To determine what type of equipment should be in any sports turf manager's equipment fleet SPORTSTURF magazine asked several industry experts the following two-part question about what constitutes a complete fleet:

What pieces (and brands) of equipment and tools do you feel are essential to your job, and why is each piece important?

Connie Rudolph, Head groundskeeper, St. Paul Saints, Midway Stadium, St. Paul, MN

Midway Stadium, home of the St. Paul Saints minor league baseball team is an intensely scheduled stadium. In addition to baseball, the facility hosts football, soccer, concerts and other major events. A full calendar brings field maintenance headaches. To be successful in my job, I need the proper equipment. The following are the essential pieces of equipment I use and why they are important:

Mowers - A sharpened reel mower keeps the grass looking good by providing a nice clean cut and the rollers give off the beautiful striped look. It’s important to follow the one-third rule of never cutting off more than one-third of the grass blade at one time. Ideally, it would be nice to have a triplex for the outfield and a smaller single reel mower for the infield. I have a John Deere triplex and a National Infield Mower. In addition, I have a Toro Groundsmaster for my outside grounds and as a backup for my main field.

Aerators - I own a Turfco pull-behind core aerator, an old Ryan Greensaire (for small areas), and I am able to borrow a Cushman GA60 as well as an Aerovator. In my mind, aerating is one of the most important things you can do for your turf. It relieves compaction, provides topdressing material, creates air exchange in the soil, and stimulates root growth.

Topdresser - I have to borrow this equipment and I use it 1-2 times a year, especially after football when my turf is torn up and the ground is uneven. I usually perform this in conjunction with seeding and aerating, so the topdressing material will provide soil contact with the seed to make sure it germinates. It’s important to match your topdressing material as close as you can to your existing soil. I use a Turfco topdresser.

Utility Vehicle - This is one of the most versatile and useful pieces to own. I have a Cushman Truckster and it’s used for hauling and pulling equipment.

Field Groomer - The groomer I own is a Cushman, which leaves a nice surface on my skinned area and doubles as my football field painter.

Tractor/Loader - I have a small, older Mitsubishi loader that works well for loading the topdresser or the utility vehicle.

Roller - I am lucky to have an older Rolles roller that I can use to firm up my infield or use for sodding projects. It’s a smaller roller, so the weight isn’t excessive and won’t overly compact the soil.

Fertilizer Spreader - One fits on the back of my Cushman and the other is a push model. The key is finding a spreader that spreads your material evenly.

Sod Cutter - I own a Turfco sod cutter and it is handy to have for field repairs and renovations.

Painters - I have two painters. The large unit I use for painting football is made by Minnesota Wanner and fits on my field groomer. The other painter is a 5-gallon unit made by Broyhill that I use for baseball and football touchups.

Edger - A small edger is desirable to own. Nothing makes the field look better than a nice sharp edge between playing surfaces. The model I have is a Little Wonder.

Nail Drag - This is a must if you have baseball or softball. It loosens up the playing surface to reduce bad ball hops. It is a simple tool to make and can be
pulled behind your field groomer or utility vehicle.

Sprayer - I have a large sprayer that fits on my Cushman and a backpack sprayer that I use for spot spraying. It's nice to have this equipment on site when timing is critical for disease incidence.

Luke Yoder, field maintenance, Pittsburgh Pirates

The following are pieces of equipment that we have in our fleet and the reasons why each is important to have:

John Deere 4200 4WD tractor for running implements. We have a snow blower, a pronovost dump and a core harvester that we attach to this tractor. This tractor is set up with galaxy turf tires and hydrostat transmission.

John Deere 59-inch snowblower for snow removal.

John Deere 4600 4WD tractor w/John Deere 430 loader to load the topdresser, run the tiller, and aerify the outfield. This tractor has a little more power than the 4200 and is necessary to run the attachments that were previously mentioned. This tractor is also set up with galaxy turf tires.

John Deere 2653 A Triplex mowers to mow the outfield. It makes a nice cut, leaves an attractive stripe and gets the job done quickly. It also has a built-in back lap switch so we can back lap without having to remove the cutting units. We do this at least once a month. I feel it is important to have two of these mowers so we always have a backup; or if we are mowing foul at a higher cut, we can have one designated for each.

John Deere Electric Turf Gators for hauling tools or materials and for getting from point A to point B.

John Deere 2020 Cab ProGator w/200 sprayer has a sharp turning radius and the reverse speed is plenty fast for backing off the wall. The booms are hydraulic and can be easily lifted to avoid hitting the wall. All of these features allow us to turn on the warning track and not the turf. It also has a ventilated cab, which protects the applicator from chemical spray drift.

John Deere 2020 ProGator to run the topdresser that mounts on the back and also the bed. The bed in the ProGator has payload capacity of more than 2,000 pounds, which is important for heavy loads.

John Deere 6X4 w/ front blade for hauling around heavier loads, but its main purpose is to clear snow off the field if it snows before a game.

1500 3pt Aerifier for the outfield. It works fast and has adjustable hole spacing, as well as adjustable hole depth. We always use hollow tines when we aerify.

John Deere 800 walking aerifier for our infield and foul areas. We can use different sized tines. It has adjustable hole depth as well as hole spacing, and it best suited to do smaller areas.

John Deere 1200 A field rakes for helping to maintain our infield skin and
warning track. We have two of them so we can designate one to the warning track and one to the infield skin. They have a great drag in the back that leaves a nice finish and also a good blade in the front for pushing material. The scarifier comes in handy for opening up the top surface, making it easier to move around material from high to low.

John Deere TC125 core collection system to harvest the cores off of the field after aerifying. We can pick up the cores off of the field without smashing them into the turf.

John Deere 220A walk-behind greens mowers to walk mow the infield and outfield. They are easier on the grass than a large tractor mower and make a nice pattern. The lines are smaller than the outfield and bring a neat look to the field.

Tanaka TLE shaft-driven edgers for edging the entire ball field throughout the entire season.

STIHL BR420 backpack blowers/vacuums are a critical part of our maintenance program. We use the vacuums after every game to suck every lip on the playing field. These do a much better job than a broom or leaf rake of removing clay and calcined clay from the turf edges. It is also easier on the turf than a broom or rake. I have found that by doing this on a regular basis it almost eliminates the need to blow lips with a water hose.

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Because their definition of "playable" will never be the same as yours.

Most sport facilities are often faced with very short periods of time between sport seasons to get their fields "playable".

Typar Turf Blankets will enhance germination and root growth, allowing for earlier usage and greater survival through seasons.

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**Typar Turf Blankets**

Hotsy pressure washer to clean equipment after using it on the field. We clean our mowers after every use and every thing else once a week.

Foley United reel grinder helps maintain a sharp edge on our reels. We grind our reels twice a year.

Having our own machine allows us to set our own schedule and grind when we need to.

Royer soil screener shreds clay for us. We can put in chunky or rocky clay and have it sift through to the finished product coming out is workable. We can also put in clay blocks or bricks and have it chew it up and spit it out into a workable form for repairing the pitchers mound or batters box after a game.

Husqvarna CT20 tiller comes in handy for softening up areas of the field we want to play slower. We use it every other game day to soften in front of the plate so if the ball is hit in the front of the plate it dies and makes for an easy out.

Scotts SS-2 stainless steel drop spreader for when we want to put out a granular product more accurate than a rotary. They also come in handy when it is windy and do a better job of putting out seed than a rotary.

Scotts SR-2000 rotary spreaders do a great job of evenly spreading out the product. They also have a side deflection shield. This allows us to cut off one side of the spreader so we do not fertilize the dirt or track.

DynaPac CC092 two-ton roller for rolling the skin area.

Brower roller by Textron to roll areas that get heavy play.

Ryan 18-inch sod cutter for harvesting sod out of our nursery to put on the field.

John Deere JX85 SP 21-inch mower w/bag to mow the bullpens and also the tarp area when the grass gets matted down. These rotaries have great vacuum power and help the stand the grass up as it is cutting.

John Deere 600 3pt tiller hooks up to our 4400 tractor and we use it for renovating our infield.

John Deere 820R WB tiller for smaller areas than the big one. We use it on the home plate area, the bases area or anywhere near the grass where we are not comfortable using the big tiller.

Heather Nabozny, field superintendent, Detroit Tigers

My fleet includes the following: Jacobsen Greens king 6 triplex mower; Jacobsen PGM walk behind greens mower; Cushman Turf Truckster utility vehicle; Club Car utility cart; 125-gallon sprayer (attachment to Cushman); Ryan GA 30 aerator; Ryan Core Harvester (attachment to Cushman); Bobcat loader; MTD rotary mulching mower; two RedMax backpack blowers; Tanaka string trimmer; Maxim power edger; Smithco trap rake; Brower one-ton roller; Turfco Mite-R-Matic sand topdresser; two Cub Cadet garden tractors; and two MTD pull behind leaf sweepers.

We use the triplex mower to mow the outfield and sidelines, and the walk behind greens mower to mow the infield. Our Cushman is versatile and I am working on getting a second this year. The Cushman has a full-size hydraulic dump box; the sprayer is also compatible, along with our core harvester. We use the dump box all of time for materials and such. We use the sprayer for whatever type of turf application we might need to spray. When we core aerate the field with our Ryan GA 20 aerator we pick up our cores using the core harvester. The core harvester works nicely because it is a little wider than the aeration. Our club car also has a dump box on it, although it cannot handle the payload that the Cushman can.

The Bobcat loader makes us much more time efficient. We use it to load sand for topdressing and to move and load other types of materials. Our MTD rotary mower is essential because we move our bullpens with it. We have fencing surrounding our bullpen and the gates are rather narrow. The rotary
The string trimmer is used to trim the turf next to the walls and fence in the bullpens. The edger is used to edge the field. The trap rake is used to drag the track and it has a couple different attachments to scarify, level, and even plow. We usually hand drag our infield except when we are doing renovations, which is when the Smitty trap rack comes in handy. Our 1-ton riding roller is used for the lips and clay areas that need compacting as well as on the warning track when we install new material. The topdresser is used for our sand topdressing. The Cub Cadet garden tractors are used for bringing out batting practice equipment and for pulling the leaf sweepers. The leaf sweepers are used to pick up firework debris.

John Mott, superintendent, RecSport Grounds, Ohio State

There are many pieces of equipment to assist the sports turf manager with his/her duties. Starting with the most important, at least three different mowers are necessary. I call the first a production mower. We use a Jacobsen 5111, which has an 11-foot-plus cutting width. With 90-plus acres of cool season grasses, this rotary allows us to maintain a twice per week cutting schedule. A zero-turn trimming mower compliments the production mower and provides speed and agility for the grueling task of trimming hillsides, around trees and along fences. It also has the advantage of a relatively fast transport speed, which gives the option of trailerizing or driving to multiple locations. A rugged hand mower provides a means to get into those tight spots. I use a heavy steel deck two-cycle driven push mower, which seems to handle those overgrown tight spots. Consideration should be given to the presentation desired. A striping mower is on my list of most desired. Something like a Jacobsen 2900 with enviro decks would serve this purpose. Many of the z-turns have a striping kit option.

Line trimmers are also a must. The new rapid load heads using precut lengths of square line help eliminate downtime and wasted time rewinding spools. A backpack blower will finish the clean up of clippings.

Creating and stimulating this fine stand of grass starts with a 40 to 50 horsepower tractor. Wide turf tires help eliminate rutting and soil compaction and there is less surface disruption. Diesel engines provide economy of operation and long service life.

A two hopper slit seeder can serve several functions. Seed and fertilizer can be sown at the same time. The vertical blades of this type seeder can be used to augment aeration and they also provide excellent seed-to-soil contact for a high degree of germination. A roller on the back of the seeder helps smooth surface disruption. I use a pull-behind, hydraulically lifted core aerator with 1/2-inch tines. This requires several passes in at least two directions. A solid tine aerator would provide an alternative to coreng, which can produce a level of compaction at the depth of the tines. A shatter-tine or camtype process both seem effective. A 10 to 40 foot adjustable swath broadcast spreader handles distribution of fertilizer. 500-pound capacity helps eliminate excess loading.

Weeds are attacked using a boom sprayer. The new computerized self-propelled units provide excellent quality and consistency. I also use a 3 pt, hitch-mounted tank sprayer with adjustable gun for spot treatments, fences and tight spots. Pump-up handheld sprayers handle the small jobs and there are several nice backpack units as an alternative.

A small topdresser is a necessity and consideration should be given to carrying capacity versus length of runout. The large area topdressers can also serve as material handlers and help load and distribute mixes. A skid-steer loader is beneficial for loading the topdresser. The capabilities of other attachments make owning a skid-steer a nice luxury.

Depending on staffing levels, one or more utility vehicles will enable the staff to move about the grounds and haul various materials. We have a small trailer dedicated to hauling a rototiller, walking slit seeder, bunker edger, sod cutter, drags and line striper.

Also in our inventory are two types of rollers. A pull-behind 3 gang turf roller is used for general rolling needs and I have found that a small driveway roller is excellent (and a little heavier) for ball diamond skins. The string trimmer is used to trim the turf next to the walls and fence in the bullpens. The edger is used to edge the field. The trap rake is used to drag the track and it has a couple different attachments to scarify, level, and even plow. We usually hand drag our infield except when we are doing renovations, which is when the Smitty trap rack comes in handy. Our 1-ton riding roller is used for the lips and clay areas that need compacting as well as on the warning track when we install new material. The topdresser is used for our sand topdressing. The Cub Cadet garden tractors are used for bringing out batting practice equipment and for pulling the leaf sweepers. The leaf sweepers are used to pick up firework debris.

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