

Now that we know the basic principles behind how the FWI works, we need to transform the results into information we can use.

Step 1: I apply this information during the winter. Before the growing season starts I sit down and record the various events that will take place on a field for the year. You can use your past records for when sports are scheduled to be played, when team practices will be held and so on. I record all of this information on a preseason FWI yearly log (see Figure 1).

Use one sheet for each of the fields you plan to track the activities on. Figure out the AWIV for each event and then add the last column to get a yearly AWIV at the bottom. You can also chart the AWIV by the month if you wish. Next, compare your yearly AWIV with the activity rating at the bottom of the form. This number will prescribe the amount of maintenance you should be doing to keep your field in a healthy condition. Each of

these maintenance levels will be discussed in further detail shortly.

Step 2: During the course of the growing season I keep a FWI monthly log sheet for every activity that takes place on the field and for every month during the growing season. I keep a running total of the monthly AWIV and compare this number with the number I calculated on my preseason FWI yearly log, using the monthly breakdown I calculated. If the AWIV number is higher than the AWIV number on the preseason log sheet I can adjust the level of maintenance upward to anticipate the increased use of the field. I can also adjust the level of maintenance downward if the numbers show a decrease in field use.

As you use this system year after year the calculating of the preseason FWI yearly log becomes easier because you have the FWI monthly log sheet from the previous year to use. If you put the preseason FWI yearly logs

and the FWI monthly log sheets in a spreadsheet program the calculations are much easier to do.

It becomes quite easy to adjust your maintenance program swiftly using the FWI.

Activity rating

The activity rate shows what maintenance is prescribe for your calculated AWIV value. The maintenance schedule is as follows:

Level 1: Light maintenance: equal to or less than 250 AWIV a year. Perform one or two hollow core aerations a year.

Level 2: Light to medium maintenance: 251-300 AWIV a year. Perform between two and four hollow core aerations a year and one topdressing a year.

Level 3: Medium maintenance: 301-350 AWIV a year. Perform hollow core aeration once a month, one deep tine aeration a year, one topdressing a year, and one overseeding a year.

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Level 4: Medium to heavy maintenance: 351-400 AWIV a year. Perform hollow core aerations once a month, two deep tine aerations a year, two top-dressings a year, and two or less over-seeding a year.

Level 5: Heavy maintenance 401-450 AWIV a year. Perform hollow core aerations once a month, two or more deep tine aerations a year, or one deep tine aeration and one deep hollow tine aeration a year, two or more topdressings a year, two to four over-seeding a year, and field repairs, for instance, plugging or minor sod repair.

Level 6: Renovation more than 451 AWIV a year. Perform hollow core aeration once a month, two or more deep tine aeration a year, or one or more deep tine aeration and one or more deep hollow tine aeration a year, two or more top-dressings a year, overseeding once a month, and major field repairs by plugging and sodding large areas of the field.

The numerical ranges of the activity rating

are for Kentucky bluegrass. Use the species modifier if you have a different species of grass on your fields.

Species	Multiplier
Kentucky bluegrass	1
Perennial ryegrass	1.25
Bermudagrass	1.5

Use this multiplier to adjust the numerical range of the activity rating.

Some things you should remember: Not all fields are created equal, and each field is unique in its character. The impact an activity will can have on a field with a heavy clay native soil rootzone will be different than a field that has a sand-based rootzone. Be aware of the characteristics of each of the fields you manage. The Index gives you detailed information of the wear taking place on your fields, by activity; this will allow you to plan an appro-

priate maintenance regiment. This Index's information can also be used to calculate a maintenance budget for your fields.

The important thing to remember is to be proactive; the FWI should not be used as a replacement for walking your fields daily. On the contrary, the FWI is more effective when you do walk your fields daily. Use the index as another tool in your turf management tool box. ■



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*There must already be a national sports turf manager from your facility or commercial member from your company before you may sign up in the Associate category.

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Jacobsen Groom Master II

The Groom Master II from Jacobsen combines great ergonomics, plenty of power and unparalleled maneuverability into one productive machine. With a standard series-parallel 3-wheel drive traction system that does not slip on the loosest infield dirt or bunker sand, the Groom Master II is available with either a Briggs & Stratton 18-hp gas engine or a 19-hp, 3-cylinder Kubota diesel. Featuring power steering, a tilting steering wheel, a 12-volt accessory power outlet and a redesigned hydro pedal, the Groom Master II is both easy to operate and comfortable to drive. Several attachments available.



Jacobsen

For information, fill in 054 on reader service form or see

<http://www.oners.hotims.com/14676-054>

Deere 1200A field rake

The three-wheeled self-propelled John Deere 1200A bunker and field rake features superior traction, low-maintenance, and safety. Its 10-hp, air-cooled Kawasaki engine and muffler and cowling design delivers efficient and quiet operation. With an improved braking system, high-back adjustable seat and steering that requires 40% less effort, the 1200A is easier to handle. The front blade and the cultivator/scarifier have a spring-assisted lift with ergonomic handle. The 1200A also has standard power lift for rear attachments; simply flip a switch to raise and lower the rake.

John Deere

For information, fill in 055 on reader service form or see

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Toro

The new Infield Pro models feature the new Quick Attach System that allows you, in less than a minute, to switch from among 21 different attachments, without tools. Front attachments include: Hydraulic Flex blade, Manual Blade, 60-in. Blade Extension, Lip Broom. Mid-Mount attachments include: Weeder Tine Toolbar, Spring Tine Toolbar, Solid Tine Toolbar, Scarify/Level Blade. Rear attachments include: Utility Box, Nail Drag, Tooth Rake, Spring Rake, Grooming Broom, Finish Grader, Spiker, Drag Mat Carrier, Steel Drag Mat, Coco Drag Mat, Debris Blower, Hitch Kit.

The Toro Company

For information, fill in 072 on reader service form or see

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Beacon Nail Drag

A tool that is built for punishing work, the Beacon Premium Nail Drag is constructed with welded steel for stiffness and durability. You will find this to be the best performing, most durable, daily grooming machine ever!

Beacon Athletics

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John Mascaro's Photo Quiz

Can you identify this sports turf problem?

Problem:

Irregular brown areas on turf

Turfgrass Area:

High school baseball right field foul line area

Location: Oregon

Grass Variety: Perennial ryegrass

Answer to John Mascaro's Photo Quiz on page 41

John Mascaro is President of Turf-Tec International



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TOOLS & EQUIPMENT

Redexim

Redexim Charterhouse manufactures a 73- and a 95-in. version of their Verti-Broom for infield grooming.

The highly effective triangular arrangement of the brushes, along with the stiff, long wearing poly-bristles quickly and efficiently brush infields to an even and level finish.

Redexim Charterhouse

For information, fill in **068** on reader service form or see

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all over the world are now being groomed regularly with Bannerman groomers. The Ballpark-4, Ballpark-6, and Diamond Master groomers are ideal for working in soil conditioners and amendments. A valuable sportsturf management too. Designed for three point hitch mounting on any tractor from 17 horsepower and up.

Bannerman

For information, fill in **071** on reader service form or see

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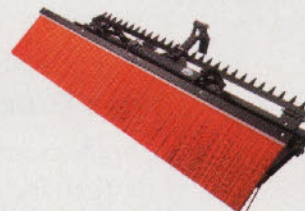


Ball Field Finisher

Broyhill's Ball Field Finisher ensures top-quality pattern definition for all types of soils with its 12 x 2-in. diamond grooves. The standard flip-up scarifier and 45 degree back slope level bar allows for easy grading, surface break-up, or landscaping. The unit can quickly be attached to and detached from various turf vehicles.

The optional electric 2-point lift raises or lowers attachments on the rear of the vehicle for easy use and transport.

Broyhill For information, fill in **057** on reader service form or see <http://www.oners.hotims.com/14676-057>



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Athletic Field Groomer

The B200 from Kromer is the only athletic field maintenance machine on the market today that grooms, conditions, sprays, applies dry lines or wet lines, and will cut and paint a line at the same time. Available with 32 attachments and ULTRA PRESSURE painting. Never paint the same old line again; use up to 50% less paint and produce crisp, sharp lines with no overspray.

Kromer Company

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Quadraplay one-pass system

For infield grooming, SISIS recommends the QUADRAPLAY system, fitted with rake/lute/roller/brush, and for renovation work, a spiker-slitter/grooming rake/roller/brush. The Quadraplay has a frame incorporating a carrying platform to carry hand tools and materials. Implements can be arranged in any sequence and are independently adjustable. The same range of implements can also be used on turf areas, making the QUADRAPLAY a very flexible implement.

SISIS North America

For information, fill in 059 on reader service form or see

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Infield Drag Pro groomer

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George Mason TRIUMPHS in College Softball competition



Congratulations to George Mason University, Fairfax, VA, and its field grounds crew for winning the 2007 Sports Turf Managers Association's College Softball Field of the Year Award. Led by Josh McPherson, a Michigan State product whose early mentor was Boyd Montgomery, CSFM, last year's Harry C. Gill Memorial Award recipient, the crew includes Clint Steele, David Quinn, and Matt Carroll.

As director of turf management since 2005, McPherson oversees 18 acres of NCAA and recreation sports fields, as well as the 70-acre west campus complex. The winning field features Tuffcote bermudagrass overseeded with 10-15 lbs/1000 sq. ft. of Sunrise Primo ryegrass blend in a loamy sand mix rootzone.

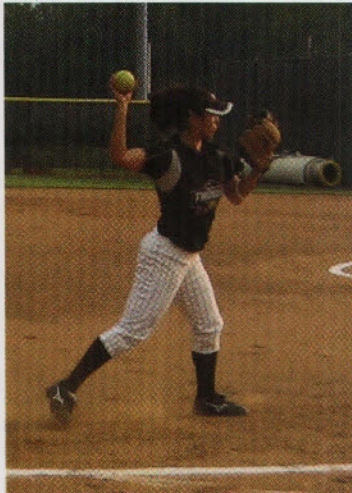
McPherson says when he first started managing the softball field it

was difficult to line up the foul lines with the poles and home plate; after measuring he discovered the bases and plate were off. So in the winter of 2006-2007 he and his crew fixed the problem, and also tackled the mound, which McPherson said had a hole after every game that would fit a basketball.

The mound area was excavated and rebuilt (using Hilltopper clay) and held up well the following season.

Due to tarp holes and the slope of the field, McPherson says sometimes they have to remove a lot of water from the field by digging holes, pushing the water into them, then pumping out the water. "We take pride in not canceling any games due to field condition," he says.

"We always have had difficulty managing this field in summer because there are only five irrigation heads that run through the center of the field and trees shade most of centerfield," McPherson says. "It was hard to get



George Mason in addition to practicing at the facility twice a week, and of course summer camps were also scheduled. "Many days the field was in use from 8 AM to 10 PM," McPherson says. "It was hard finding time to mow not to mention all the other maintenance needed."

"I was very proud of my staff; it's not easy giving up a summer for a rental group," he says. "But the team was appreciative of the effort; in fact, they collected enough money to pay for three of my staff to fly to Wisconsin for the championship games (which the Glory won)."

McPherson credits Clint Steele for the condition of the softball field. "I gave him a goal to get the field into shape and he did that, 'and then some'."

McPherson interview

SportsTurf: What channels of communication do you use to reach coaches and users of your facility? Any tips on getting good cooperation?

McPherson: One on one contact works best for me. In season I try to meet with the coaches several times a week. When they are out of season I talk with them less frequently. I also try to communicate with the same person on the coaching staff. When I communicate with different coaches sometimes you get different answers, so one point of contact is crucial.

green grass along the warning track and skin, which most summers didn't matter but last year our schedule picked up tremendously."

The National Pro Fastpitch league's new Washington DC franchise, the Glory, played 29 games at

SportsTurf: How did you get started in turf management? What was your first sports turf job?

McPherson: As a horticulture major I was required to take turf management at Michigan State. As soon as Trey Rogers started talking about the World Cup Silverdome project I started getting interested in sports-turf. I met my biggest influence, John Sorochan, later that week; he was a graduate student at MSU back then. His excitement and passion for

turf management left an impression on me. My first sports turf job was for Boyd Montgomery and Brian Hall at Pacesetter Park in Sylvania, OH. I later improved my skills as a turf manager at Virginia Tech with the help of Erik Ervin, Mike Goatley, Casey Underwood, and Jason Bowers.

SportsTurf: How do you balance your family life with work demands?

McPherson: When I first started at Mason I struggled with this. I was working many more hours than I should have. I put an emphasis on hiring more full time help, and was able to add

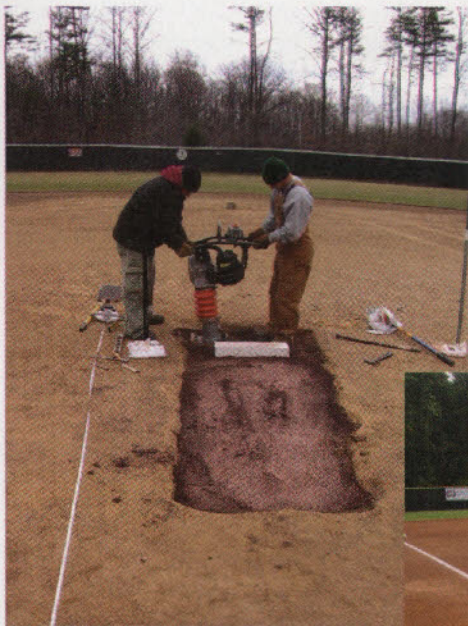
two more employees. This helped tremendously, especially in the spring season. It allowed flexibility with my employees to get some weekends off, especially for important weekends (weddings, birthdays, etc.). My wife Mindy is very understanding; she always puts it in perspective for me telling me it is just grass. I have a quality staff that can handle everything while I am gone and not have to call me. I have to thank David Quinn, Clint Steele, Matt Carroll, Mike Nunnally, Josh Richards, Elon Backer, and Tyler Youngs for everything they do. They are the reason everything looks so good here at Mason.

SportsTurf: Do you plan any adjustments, large or small, to your maintenance plan in 2008? Did you purchase any new equipment or product for this year?

McPherson: We are constantly experimenting with irrigation. I am currently working with Virginia Tech on ET-based irrigation. We want to see how little irrigation we can use and still have



FIELD OF THE YEAR



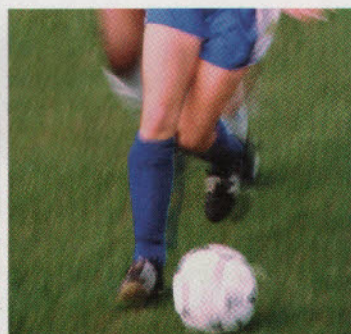
a great playing surface. I started using Polyon fertilizer last year and was very happy with its performance so I am going to adjust that slightly this year. I am also playing around with T-3 tetraploid ryegrass on my rec sports fields. I would like to purchase a turf vacuum and a mower this year. The vacuum would allow us to aerate more often.

SportsTurf: What's the greatest pleasure you derive from your job?

McPherson: I love when people ask me if my fields are artificial or not. I know I have done a good job when they look and cannot tell if it is real or fake. Most of them can hardly believe that they are real and want to know if they can touch the field to confirm it. I also get pleasure from the athletes telling my staff how much they enjoy the fields.

SportsTurf: How do you see the sports turf manager's job changing in the future?

McPherson: Being environmentally friendly is very popular right now and I think we as turf managers need to show how we help the environment, not hurt it. We need to educate ourselves to see if there are things we can do differently to be more environmentally friendly. We need to be better prepared to answer questions like these in the future and be able to defend our industry. ■



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that can stand up to the stress and demands of big-time sports, to the wear and tear from the cuts, starts and sudden stops you get from football and soccer cleats, to the punishment of baseball spikes, relax, you've found it - TifSport. It's what many experts are calling the new standard in sports turf for the 21st century. For more info and a list of licensed growers visit our website or call 706 542-5640.

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