for Heather there is nothing better than doing what she loves.

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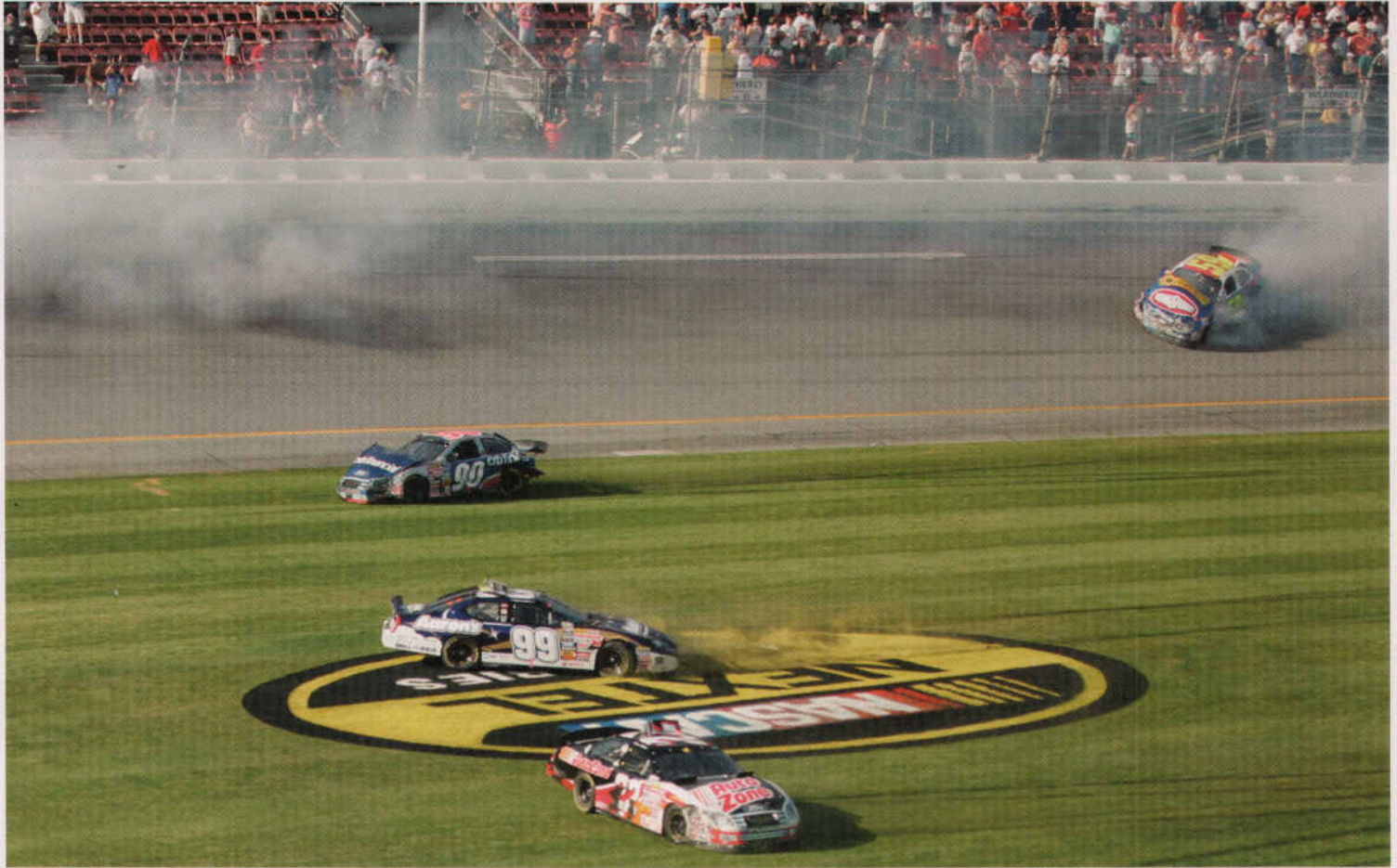
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Daytona's turf is part of the show

By Eric Schroder

Sam Newpher's career in turf management started traditionally, as an assistant groundskeeper at Atlanta's old Fulton County Stadium back in the 1970's. He eventually was named the head guy and spent 8 years maintaining the field for the Braves and Falcons. He moved to golf for 6 years, and then took the job he's now had for 12 years, superintendent of grounds and turf at the Daytona International Speedway (DIS). NASCAR dads, eat your hearts out!

"My maintenance schedule isn't that much different here than it was for baseball," he says, "except we keep the turf a bit more firm. Safety is

still the major goal. When you have a 3,500-pound racecar sliding across your turf, you're more worried about the driver than you are the turf."

Newpher is responsible for 550 acres of turf at the world's most famous speedway and has a crew of five to assist. There's another "green team" responsible for trees and other landscaping; Newpher is strictly the grass man. Newpher says his boss, VP of Operations Dick Hahne, wants to make sure when the Daytona 500 runs in February that "the grass is bright green, the flowers look perfect, and the tropical nature of the track is complete," so that fans watching up north say to themselves, "Let's go to the race next year!"

Can you identify this sports turf problem?



Problem: Black line between field and common area

Turfgrass Area: Athletic Field

Location: Pinecrest Village, FL

Grass Variety: Bermudagrass athletic field and St. Augustine grass common area.

**Answer to
John Mascaro's Photo Quiz
on Page 48**

*John Mascaro is President
of Turf-Tec International*



IT'S AN "UNWRITTEN RULE" ACCORDING TO NEWPHER THAT ONLY THE DAYTONA 500 WINNER CAN SPIN OUT ON THE TURF LOGO IN THE TRI-OVAL.

"By the day of the Daytona 500 (the 'Super Bowl' of NASCAR) only 40 acres of those 550 are not being used for something," says Newpher. "Fans take over about 10 acres, for example, and the drivers' RV park is another four acres, and it goes on and on. That one day we need to look our best and often, the turf looks its worst,

at least to the crew and me. People are all over it that week so we irrigate as little as possible."

The most famous, and visible, section of Newpher's turf is 5 acres known as the "tri-oval" that sports the huge Daytona logo. This logo is 200 feet long, with 34-foot high letters and an apex of 68 feet at the top of the flag in the middle. It's this tri-oval, so close to the track itself, that periodically gets an out of control race car skidding across it. (Newpher has an acre of replacement turf growing near the track.)

"We used to string out the logo ourselves until our 50th anniversary (in 1998)," says Newpher. "To celebrate the anniversary we changed the logo and added more logos to the tri-oval, as well to the backstretch and Turn #3, and it became a lot more work. Now Missouri Turf Paint does

all the logos because they are so complicated and time-consuming. They bring a 200-foot stencil for the main logo and work exclusively at night since it's way too dangerous to be that close to the track when it's 'hot'."

It's an "unwritten rule" according to Newpher that only the Daytona 500 winner can spin out on the turf logo in the tri-oval. He says his greatest memory of the great race was when the late Dale Earnhardt, driver of the black #3 Chevy and known as "The Intimidator," finally won Daytona after 20 tries and proceeded to spin doughnuts on top of the logo's flag. "The fans went absolutely nuts, and after the race many of them grabbed some sprigs that had chipped up from his doughnuts," says Newpher.

Another memorable moment came 3 years later, during the Pepsi 400 race in July. Earlier that year, Earnhardt had passed away after hitting the wall at Daytona. This day, his son, Dale Earnhardt, Jr., took the lead in the backstretch near the end of the race. "I was in the pit area and you could actually hear the crowd's roar over the noise from the racecars," Newpher recalls.

By the way, if you're thinking you'd be angry if a millionaire race car driver tore up your perfect turf on purpose, you need to know that immediately following the Daytona 500, Newpher every year begins tearing out the turf on the tri-oval for a motocross event the next week. ■



Kris Harris is the Sports Turf Manager for the Georgia Tech Yellow Jackets

WHAT'S A TEXAS AGGIE DOING WITH UGA TURF ON HIS GA TECH FIELD?

Georgia Tech Sport Turf Manager Kris Harris isn't bothered too much about what other people think. "I don't mind being the village idiot for a few months out of the year. All I care about is managing my football and baseball fields for those three or four months when it counts," Harris says. According to most agronomists, nothing Kris does should work.

"For football I go as low as I can go," he says. "We start out in May at 1/2"-7/16" and I go down from there. I keep my baseball field a little higher. We mow it at 3/4" most of the year and take it on down to 1/2" after the season."

Most sports field managers rarely mow their bermudagrass lower than an inch, and never lower than a half-inch. Kris also overseeds very heavily. "I may have 50 to 70 pounds/1000 of rye out by the end of the sea-

son on the football field here at Bobby Dodd Stadium. And usually about 30lbs/1000 on my baseball field. They have to be perfect all season long, not all year long."

The administration and Georgia Tech coaches want the field to be perfect for the spring practice game, too. "So far I've been real lucky there," says Harris. "I've never had to paint the football field green for a game yet. To keep my fields looking good I know I have

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to hold that rye until we're done with our big spring practice game in mid-April and the baseball season is over, which is usually the middle of June."

With that much rye Kris knows he's shading out his TifSport, holding it back. So when he sprays out his rye, he's got maybe 2% TifSport coverage. Maybe. "The hardest thing I have to deal with is impatience. A lot of guys can't do this because their coaches go ballistic. Mine do, too. Every year, for a month or two. That's OK with me. I just smile. I know everybody wants it to look good all the time. But you've got to choose your poison. Do you want it to look good year-round? Or do you want it to look great during the season? I'm a very seasonal guy."

Kris is a Texas Aggie. That explains a lot about his approach to life, which is a lot like his approach to grass: hard work and long hours followed by more hard work and longer

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Harris explains his management program to University of Georgia plant breeder and TifSport developer Dr. Wayne Hanna.

hours. Even as a student at Texas A&M he was putting in five days a week for the athletic department. "I worked for Leo Goertz, one of the best guys you'll ever want to meet," he says. It was Goertz who convinced Kris that he needed to look for an internship elsewhere to broaden his experience. "I'd been looking all over the country for something for the summer, and got a call back from Ed Mangun, who was in charge of Turner Field in Atlanta. I loved baseball and hate cold weather, so Atlanta was a no-brainer." Kris was more than eager to get started. "I finished a regional baseball tournament at A&M, drove all night, got to Atlanta about noon, worked the rest of the day and did the game that night."

"Ed is the best in the business, and Bob McCulloch, Ed's assistant at the time, is probably the best clay man you'll ever meet. I



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HE GOT HIS STAFF DOING THINGS HIS WAY, AND HIS PROGRAM JUST KIND OF TOOK OFF FROM THERE. NOW HE'S GOT ONE OF THE BEST PROGRAMS IN THE COUNTRY.

guess that's where I learned about never trusting anything to chance, from Ed and Bob. Back then the Braves were owned by Turner Broadcasting and we were on TV almost every night, so everything always had to be perfect." When Kris got ready to return to school that September to finish his final semester, Ed asked him if he wanted to come back to work as an assistant when he graduated. For the record, Kris graduated in December and started with the Braves two weeks later.

Harris recalls, "I really didn't have a life except for Turner Field and turf. When I wasn't busy at the ballpark I started hanging out here at Tech. One thing led to another and

before too long, Shawn Teske called and asked me if I would be interested in taking on the sports turf manager's job here. I initially turned him down. I was working on the professional level and thought that was where I needed to be."

Back to campus

Teske persisted, and finally, in 2000, Kris came to Tech. "When I look back on it now, I don't know how I kept the job. I was totally out of my league. I had too much on my plate because I was trying way too hard to make things perfect like at Turner Field. I couldn't even get everything to mediocre! My grass

was fair at best that first year. I had a lot of problems. George O'Leary kept my job for me. He literally did."

Fortunately Harris got through that first year and got things on his schedule. He got his staff doing things his way, and his program just kind of took off from there. Now he's got one of the best programs in the country.

When Kris first arrived at Tech, all of the fields were Tifway 419. His decision to switch to TifSport turned out to be more luck than planning. "I'd heard that there was a good new bermuda out, but I didn't know anybody that had it yet. I also knew that my Tifway was working OK for me. So when we decided to

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re-work the baseball field, it was pretty much a given that it would be 419 again. Even my sod farm, Turfgrass America down in Camilla, was pushing me to go with Tifway. I also knew this was a big deal, because when you put grass down, your bosses want it to look green. They've just spent a lot of money and they want to see green grass."

True to form, Kris wasn't taking any chances. He'd been making the three-hour drive down to Camilla every week for at least six weeks to check on his grass. "It was really looking good – that is, until my final visit to the farm. It was a snafu that worked out for the best. My Tifway had been scalped to all get-out and I knew that if I took it back to Atlanta and put it down on my baseball field, they'd probably fire me right there on the spot," Harris says. "So the farm manager took me over to look at their new TifSport field. It was young but I thought, 'If we can hold this stuff

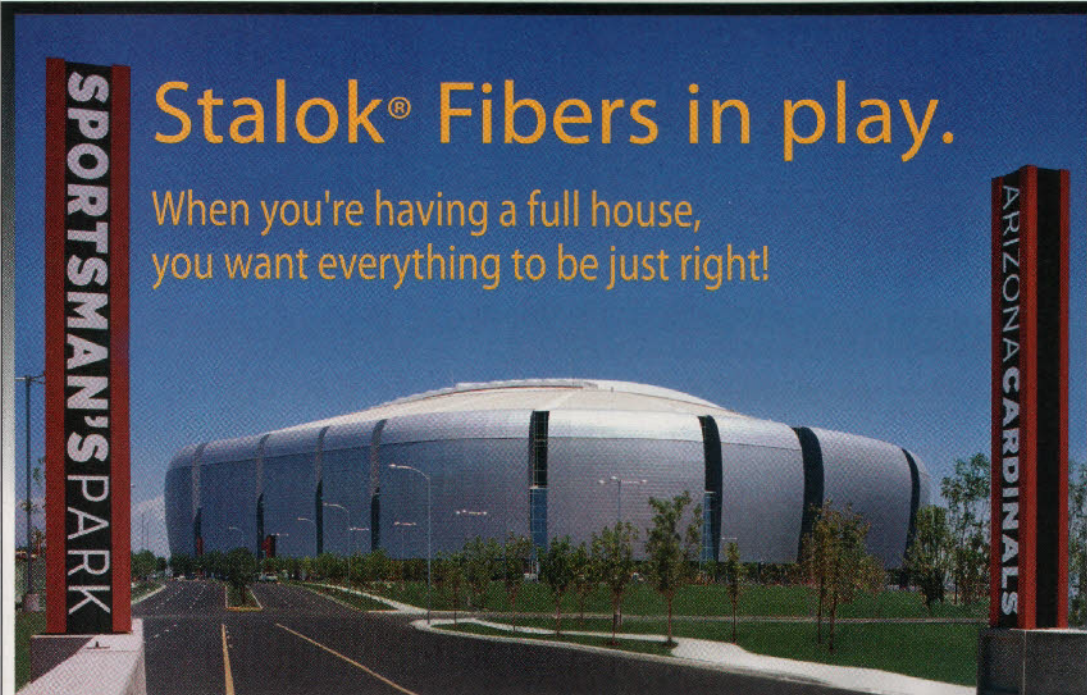
together, it just might work.' I knew I didn't want a grass that had been grown in clay, even if it was 419, and the TifSport was growing in the right kind of sandy soil. We cut it that night and started laying it down the next morning. It's amazing.

"I've got a picture I took two or three weeks after we put that TifSport down. It's of Mark Heinlein. He's with the Motz Group, and he's holding a six-foot piece of sod. I bet the roots are 12-inches deep. So I was excited. Whether it was the grass, or what I was doing, or a combination of both, something was working," Harris says.

That next summer, though, after the rye had all died back, Kris didn't like what he saw. "It was the first week of July and I thought for sure that I was going to have to re-sod my infield and hips again, but I decided to put it off until I got back from a rare two-week vacation."

Two weeks later he found that nearly the entire infield and hips were grown back in. "I was floored," he says now. "I'd never seen any turfgrass make that big of a turnaround in such a short time. So when my bosses decided that we were going to re-do the football field at the stadium that summer, I knew what I was going to do. I told Turfgrass America to cut my sod out of that same TifSport field.


"TifSport is a slow starter," Harris continues. "It needs a lot of heat before it will get going, especially in Atlanta. If your soil temperature's not where it needs to be, you've just got to play with it. When I start cutting it, I'm low, low, low. And I go down from there. When you keep it low, it's got no place else to go. It can't grow up. All it can do is grow out. We start mowing daily around here the first of May, and there's not much grass to cut then. We're basically just running the mowers over it. It's the same for all of my fields, my practice



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I KNOW I WENT OUT ON A LIMB WHEN I DECIDED TO TAKE IT LOW. BUT I FOUND OUT THE LOWER IT GETS THE TIGHTER IT GETS. AND THE MORE IT GROWS Laterally, the faster my divots fill in.

fields, my football field, my baseball field. But once I start, I do everything I can to get my bermuda up and growing. I'm aerifying at least every two weeks, and every ten days when the temperature gets above 80 degrees.

"I also pound it as heavy as I can with fertilizer for 12 to 15 weeks. I noticed that this grass will respond to different fertilizers at different temperatures, so I started playing with that," he says. "I kind of go by daytime-night-time temperatures. Between 85 and 90 degrees, it responds great to ammonium sulfate. It just takes off. We catch our grass clippings every time we mow, and I noticed we were filling up three or four buckets with clippings every

couple of days the week we'd fertilize with ammonium sulfate. Then we'd go with ammonium nitrate the next week and our clippings would start to level off. And the next week, back with the ammonium sulfate and it would be blown away. But guess what? Once you start to get those 90-degree days, it's just the opposite. Ammonium nitrate makes it rock and roll, and it doesn't really have much response to ammonium sulfate. Once I figured all of that out and the fact that TifSport likes to be low, which I think is probably the most important thing, I haven't had any major problems since.

"You can't manage TifSport like your old 419," Harris says. "I can only tell you what

works for me here at Georgia Tech. I know I went out on a limb when I decided to take it low. But I found out the lower it gets the tighter it gets. And the more it grows laterally, the faster my divots fill in."

Keeping it low

It's early September, a week away from his home opener, and Kris's height of cut is usually up to 1/2-inch by now. But not this year. "I decided that this year I'm going to try to keep it at or below 3/8 of an inch all season long," Kris tells me. He knows there could be drawbacks with this strategy. "At 3/8 of an inch you can't hide a thing. If you've got



Harris sprays his field in early September.

a little divot out there, it's there for everybody to see, because there's no taller grass around to hide it.

"I know I can always go back up to 1/2 inch if I have to. But I'm going to try to keep it at 3/8. This past week during practice it really held up well. We only had 3 divots. There might have been a few other places where it was sheared a little bit where somebody slid. But bottom line, I've still got all of my leaf tissue out there. So it greened right back up.

"Everything I'm doing goes directly against what I learned in college. Even my equipment dealers are scratching their heads. My new 3225C is a fairway unit, but it actually has 5-inch greens mower reels."

Kris will tell you that one of the smartest things he's done for his career is to figure out a way to stay in contact with the Georgia Tech coaches. "There are no two ways about it. If you're not in direct contact with the coach, you're putting somebody else between you and him. And more than likely that person can't explain to the coach what you just explained to them. Or answer questions. Because they just don't know. As a groundskeeper you're the only one who can really explain what's going on. So I made it a point to get to know George O'Leary. If he wanted to chew me out, I got to defend myself with him face to face, not through somebody else. I also really respect Chan Gailey. He is by far the best coach a turf manager ever had. He's like another father to me. He and my boss, Shawn Teske, leave me alone most of the time. They give me all the rope I need, and they trust me not to hang myself."

Kris makes it work. "Maybe I'm just in the right spot. I don't seem to have any serious problems. I don't have the disease pressures that some people have. My water is good. My soil is almost perfect now, five and a half. Maybe I'm in the perfect spot for this grass," he says.

"You have to be crazy to be in this business. If you aren't talking to your grass like an idiot you're in the wrong business."

Sam Williams provided this article. He can be reached at sgw@alltel.net. ■

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Getting it right:

where turf meets track

By Mary Helen Sprecher



Vestavia Hills (AL) High School complex, built by Sports Turf Company, Whitesburg, GA

One of the biggest challenges facing a sports field maintenance crew is the area where the field meets the edge of the track or where one type of field, grass or synthetic turf, meets the other.

On natural grass fields, problems can be caused by overzealous use of weeders, mowers, or edgers. This equipment can easily damage the track surfacing system. Granular materials that wind up on the track may cause problems, too, when they are ground into the surface, contributing to early wear.

That's not all, say industry members. There are maintenance challenges inherent in synthetic turf fields, too, at the junction of the track and field.

Robert Delmonico of RAD Sports in Andover, MA says that properly addressing this problem for synthetic turf fields starts from the ground up, literally. "When constructing a track surrounding a synthetic turf field, one of the main issues is damage to the turf when the

contractor is paving the track. In some cases, the synthetic turf is already in place before the top course of paving is placed."

This, according to Delmonico, is where the problem starts. "The issue is the confined space between the paving equipment and the edge of the turf. Often, the raker is stepping on the asphalt and can inadvertently step on the turf causing asphalt to end up on the turf, which can either burn or stain it. One way to prevent this damage is to require a person on the paving crew to stand on the turf side of the edge along the inside lane of the track and the field side of the D-areas during the entire paving process. As time-consuming and tedious as that might be, this simple step can prevent turf damage. Such damage is serious; once the turf is burned, it is extremely difficult to repair if it can be repaired at all."

Once the track is in place, says Sam Fisher of Fisher Tracks, Boone, IA it is more likely that the sports field will need maintenance than the track. Planning for field maintenance in the design phase, therefore, is key.

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"One area that I think is overlooked on most installations is an access ramp on and off the edges of the track for infield maintenance work. We've always known that natural grass fields need regular maintenance, but as everyone is now learning, these synthetic turf fields need considerable maintenance as well. They need to be groomed often. These groomers are no different than a decent-sized lawn mower."

Driving, dragging or pushing maintenance equipment over the track, says Fisher, not only can contribute to early wear of the track, it can also cause damage that might not be visible at first.

"At some facilities, the turf continues right up to the edge of the track surface. The constant on and off with a vehicle for grooming tends to compact the rock at that area. That creates a depression at the edge that

becomes so deep the machinery is actually catching on the edge of the track. In addition to the depression, eventually mud can be generated by the traffic and wear. It would be a very small task to install an asphalt ramp on both the inside and the outside for the crossing of maintenance equipment," says Fisher.

Creating a physical barrier between the track and the field, such as a flush curb, is one of the most effective ways of avoiding problems. Ed Norton, RLA, of Holcombe Norton Partners, Birmingham, AL says that the delineation will help keep maintenance equipment and the occasional person who uses it with perhaps more enthusiasm than finesse, from coming into contact with the track.

"In addition to providing the track paver an edge to work to when building the track, it establishes a maintenance line that keeps the

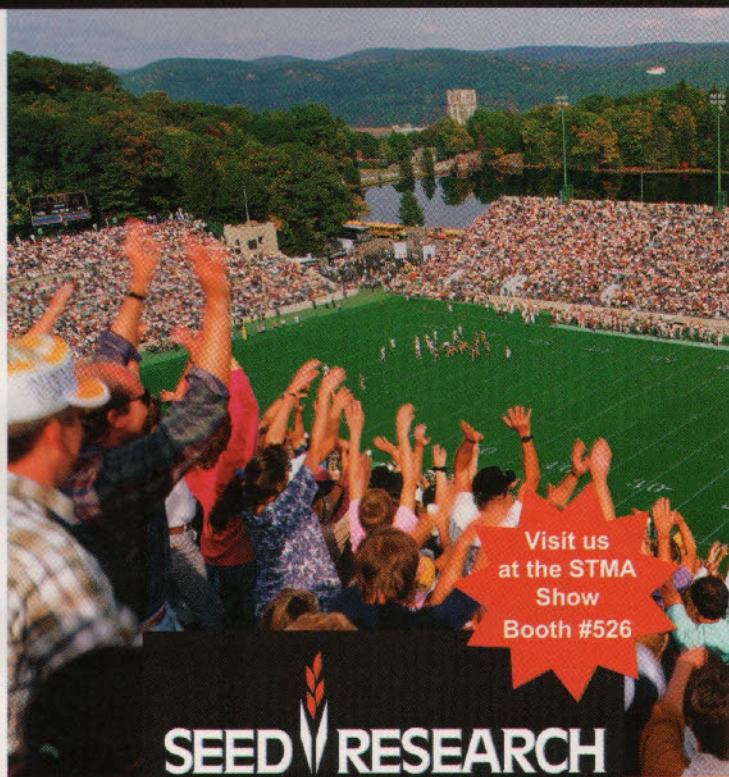
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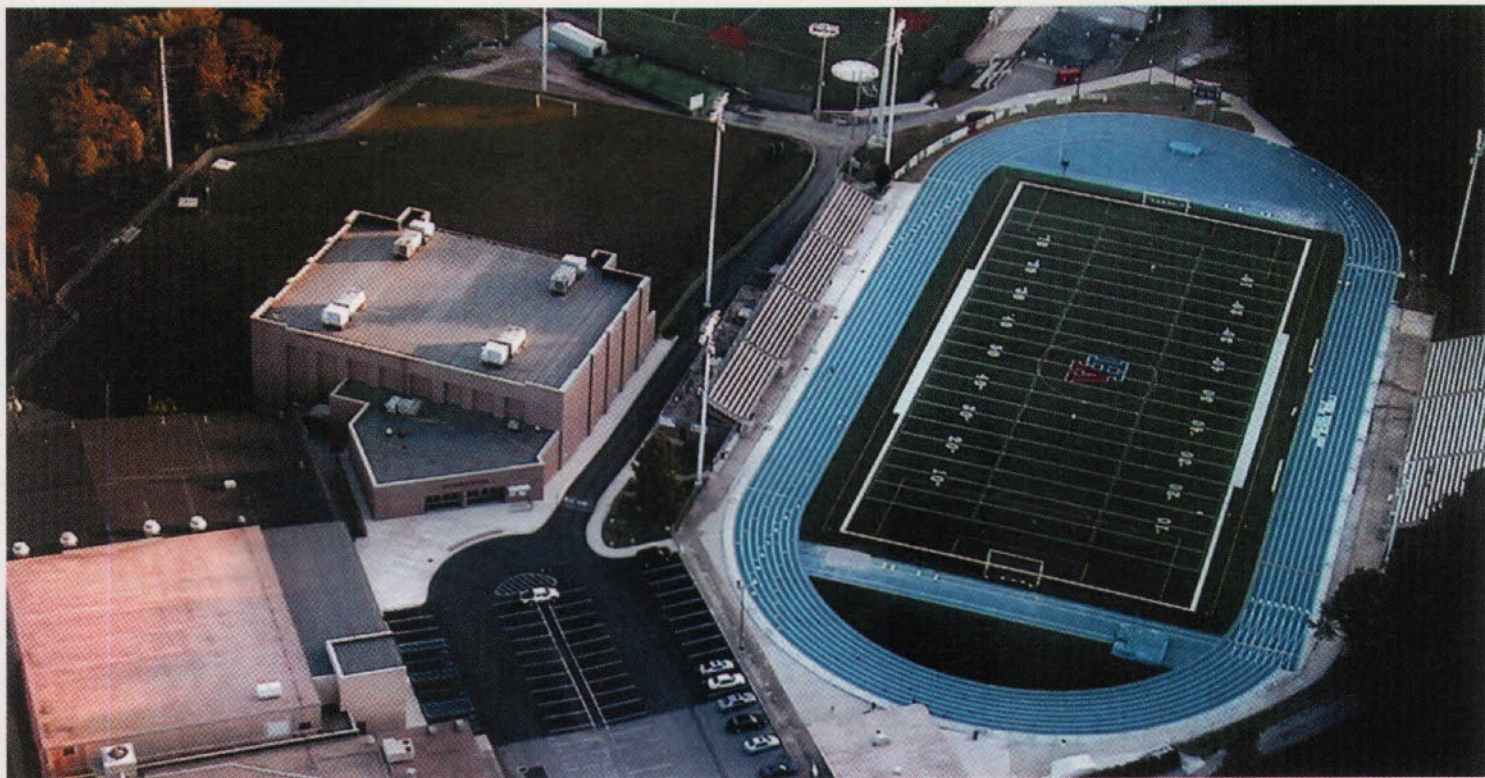
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IT IS CRUCIAL THAT THIS AREA IS CLOSELY REVIEWED PRIOR TO GRASSING TO INSURE THAT POSITIVE DRAINAGE AND A SMOOTH TRANSITION IS MAINTAINED."

mower or string edger from gouging the track surfacing."

John Huard, Jr. of the South Portland, Maine-based Northeast Turf, Hue Inc., advises clients to use a curb in order to divide the track and the synthetic turf or natural grass surface. The materials most often used to create that curbing are recycled plastic timbers, concrete, pressure-treated wood, the so-called 'U' drain, and a 'rope tuck.' Each, Huard points out, has its pros and cons.

"The recycled timbers are fairly easy to install and they do make a nice edge detail. But even installed properly, they tend to move over time and they do not take paint very well. Concrete is nice, but the drawbacks are that the shelf anchor is not consistent (very little to glue to, and the height varies, giving different exposed fiber heights) and there tend to be voids in the shelf. Since the glues that are used to anchor the turf are fairly expensive and become "fillers" for the voids in the concrete, this can get costly. Pressure-treated wood is easy to work with, but is on the lighter side for turf anchoring. The pros are in the ease of handling and installing, the cons are it tends to splinter if run over by field maintenance equipment and if unpainted; the faded color can look 'moldy'."

The typical 'U' drain, Huard says, "does a nice job of collecting water run off from the track before going onto the field, although the composites used to make them are fragile during handling and installation. Some people fail to realize or don't correctly calculate the amount of water draining off a track or coming off surrounding grandstands. All that water eventually makes its way to the field; the 'U' drain addresses this by not allowing the water to reach the field. In terms of maintenance, these drains are easy to clean with tops that come off and can be replaced if they break or bend."

The final method mentioned by Huard is the "rope tuck" method of curbing. This, he explains, "gives the flexibility to remove the turf without causing any harm to it, but this

area tends to fill in with debris, trash, leaves, pine needles and so forth. That debris is difficult to remove. We have only done one of these installs but we maintain this field on a regular basis. The edge detail takes the most time to clean because of the rope tuck."

It is important to think through the drainage issues of the field before choosing a curb type. Norton believes that thoughtful consideration of drainage issues can spare the maintenance crew and the facility users a lot of grief down the line.

"A channel or trench drain around the inside perimeter of the track solves a lot of problems. This allows the builder to utilize

laser technology right up to the drain when finish grading the field. The drain also provides a field maintenance edge away from the synthetic surfacing of the track," Norton says.

Of course, Norton says, the ever-important bottom line has to be taken into consideration, since a channel drain system is one of the more costly installations. "The alternative to a channel drain," Norton says, "is a series of drain inlets around the outside of the field. The builder can laser-grade the field itself, but will have to hand work around the inlets and up to the edge of the track. It is crucial that this area is closely reviewed prior to

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IMPROBABLE THOUGH IT MAY SOUND, THE SEED OFTEN TAKES ROOT IN THE INFILL OF THE FIELD, CREATING AN ADDITIONAL CHALLENGE TO THE MAINTENANCE STAFF.

grassing to insure that positive drainage and a smooth transition is maintained."

How the surrounding surfaces are maintained, says Huard, and what effect maintenance has on the turf has to be considered closely. "The number one maintenance issue I see from in connection with synthetic turf fields surrounded by natural grass areas is the direction of the mower discharge. If the synthetic field is separated from a natural grass area by only the curbing, the maintenance staff mowing the lawns tends to blow the discharge onto the turf, introducing unnecessary foreign debris that needs to be removed. By simply discharging the mower away from the synthetic field, the maintenance staff can reduce the amount of debris they need to remove from the playing surface."

Huard also sees problems in cases where freshly spread grass seed finds its way into the edges of a synthetic field. Improbable though it may sound, the seed often takes root in the infill of the field, creating an additional challenge to the maintenance staff.

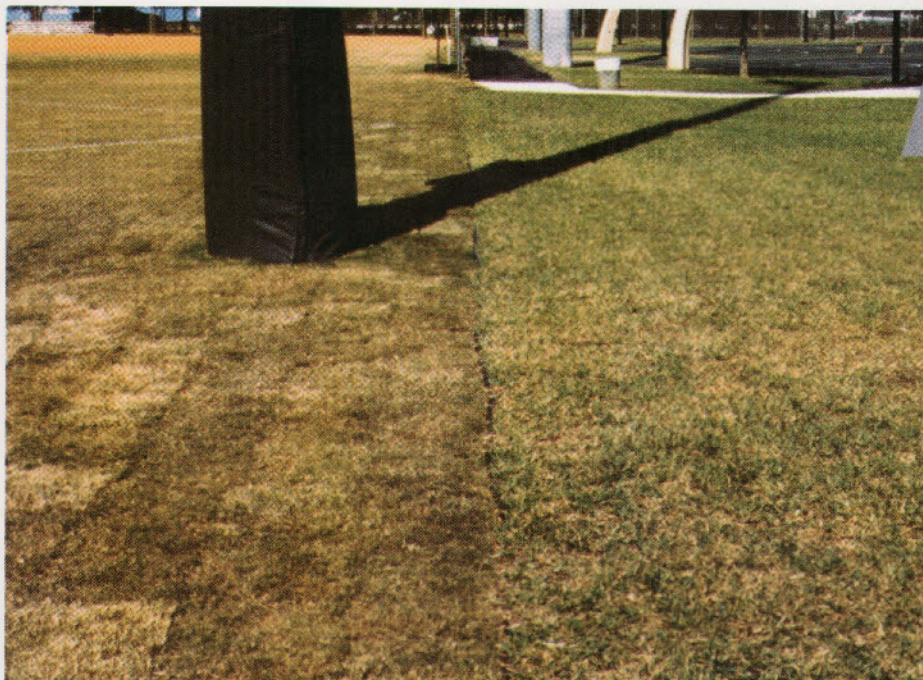
Water, either from irrigation systems or from rain, can carry seed and other contaminants onto a synthetic turf field or onto a track, according to Sam Fisher. It happens naturally, but there is no reason to tempt fate by carrying watering to extremes.

"One of the biggest problems we see across the country with the natural grass fields is the desire to water (and in some cases almost flood) the grass to the very edge of the track. The drainage is not adequate to handle all of this water and asphalt stripping begins to take place. It is nearly impossible to design a sprinkler head that is going to hold a perfect edge when spraying water and, of course, wind will move that water such that the track is inundated on a consistent basis."

With proper placement of irrigation equipment, says Ed Norton, the potential for problems can be minimized.

Mary Helen Sprecher wrote this article on behalf of the American Sports Builders Association. See www.sportsbuilders.org. ■

John Mascaro's Photo Quiz



If you would like to submit a photograph for John Mascaro's Photo Quiz please send it to Turf-Tec International, John Mascaro, 1471 Capital Circle NW, Suite # 13, Tallahassee, FL 32303 or email to john@turf-tec.com. If your photograph is selected, you will receive full credit. All photos submitted become property of *SportsTurf Magazine*.

Answer: from page 28

The black line between field and common area of this newly sodded sports complex was actually plastic landscape edging. This edging was inserted between the bermudagrass athletic field and the St. Augustine grass common area as a barrier to keep the bermudagrass from invading the St. Augustine grass. The original plan for this area was to have the sidewalk intersect these two areas creating a walking path and also a barrier for the different varieties of grass. In an attempt to save money, the city decided to eliminate the sidewalk. In its place, a contractor inserted the plastic landscape edging to keep the different grass varieties separate. This is a good example of how changing one small detail on paper does not necessarily translate well on turf. Interestingly enough, the city eventually ended up installing the sidewalk that was in the original plans, which solved the problem of keeping the two varieties of grass from encroaching and continued the walking path around the ball fields.

Thank you to Loren Matthews, Director Parks and Recreation Department at the Village of Pinecrest, for allowing me to take this photograph. ■