Prepping soccer fields for fall

BY KEVIN VOS, CSFM

We begin getting ready for our fall season as soon as our spring season is over, which is at the end of June after four weekends of tournaments. The fall season kicks off the first weekend in August with a 4-day soccer tournament. That leaves us only a few weeks to get things ready.

The fields are thoroughly inspected for worn spots, low spots and anything else that needs to be changed or improved.

All fields are topdressed with 100 percent sand at approximately 1/8 inch thick, and low spots are leveled.

Deep tine aerification is done on the first of July after topdressing with 3/4-inch solid tines to a depth of 8-10 inches. Core aeration is also done over all fields in the middle part of August and again in late October/early November. During the remaining fall season, the high-use areas are aerified with solid tines approximately every 10-12 games or after a tournament.

Areas showing some wear and tear are slit seeded with Kentucky bluegrass at a rate of 2-3 pounds per one thousand square feet going in two to three directions. Seeding is done throughout the fall in high-use areas by slit seeding, divot mix or broadcasting. Either Kentucky bluegrass or perennial ryegrass is used, depending on the amount of wear and time of the year.

Depending on a mid-season soil test, the following applications are made for the remaining fall:

- Sand-based fields—equal parts of granular nitrogen and potassium applications are applied approximately every 14 to 21 days. Roots 1-2-3 nutrient package is applied every 21 days; Iron is applied as needed.
- Soil based fields—equal parts of granular nitrogen and potassium are applied at a rate of .5 pounds per one thousand square feet approximately the first week of July, a 20-0-20 slow release granular fertilizer is applied at a rate of one pound per one thousand square feet approximately in mid-August, a 25-3-10 slow release granular fertilizer is applied at a rate of one pound per one thousand square feet approximately the end of September, and a 40-0-0 dormant granular fertilizer at one pound per one thousand square feet. Roots 1-2-3 nutrient package applied twice in the fall.

Fields are mowed a minimum of three times per week at 1 3/4 inch height. Fields are mowed every day of the week preceding and during tournaments.

The irrigation system is rechecked for proper distribution, soil moisture is continually monitored for either sand-based or soil-based fields. We try to apply 1-1 1/2 inches of water per week of rainfall and irrigation.

We follow IPM practices for pesticides, and applications are only made if needed.

Fields are then laid out according to the age level of the user group, and painted as needed with a growth regulator added to the paint.

Kevin Vos, CSFM, is athletic facilities manager, Muscatine Soccer Complex, Muscatine, IA.
University favors slitting approach

Like many universities, Southeastern Missouri State University knows all about sports fields. The school maintains two practice football fields, two practice soccer fields, a football field-sized band practice field and a softball field. And Dennis Koeberl, the grounds crew foreman, is in charge of keeping these fields consistently safe and playable. That means Koeberl knows the ins and outs of overseeding.

For the past two years, Koeberl has retired on a Redexim Charterhouse overseeder called the verti-Seed, and he couldn’t be happier. "Every time we used our old machine, it would end up tearing up the soil too much," he says. "The blades actually pulled up the Bermuda runners, making a mess of things. We couldn’t afford to disturb the soil on those practice fields."

The problem was exacerbated by the fact that the university wanted overseeding done on other areas around campus (for seeding fescues) including new intramural fields and highly visible common areas. "I was worried about the possibility of damage from that overseeder," Koeberl adds.

The school’s new Verti-Seed seemed to answer their overseeding challenges. "This one slits open the sole, drops the seed right into the hole and then covers it up. We can put a lot more seed on in only two passes and it’s a lot faster, and no other machine does this." Koeberl notes that the old seeder required several passes to cover a given area with sufficient seed. "The Verti-Seed saves us a great deal of time, so we can spend it on other, more important jobs around campus.”

-Jeff McGinnis
It is a standard turf manager problem: how to achieve an established, healthy turf covering that is consistently dense on areas that get worn out by hard wear, drought, or winter damage. While differences do exist between regions, this guide was designed to assist most turf professionals with the basics of overseeding.

Overseeding today is a somewhat different process than it was in times past. Previously, a field might be shut down for 2 weeks while the procedure took place; today, given cost and scheduling pressures, the downtime is often limited to only 1 day. After that, traffic is restricted for a day, and you wait 2 days before mowing again.

Along side winter overseeding in tropical regions we should consider summer maintenance of winter sports fields.

Soil testing to determine nutrient levels is usually the first step in preparing for overseeding, followed in some areas of the country by scarification (in at least two directions) to remove debris and smooth out minor irregularities. In places where there is a high percentage of Poa annua in the existing turf makeup, intense scarification at 3/4 in. can help to weaken its competitive edge, providing the newly seeded species with a fair start.

After scarification (in some states), many turf professionals suggest mowing in at least two directions and then removing the clippings. A higher percentage of Poa annua in the cover may necessitate very close mowing, as this will weaken the Poa. Unfortunately, doing this regularly will actually help the Poa, since it's more resistant to close mowing than more desirable species. The lesson here is to perform scalping only when there is a high percentage of undesirable turfgrass species.

A key step: a series of aeration steps should be performed in succession. First, deep-tine aeration should be done if possible (especially in compacted soil or areas with poor soil composition), using an aerator that produces a "heaving" action of the soil, creating fissures within the layers of soil where the tines enter it. Much of the topdressing mixture will flow down the holes produced, a desirable condition that permits rapid establishment and survival of the seedlings. If the moisture of the sand or soil prevents this flowing of the sand into the holes, than you may wish to dragmat and brush the sand into the newly created holes. (Phosphorus fertilizer may be applied before aerating, if the previous soil analysis determines it's needed.)

Following solid-tine aeration, the use of hollow-tines will aid sand incorporation, avoid laying and reduce compaction in the upper levels of the soil profile.

After initial aeration, topdress where needed with an appropriate sand and/or mixture. Choice of topdressing type depends on a laboratory analysis of existing surface samples. In most cases, a uniformly graded, medium/fine sand is preferred. Ideally the ground surface and the sand/topdressing should both be dry at time of application.

Using a dragmat and brush on the surface again will help achieve maximum filling of both solid-tine and hollow-tine holes. Additional applications of sand may help correct minor surface irregularities. Beyond this, aeration using a slitter (in five or six directions) will create numerous large drainage pores through the surface layers, improving root development and microbial activity, and enhancing filtration rates for efficient and uniform irrigation.

Once the above steps are done to satisfaction, the area should be lightly irrigated to ensure that sufficient moisture exists for rapid germination.

Finally, overseeding should be done lightly in at least two directions using...
a quality overseeder and certified seed of an appropriate mix. Fresh, quality seed must be used to ensure high purity and high germination capacities. Worn areas should be overseeded more heavily. Uniformly topdress with 1/8 inch of sand to cover the seed and improve moisture retention. Prevent access to the area by visitors after overseeding and topdressing, and lightly irrigate to enhance seed germination. During hot weather, frequent light irrigation may be required, though too much water should be avoided as it can disturb the seeds.

Of all the process factors that affect overseeding success, the most important criterion by far in determining germination is good seed to soil contact. Because of this, some methods of overseeding may be insufficient; for example, simply spreading the seeds over the surface of the ground gives them little hope of germinating in most cases. Methods that permit seeds to become established in the upper stratum of the soil, particularly approaches that involve burying the seed, are certainly preferred.

After establishment, the seedlings should be fertilized with nitrogen, though not before 2 weeks have passed; this will reduce the competitiveness of Poa annua and permit more uniform establishment. (If Poa annua is not present at seeding time, fertilizer can be applied before overseeding.) On high sand content constructions where black layer is present, avoid fertilizers that contain sulfur, since it can contribute to undesirable hydrogen sulfide formation and subsequent metallic sulfides.

Gradually reduce the frequency of irrigation to harden the new plants and encourage deeper rooting. Depending on the sport, initial mowing can begin when the seedlings are 2-3 inches in height. Be careful to remove no more than 25 percent of the leaf blade per cut and vary the direction of each cut. Cutting must be done as cleanly as possible to avoid damage or bruising to the young turfgrass.

Let's take a quick look at the two main types of overseeders available, keeping in mind that some machines are pedestrian models while others are tractor or truckster drawn.

Broadcast type machines are useful for random seed dispersal and so are more commonly employed where large areas must be covered. Drawbacks include the fact that these units often do not work well on undulating ground; seed is often left on the surface; and heavy post-seeding watering may be needed.

Drill seeders capable of actually burying the seed after putting it into the soil are state-of-the-art. This type of seeder cuts a thin slot through surface thatch and into the soil beneath the seed is then dropped into the slot and the slot closed again guaranteeing seed to soil contact for every seed, affording high germination rates.

For fine turf overseeding, look for machines that offer accurate metering even when using fine bents and close drill spacing.

Jeff McGinnis is a partner in the marketing communications firm Gaul Advertising. He can be reached at jmcginnis@gauladvertising.com.
TOPDRESSING MACHINES

Ty-Crop designs and manufactures a variety of simple-to-use, high performance top dressing machines to fit almost any budget or need. With a load capacity of just under 2 cubic yards, the affordable QuickDawg 450 fills the gap between smaller 1 yard and larger 4 cubic yard toppers. The QuickDawg 450 is designed to operate from the tow vehicle’s hydraulics and can be towed with tractors or vehicles starting at just 15 HP.

Ty-Crop/800-945-7848
For information, circle 079 or see www.oners.ims.ca/2083-079

MANUAL SPRAYER

Echo’s MS-100 manual backpack sprayer features an enclosed piston and diaphragm pump that produces from 15-150 psi. The 20-in. brass wand and adjustable nozzle of the unit deliver a controlled spray ranging from wide angle mist to a single stream. All critical seals and O-rings made from Viton formulation.

Echo Inc./847-540-8400
For information, circle 083 or see www.oners.ims.ca/2083-083

MULTISPREAO SYSTEM

Earth & Turf’s Model 300 MultiSpread topdresser with a dual-spinner spreading option has a 22-cu.ft. capacity and will spread up to 15 ft. wide. It’s also available with a beater or brush-spreadign mechanism, so operators can choose the optimum spreading unit. The unit has a simple modular design with heavy-duty bearings and a V-groove tracking conveyor to provide durability and low maintenance costs.

Earth & Turf/888-693-2638
For information, circle 085 or see www.oners.ims.ca/2083-085

UPGRADED SPREADER

Dakota Peat & Equipment changed its Turf Tender product line to make the equipment stronger. The Model 440 and Model 410 Turf Tenders feature yellow chromate hardware that replaces the standard hardware on last year’s models as well as new cylinder shafts with black oxide coating rather than chrome. Both models now feature spinner blades that can be adjusted in the field to modify the spread pattern to accommodate different types of sands.

Dakota Peat & Equipment/800-477-8415
For information, circle 084 or see www.oners.ims.ca/2083-084
BROADCAST SPREADER

Featuring an all-steel frame, frontal “splash plate” and three available hopper sizes, Land Pride Broadcast Spreaders fit most landscape uses. The 14-gauge hopper is manufactured using a spin process for sturdy one-piece construction. The smooth, seamless inner wall allows material, ranging from fertilizer to seed and sand, to flow freely for complete “clean out.”

Land Pride/785-823-3276
For information, circle 087 or see www.oners.ims.ca/2083-087

FOR PROGATORS

Specifically designed for the John Deere ProGator 2020 and 2030 utility vehicles, the TD100 Top Dresser is made of a galvanized steel hopper that resists corrosion and supports 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.

John Deere/800-637-8233
For information, circle 086 or see www.oners.ims.ca/2083-086

SPREADER

Sprcnd-xl, a division of TrynEx International, offers the LO-375 commercial-duty granular spreader for seed, fertilizer and control products. Standard with a 10-ft. control cable, the spreader’s material flow gate calibrates and controls material flow. This allows the operator to distribute the right amount of material for each individual application. An adjustable deflector allows for spread pattern manipulation.

TrynEx International/800-725-8377
For information, circle 081 or see www.oners.ims.ca/2083-081

Safety and Performance from the ground up

Safety for players is your number one concern. Instead of ending up with turf that looks like it’s been ground up and spit out, build lush springy turf from the ground up with LAUNCH® Biostimulant.

LAUNCH® combines the best of Gordon’s FOCUS® and BOV-A-MURA® into one powerful formulation that encourages strong healthy roots, increased density and wear resistance. When used regularly, it also encourages quick germination, vigorous establishment and the rapid recovery of damaged sports turf, from soccer and football fields to golf greens and fairways.

- Latest surfactant technology for maximum soil penetration
- Ideal for seeding, sodding, sprigging and hydroseeding
- Contains humic, fulvic acid extract and kelp extract
- Enhanced with deodorized dairy manure slurry base
- Root and foliar uptake

An Employee-Owned Company

Launch, Focus and Bov-A-Mura are registered trademarks of PBI/Gordon Corporation. Information regarding bioformulations can be viewed on our web site.

1-800-821-7925 • www.pbigordon.com

Circle 170 on card or www.oners.ims.ca/2083-170
RIDING MOWER
There's now a new low profile and added features on Encore's Prowler Mid Cut. Highlighting this mid cut is Encore's exclusive side-to-side articulating floating deck, no slip disc brakes, and maintenance free blade spindles.
Encore Mfg. Co./800-887-4255
For information, circle 091 or see www.oners.ims.ca/2083-091

NEW SPIN TECHNOLOGY
Turfeo introduced its new WideSpin technology to its CR-10 topdresser and material handler. The unit is capable of applying light or heavy topdressing applications at unprecedented widths. WideSpin technology, combined with the CR-10's angle-adjustable spinners, gives you the ability to apply a full range of topdressing depths.
The tiltable spinners give you control over width and depth as well as the driving force of the topdressing into the turf.
Turfeo/800-679-8201
For information, circle 089 or see www.oners.ims.ca/2083-089

MULTISLIT
The Multislit has a working width of 48 in. Each plate is fitted with five blades with a depth of 6-8 in. The plates incorporate a wide rim to reduce surface marking when used at full depth. The frame has an integral weight bar for additional weights if required, and incorporates floating pressure rollers that follow ground contours. The 3-point linkage mounting fits directly to compact tractors. Conversion frames are available for use with most trucksters.
SiSIS Inc./864-843-5972
For information, circle 099 or see www.oners.ims.ca/2083-099

COMBINATION SPREADER
LESCO features a granular spreader that combines the accuracy of a drop spreader with the efficiency of a rotary. This lets you trim in narrow areas using the drop function and also provides the productivity of rotary application for wider expanses. The patent pending Roto/Drop Spreader applies granular fertilizer, control products, grass seed, and ice melt products.
LESCO/800-321-5325
For information, circle 082 or see www.oners.ims.ca/2083-082

SHIELDED SPRAYER
Double or triple your spray crew's efficiency with a Pro Lawn shielded sprayer for your Grasshopper True ZeroTurn FrontMount or M1 mid-mount mower. Spray shields contain chemical spray within the spraying chambers for on-target application.
Grasshopper/620-345-8621
For information, circle 080 or see www.oners.ims.ca/2083-080

UV-TOWED TOPDRESSER
Toro's Topdresser 2500 is a self-contained, all-wheel-drive unit towed by a Toro Workman or other utility vehicle. Boasting a 25-cu.ft. hopper capacity, the unit features oscillating axles and all-wheel drive to ensure consistent application rates in uneven terrain. The redesigned belt features a seamless, more aggressive traction-grip pattern for improved performance, even with fine rates and wet sand.
Toro/952-888-8801
For information, circle 090 or see www.oners.ims.ca/2083-090
TOPDRESSER
Millcreek Manufacturing Co.'s Turf Tiger topdresser is a large-capacity unit that applies a wide variety of topdressing and bulk materials even when material is wet. The unit has a 7,500-lb. capacity and applies sand/peat topdressing, compost, topsoil mixtures, soil amendments and other bulk materials. The spinner attachment applies a precise pattern of sand/peat topdressing 35 ft. wide. Fully loaded, the large turf tires exert only 141 lbs. per sq. in. of ground pressure.
Millcreek Manufacturing/800-311-1323
For information, circle 088 or see www.oners.ims.ca/2083-088

TRACTOR-TOWED AERATOR
The BlueBird TA1 10 aerator is designed to be towed by a 16 hp or larger tractor. It has an aerating width of 36 in. with an aerating depth of up to 3 in., allowing the operator to efficiently cover up to 3 acres an hour. Two independent tine rotors with 32 interchangeable 1/2 in. closed spoon tines provide s maneuverability around corners and tight areas. Five optional weight containers offer optimal soil penetration.
BlueBird/Electrolux Professional Outdoor Products/800-808-2473
For information, circle 098 or see www.oners.ims.ca/2083-098

BROYHILL SPIKER
The Terra Super Spiker is a five-gang turf spiker that can be used all season long for aeration, over-seeding, and fertilization. It is ideal for infields to punch out surfaces and help dry fields in wet conditions. Working depth is variable from 0-1 1/2 in. by dial-in adjustment. Thirteen points per blade, 70 blades over a 66-in. working width and weight can be added for better penetration on hard surfaces. Ball hitch trailer design comes with hydraulic cylinder and hoses for easy hook-up and transport mode.
Broyhill/800-228-1003 ext. 34
For information, circle 097 or see www.oners.ims.ca/2083-097

http://www.sportsturfmanager.com • STMA

YOUR “ONE-STOP SOURCE” FOR AMERICA’S LEADING BASEBALL SURFACES & SUPPLIES
THE PROFESSIONAL’S CHOICE
USED BY OVER 100 PRO TEAMS, OVER 600 COLLEGES, PLUS THOUSANDS OF TOWNS & SCHOOLS WORLDWIDE.
SPECIAL MIXES FOR INFIELDS, PITCHER’S MOUNDS & HOME PLATE AREAS.
REGIONAL INFIELD MIXES AND RED WARNING TRACKS FOR EVERY STATE & CLIMATE!
PLUS INFIELD CONDITIONERS TO IMPROVE EXISTING INFIELDS:
IF TOO HARD AND POORLY DRAINING:
Pro’s Choice®
THE REDDER, LESS DUSTY, MORE UNIFORM INFIELD CONDITIONER & DRYING AGENT
“RED” OR “GREY” FOR INFIELDS
“GREEN” FOR TURF
FOR CONSISTENT INFIELD CUSHION IN WET OR DRY WEATHER!
IF TOO SOFT & DUSTY:
STABILIZER®
FOR FIRM, YET RESILIENT, PLAYING SURFACES TO QUICKLY DRY INFIELDS!
The Original & Most Absorbent is Now
NEW & IMPROVED GRANULAR
DIAMOND-DRY.
WHAT? We Came 100 Miles
We Came 100 Miles And Fax STILL Don’t the DIAMOND DRY!
OVER 200 OTHER INFIELD PRODUCTS!
FENCEGUARD
Protective Safety Covers for Chain Link Fence
WALL PADDING • WINDSCREEN • RAIL PADDING
TAMPERS • DRAG MATS • RAMPS
HOLLYWOOD® BASES • FIELD MARKING MACHINES
BATTING PRACTICE COVERS • RAIN COVERS
PEBA-MOUND™ PADS • MOUND BRICKS
SAFE “T” MATT® BATTER’S BOX PADS
TYPA® & TERRA-BOND® GEOTEXTILES
ON-DECK CIRCLES WITH TEAM LOGOS
PERMANENT FOUL LINES & MUCH MORE!
FREE INSTRUCTIONAL BROCHURES
DISTRIBUTION CENTERS NATIONWIDE!
800-247-BEAM
908-637-4191 / FAX 908-637-8421
PARTAC PEAT CORPORATION
KELSEY PARK, GREAT MEADOWS, NJ 07838
“The best infield mix I’ve ever used.”
— GEORGE TOMA

Circle 171 on card or www.oners.ims.ca/2083-171

SPORTSTURF 33