

Team, which includes Tom Brown, Irrigation; Mike Lieker, Landscape; Eric Farr, Certified Chemical Applicator; Jim Meyer, Mechanic; and Steve Moore, Traffic, Safety and Playground Technician. Jim Wilson, Assistant Grounds Supervisor, heads up the Sports Facility Team, which includes Dennis Martin, Brenda Wade, Dan Moore, and Victor Mutunga. The Mowing Team includes Joe Golden, Steve Caldwell, Bill Turner, Khalid Nawaz, Bill Dickinson, and Gary Rutledge.

Together this group is responsible for some 800 acres of property including all of the lawns, landscapes, playgrounds, roads and parking lots at 30 schools. Athletic areas include 8 varsity stadium fields, 26 high school practice fields, 8 middle school competition football fields, 9 other middle school practice fields, and 24 elementary athletic fields. Of those 75 fields on 119 acres, 52 fields on 80 acres have centrally controlled automatic irrigation, 36 fields on 60 acres are Bermuda turf, and 15 fields on 30 acres are sand based rootzones. Our crew performs all maintenance and most construction work, including irrigation design and installation, dual slope laser grading, and turf installation. Having this capability in-house allows flexibility in renovation timing and keeps construction and renovation costs minimal.

SWIDAC football field maintenance is fairly easy and relatively inexpensive. In February-March, a low rate of Roundup is applied to control grasses and poa. In April, we mow to 1/2" and apply a balanced soluble fertilizer. May calls for 3/4" mowing every 5 days plus a 1-lb. application of slow release N and K.

June-August is busier with 3/4" mowing every 3-4 days, monthly aeration and sand topdressing, 1-lb. N urea every 21 days, and a Revolver application for cool-season grass control in July, if needed. The grass gets taller in September with 1.5" mowing every 4 days, 10-20-20 fertilizer, and Roots Standup every 7 days. October means a 2" mowing as needed and another 10-20-20 application. If we have an early frost or November playoff games are likely, we will topdress lightly and paint the field green to make the white lines, numbers and logos look brighter on the rapidly browning turf.

#### Winterkill 2004

Although we have been growing and transplanting our own Bermudagrass since 1996, we had not suffered significant winterkill until January 2004. We knew we had a major problem when turf areas from the size of a truck to entire fields were not showing signs of greening by mid-May 2004. By early June, it was clear that we had lost more than 20 acres of turf on 31 fields, including about 60% of the SWIDAC field. Turf loss like this would be catastrophic for most organizations, but for our crew, it was just an inconvenience.

Fortunately, our turf farm was healthy and green. Field usage schedules were modified. The crew worked tirelessly, harvesting and hauling some 40,000 bushels of sprigs and planting 2-3 fields per day until we finished in late June. All turf was re-established and all fields were back in service by late August 2004.

The Switzer District Athletic Complex is not only a shining star for the Blue Valley School District but also a source of pride for the Grounds Services Department. I thank the STMA for recognizing the extraordinary efforts of my staff in providing the students and patrons of the Blue Valley School District with safe and aesthetically pleasing playing surfaces. **ST**

*Jody Gill is the Grounds Coordinator for the Blue Valley School District in Overland Park, KS.*



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# Advice on mowing stripes and patterns

SPORTSTURF asked several prominent turf managers to answer questions on how they stripe their fields. Here are some of the responses:

## Trevor Vance, Kansas City Royals

**ST: In your opinion, what are the most important things to know about mowing designs on baseball fields?**

**Vance:** The field is the backdrop of the game. You want it to look crisp, sharp, and professional. Don't take away from the game; the fans come to see the players, and after they say, "Wow!" when they first see the field, you don't want them talking about it any more. You want your field to be beautiful but not "loud."

Get comfortable with your mower first. Start simple; cutting a straight line isn't as easy as it looks. Maybe start by cutting 1/2 circles; then you can't tell if your lines are not straight. Don't repeatedly go over a line trying to get it straight though.

**ST: How do you mow a straight line?**

**Vance:** Find a point ahead and stay focused on it, then go for it. It's not easy, as I said. Hopefully your foul lines are straight, so start there, cutting along the line first, then try and follow that straightness. If you mess up, you can fix it the next day.

**ST: What equipment do you use to stripe?**

**Vance:** We use a triplex 3-reel 2653 mower in the outfield and sometimes in the infield. We also use a walk-behind 26-inch greens mower, which stripes wider so you make fewer passes.

We vary our cuts, using a different pattern every homestand. What pattern is chosen depends on weather, time of year, and length of the homestand. A shorter one we might just have a center cut; longer, we crosscut different direction every day so we don't put a grain into the turf.

**ST: Do you have to make adjustments in your maintenance schedule to mow designs? Time of day, height of cut, etc.?**

**Vance:** In the heat of summer we cut lots of 1/2 circles so we don't have to be so exact.

## Barney Lopas, Anaheim Angels

In his 9th year in Anaheim, Barney Lopas keeps it simple. "We cut a line from home plate directly to where each of our players stands, and we keep it that way throughout the entire homestand," he says of his infield mowing pattern.

"When the team's gone, we mow in different directions, but 5 or 6 days before they are back, we starting burning in the old pattern," Lopas says.

Lopas doesn't always keep it simple though. His post-9/11 American flag was a masterpiece, as was the tribute "26" cut into the outfield to honor long-time Angels owner Gene Autry after he passed away. The number refers to Autry's status as the "26th man" on the roster, says Lopas.

For three seasons Lopas and crew mowed the outfield with walk-behinds but now have some nine-blade triplex mowers from Jacobsen for the outfield, as well both Jake and Toro walk-behind models. He uses them all to create his stripes.

Lopas says if you're just starting to cut some lines into your field, use string lines to centerfield or a foul line, then mow three lines, mow them back again, before moving on to three more lines, and so on. "Pick a point on the fence and head straight for it. Once your lines are mowed in, it's a piece of cake from there," Lopas says. "Even I could do it!"

## Collin Castille, Houston Astros

**ST: In your opinion, what are the most important things to know about mowing designs on baseball fields?**

**Castille:** Knowing what your grass is capable of doing is the most important. What will the grass look like when you put a particular pattern in? How many times do you have to mow in order to get

the grass looking the way you want it (or how long does it take to get an old pattern out).

**ST: What equipment do you use to stripe?**

**Castille:** We use mowers with rollers on them. Our walk behind, which we use for the infield, is a reel mower with a small roller in the front and a large drum in the back of the cutting unit. Our outfield unit has three reels on it, also has rollers in front and in back of the cutting unit. These rollers do very good jobs and produce what we are looking for.

**ST: Do you have to make adjustments in your maintenance schedule to mow designs?**

**Castille:** No, we are fortunate that we do not have to make any adjustments to our program in order to create a pattern on our field. Our grass stripes up nicely. The only drawback to our field is that we have to cut our grass pretty low. In order for us to get a pattern to look very good we have to mow it at least five times in order to make it look good. If we ever wanted to do something with high detail we would probably have to mow it more than five times.

**ST: Any other advice for those who want to mow patterns on baseball fields?**

**Castille:** Keep your patterns simple and clean. Don't have more than one pattern in at a time. **ST**



## TOPDRESSER FOR PROGATORS

Specifically designed for the John Deere ProGator 2020 and 2030 utility vehicles, the TD100 Top Dresser is made of galvanized steel hopper that resists corrosion and is supported by a steel frame for strength. A fixed-speed nylon/polyester cord, endless conveyor belt moves material under the metering gate and through a rotating brush for even distribution. The conveyor belt and rotating brush are powered by a hydraulic motor that operates off the ProGator hydraulic system.

John Deere/800-537-8233

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Smithco/877-833-7648

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## "TURF TENDER"

Dakota Peat & Equipment has introduced the 414 Turf Tender to its topdresser product line. Built at the request of customers, the 414 features a 4-yd. hopper and is designed to spread any type of material needed for turf maintenance. The 414 features an electrically controlled hydraulic system that allows you to control spinner speed and belt speed from the tractor seat for "on-the-go" spread pattern adjustments.

Dakota Peat & Equipment/800-477-8415

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### TOPDRESSER HYDRAULIC KIT OPTION

The Ty-Crop ProPass 180 low impact broadcast topdresser now offers an optional self-contained engine powered hydraulic pump and reservoir. The unit can be towed behind many types of vehicles, regardless of their hydraulic capabilities, which means you can share the topdresser without sharing the tow vehicle. Units feature light foot print, accurate spread pattern (so there's no need to drag or brush in afterwards), and gives you the versatility to spread a variety of materials at varying widths and depths.

Ty-Crop/800-845-7249

For information, circle 066 or

see <http://www.oners.ims.ca/4572-066>



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Redexim Charterhouse introduces topdressers to its line of turf maintenance equipment. Most models use hydraulics to power a permanently self-aligning conveyor belt, delivering the wet or dry material directly to the rotary brush, which can deliver a variety of materials, including sand and rubber infill mix, for a spread up to 1/2-in. thick in one pass. The Easy Spread model is a low cost solution that can be used with a variety of materials, spreading as much as 8 tons in one day using a single operator.

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# Have you changed your filters lately?

BY **TONY STRICKLAND, CSFM**

**C**ommon sense tells us that changing filters is important. Consider, for example, the oil and fuel filters of the engines we use to perform work that determines how we are looked at professionally. Would any of you consider reusing the old filters? I have been told that using the old filters leaves the dirtiest

material in the system which will, with time, clog the filters to the point they cease to function.

No, this is not another equipment maintenance checklist (nor is it a recommendation to check the filters of your lives although it is wise to do so periodically.) This is about the use of "Filter Fabric" and "Socked Pipe" in athletic field construction.

"Filter fabric" filters the water that is to flow into the pipes under it or adjacent to it and the sock on the "Socked pipe" is used similarly. How can we allow a filtration system that cannot be changed economically to be installed at the showplaces of our profession? This is a great characteristic if you want to prevent the subsurface from mixing with the soil profile!

Let's face it, filters do and will clog and if by its own definition filter fabric does its job, which I don't doubt, how many filtration processes can they perform before they become impervious to even the smallest molecule? Even with the most pristine conditions with the best engineering and using USGA approved sands, the installation process of these systems will generate some amount of fines that will be filtered out of the water to prevent the pipes from clogging. Now, take in account the activity of the sport on the field, the cultural practices of the sports field manager, aeration produces fines, traffic of any kind produces fines, organics

from the roots produces fines and some fines come from fertilizers. Granted some of these are minute particles and some may pass through the fabric but how long does it take before the smallest particles start to bridge across the pores in the fabric?

I have personally experienced this problem. One morning, I walked out on the field at a minor league facility. Though it had not rained in 24 hours, there was an 8-12 inch layer of water covering the most of the outfield and very little water

coming out the out-fall of the drain pipe. This didn't make sense.

"They" (the local municipality) said the field was just three months old and had been constructed in-house using the labor of prisoners from the local jail. They reported the field had subsurface drainage and a sand base profile from a reputable local source. I asked the engineers who had surveyed and managed the installation of the sub-surface drainage system to come onsite to locate the drain lines for inspection. We not only found the sand to be improper but the pipes also had a "sock" on them. After the engineers and I observed the separation and sedimentation of the sand layer, which created a gunky thick ooze at the transition from sand to gravel and restricted the rapid percolation as you would hope for, we also

noticed no water movement into the gravel surrounding the socked pipe. I then scratched through the gravel to find the pipe, still no water movement; I then decided to cut the fabric and only then did the water create a vortex that would be the envy of the "Tidy Bowl Man."

My crew and I spent the rest of that season removing the twenty or more drain plugs across the field after every rain just to get the water off the field, not to mention chasing the waterfowl off. We still lost 14 home games that year while the sun

