Tools & Equipment
Groomer Technology

TWO MANUFACTURERS’ OPINIONS ON MAINTAINING SYNTHETIC TURF

We asked Jim Dobmeier, president of A-Turf, a manufacturer, supplier and installer of synthetic grass systems, and Tom Moore, national sales manager for GreensGroomer Worldwide, their thoughts on maintaining and grooming synthetic turf systems.

SportsTurf: What type of maintenance is required for an A-Turf field?

Dobmeier: Some maintenance is required to keep the field in ideal playing condition. An A-Turf field should be groomed once every 3–4 weeks during periods of active use. Regular grooming ensures the fiber strands are standing upright and that the infill is level. Several different grooming devices are acceptable for use in grooming the field. The GreensGroomer, which attaches to the back of a Gator or similar type of vehicle, is used to periodically groom the fibers and infill. A Parker Sweeper can also be purchased to remove trash and debris from the field before grooming the field with the GreensGroomer.

ST: How important is maintenance for a synthetic field in terms of the life of the field, performance and aesthetics?

Dobmeier: A-Turf fields offer a life expectancy of 12–15 years. Like any long-term investment, proper care is required to prevent damage and premature aging. Grooming once every 3–4 weeks will prevent fibers from becoming matted over time and keep the infill level across the field—especially in high usage sections, such as the corner kick area or mid-section of a field. Proper grooming not only helps keep the field looking good, it also helps to ensure safety (Gmax rating) is not compromised. For some fields under constant use, testing the Gmax at the 6 to 8 year mark is advisable. In addition to grooming, it’s important to conduct regular visual inspections to check for issues such as loose seams or tears, some of which may be covered under the A-Turf warranty.

ST: Is it possible to over-groom a synthetic field?

Dobmeier: Yes, it is possible to over-groom a synthetic turf field. Over-brushing can cause premature aging of the fibers. The amount of grooming should be proportional to the use of the field. A multi-use field will require more attention than fields that get less action.

Tom Moore, GreensGroomer

Since the advent of synthetic surfaces, there has been a subtle over-statement concerning maintenance savings compared to natural surfaces. In fact, most facilities would admit that their maintenance strategies have had to focus considerable efforts on surface consistency and safety.

While the growth of synthetic, infill surfaces has been significant, maintenance routines and techniques have struggled to keep pace, leaving many facilities with less than optimal conditions and far below performance benchmarks.

While many facilities perform required maintenance in-house, there has been an increase in external service contracts for field grooming and conditioning. Augmenting a facility’s normal efforts, service contracts can off-load critical maintenance routines to knowledgeable specialists that efficiently deliver playability and safety benchmarks.

A reliable provider will offer the following services:

- Visual inspection. Includes a walk of the entire playing surface, identifying loose seams and hash marks, infill distribution, and general condition of the turf.
- Brushing/grooming. Re-level and re-distribute infill material, stand up turf fibers.
- De-compact. De-compacting the infill improves drainage, Gmax, safety, and playability.
- Debris removal. Sweeping the playing surface, removing broken fibers, litter, and other contaminants.
- Turf magnet. Removal of ferrous materials left on the playing surface from equipment, players, and general public.
- Final grooming. Final process for that professional appearance that makes your investment stand out.
- Antimicrobial spraying. Long-lasting protective layer to guard against infectious bacteria, mold, mildew, and germs.
- Gmax testing. The hardness or softness of the field surface is key to player safety and field owner liability. This test will determine the risk a field might have so action can be taken.
- Anti-static spraying. Static is controllable and spraying adds to player comfort and reduces infill migration.

Gmax is the benchmark for the shock absorbing properties of sports surfaces. It expresses the ratio of maximum acceleration experienced during impact, to the normal rate of acceleration due to gravity. As the Gmax value increases, the shock-absorbing properties of the surface decrease. The harder the playing surface is the more impact a player’s body will absorb during impact with the surface. These measurements are a fundamental tool for field safety testing and also prove useful in managing playability. Defining a regular schedule of field grooming and Gmax testing should be an integral part of any maintenance program, regardless of synthetic or natural turf.

When considering whether to augment your maintenance efforts with an external service provider, you’ll need to evaluate their range of services, equipment used, prices and packages offered, and whether they meet ASTM certification for Gmax testing.

www.sportsturfonline.com
GreensGroomer for infill synthetic fields

The Synthetic Sports Turf Groomer and Spring Tine Rake’s brush design moves infill material three different directions for every three feet of forward movement, working the infill into low spots and depressions left after play. The Groomer is equipped with 14 blue brushes made from synthetic fiber that retain their original shape, resist wear, and will not deteriorate. The Spring Tine Rake attached to the rear of the Groomer consists of 3 rows of 28 tines for thorough coverage. Each row of tines may be adjusted to the desired level of aggressiveness for rubber or sand/rubber infill sports fields. The Spring Tine Rake combs through the infill, relieving compaction, releasing trapped turf fibers, and assuring a level playing surface.

www.greensgroomer.com

Beacon cocoa mat drag

Give your infield skin the finished look of a professional's with Beacon’s Cocoa Mat Drags. These virtually float across infield surfaces without displacing the soil or topdressing materials while providing a highly professional finish. They are also valuable for dragging topdressing into turf. Available in hand drag size (4’W x 2’L or 6’W x 2’L”) and tow-behind size 6’ x 4’, available with or without leveling bar. Leveling bar option shown.

www.beaconathletics.com

Verti-Top tow behind

The Verti-Top Tow Behind is a smaller version of the highly successful tractor mounted unit. It uses a brush to gently sweep dirt and debris from the surface of the playing surface. The new machine now includes vacuum technology that efficiently removes the finest dust, allergens and other small particles that are lifted from the turf.

www.redexim.com

Terra Clean by Wiedenmann

The Terra Clean M by Wiedenmann is a self-contained artificial turf sweeper that efficiently collects debris on the surface and can also be adjusted to reach the top layer of infill. The infill is then separated from the debris with a vibrating sifter and is redistributed back onto the field. The debris is collected in an easily removable hopper. The Terra Clean M is powered by a Honda GX 240 gasoline engine and can be pulled by most vehicles.

www.wiedemannusa.com

Deere 1200A field rake

The three-wheeled, self-propelled John Deere 1200A Bunker and Field Rake features a 9.5-hp, air-cooled Kawasaki engine, simple mechanical transmission with no hydraulic leaks, and a one-piece cowling design allows for easy access to all service locations, no tools required. With a 41.5-in.-wide wheelbase, high-back adjustable seat and 8:3:1 steering ratio that minimizes turning effort, the 1200A is comfortable and easy to handle. The optional front blade and the optional mid-mount cultivator/scarifier have a spring-assisted lift with ergonomic handle for easy operation. Also has standard electric power lift for rear attachments - simply flip a switch to raise and lower the rake.

www.johndeere.com

Pioneer Athletics introduces artificial turf sweeper

Standard care procedures for synthetic turf athletic fields have evolved tremendously in recent years, including the need to remove foreign debris and litter on a regular basis. Pioneer Athletics’ new Field Crewzer affectively accomplishes this task without the need for a large tractor or vehicle to pull or power a sweeper. The Field Crewzer features a robust counter-rotating brush that lifts surface debris into a hopper while evenly returning infill back into the field. The Field Crewzer’s components are powered independently by a Honda GX 240 engine, as opposed to depending on a power take off (PTO) system. The entire unit can be pulled by any golf cart or utility vehicle.

www.PioneerAthletics.com

Gravely Turf introduces Base Runner

Gravely Turf offers the Base Runner, an infield conditioner that features 3x3 Hydrostatic all-wheel drive and zero-turning radius features allow maneuverability with speeds up to 12 mph. With an 18-hp Briggs & Stratton Vanguard V-Twin air-cooled engine that includes an engine kill switch, this new conditioner is designed to perform multi-functional tasks for turf and athletic field maintenance. Additional features include a low-profile fiberglass body, ergonomic seat, headlight, 12-volt power source, improved operator controls and exclusive wrap-around rear-hinged cargo box for operator accessibility while seated. Mid- and rear-hydraulic lifts accommodate a variety of attachments to include a front plow, mid mount chisel blade, mid mount versa tine, mid mount finger blade scarifier, rear mount infield conditioner and rear mount sand rake.

www.ariens.com

www.stma.org
Triple-Play infield groomer

TurfTime Equipment introduces the Triple-Play Infield Groomer that loosens compacted dirt, levels the uneven field and brings a professional look to the playing surface. The Triple-Play 60P can be pulled by any ATV or lawn tractor between 14 to 20 hp. The larger Triple-Play 78 is attached to the 3 point hitch for 20 to 30 hp tractors. The unique frame of the Triple-Play has been enlarged from front to rear to enable greater degree of leveling while the multi blades carry more material with each pass. The ripper teeth are closer together and longer to increase loosening of the soil.

www.turftimeeq.com

Smithco sports truck

The Smithco Sports Truck is a totally new idea; it’s the only utility truck that provides complete ball field maintenance. It can: finish, scarify and plow; create a finish on the field with the proper amount of smoothness and consistency for safety and playability; and be maneuvered easily with its 4-wheel design for safety and versatility. Also features a unique dust suppression system for additional operator safety and improved working conditions. Lift off the dust suppression system and in minutes you have a rugged utility truck. Dry line marker and field paint lining systems available. Versatile hydraulic dump box for carrying tools, hauling dirt, sand, field amendments.

www.smithco.com

Kromer introduces Field Commander

Kromer is proud to introduce an evolutionary and revolutionary product that will save time and money on athletic field maintenance. The Field Commander is a fully hydraulic riding unit that grooms, paints and remove lines, sprays, applies logos, conditions, and does all the necessary functions to maintain both natural turf and synthetic turf fields. Available with 32+ attachments (that can quickly and easily attach or detach), the Field Commander can be customized to meet your needs and budget.

www.kromerco.com

Legacy SPORT® field maintenance vehicle

Broyhill’s Legacy SPORT® turf maintenance vehicle is designed to perform multi-functional tasks for turf and athletic field maintenance. Legacy Sport’s AWD, 16-hp air-cooled engine, and zero-turning radius provide ultimate maneuverability and speeds up to 12 mph. Standard features: low-profile fiberglass body, ergonomic seat with engine kill switch, headlight, 12-volt power source, improved hand controls location, and exclusive wrap-around rear-hinged cargo box for operator accessibility while seated. Mid-and rear-hydraulic lifts accommodate a variety of attachments.

www.broyhill.com

Jacobsen® Groom Master™ II

Jacobsen’s Groom Master II combines great ergonomics, maneuverability and plenty of power into one reliable machine. With a standard series-parallel 3-wheel drive traction system that won’t slip on the loosest infield dirt, the Groom Master II is available with either a Briggs & Stratton® 18-hp gas engine or a 19-hp, 3-cylinder liquid-cooled Kubota® diesel. Featuring power steering, tilting steering wheel, convenient 12-volt accessory power outlet and a redesigned hydro pedal, it is easy to operate and comfortable to drive. The Groom Master II is available with several attachment options, including a plow, cultivator, rake, scarifier with leveling blade, ball field conditioner, and box blade among others.

www.jacobsen.com

Synthetic/artificial turf groomer

Go Groomer Go is a synthetic/artificial turf groomer that maintains a professional look and feel on all synthetic/artificial turf surfaces. Four rows of light synthetic straight-line brushes are used with or without one row of adjustable spring loaded grooming tines to flip the turf’s infill and repair ghost markings, disperse wear patterns, and prevent rubber pellets from traveling to the side lines. Go Groomer Go also increases eye appeal, improves safety on the playing field, extends playability, decreases maintenance, lowers risk management and is a must have for all synthetic / artificial turf surfaces.

www.GoGroomerGo.com

Baseball and softball infield groomer

The FieldMaster Infield Groomer is available as a four or six foot wide 3-point hitch groomer which can easily be converted into a pull behind groomer. After more than 15 years of industry experience, the Men’s College World Series in Omaha, NE, the Women’s College World Series stadium in OK and the National Baseball Congress have all relied on their FieldMaster to maintain a professional look and feel on their infield surface area. The FieldMaster was used at the 1996 Olympics and currently resides in all 50 states and Canada. Designed and engineered to correct your problem areas in minutes, not hours and leave the skinned area tournament ready the first time and every time.

www.FieldMaster.com