

# Towable topdressers continue to evolve

**Editor's note:** This article was written by Bruce Carmichael of TrynEx International.



startup and shutdown, some manufacturers have developed an automatic procedure for when the unit is turned on and off. When all topdresser components are shut off at the same time, a buildup of material is typically left on the spinner. Then, when the unit is started, the operator experiences a sudden rush of material that leaves a clump of sand on the ground. To prevent this, some machines will automatically power up the spinners before the feed system starts, and then shut the spin-

Not only has the industry seen advancements in feed designs, but the drive systems that power them have also improved. Because of these changes, the environmental issues associated with traditional topdressers have been diminished.

» **HOPPERS** constructed of polyethylene help reduce the physical footprint of topdressers.

**As** sports turf managers adapt to new turfgrass recommendations, equipment manufacturers incorporate new technology in their latest designs of small, towable topdressers.

Topdressing has been evolving since the early days of golf. What began as a generous application of sand, which was applied only a couple times each year, has developed into a process that is practiced much more frequently with a very precise amount of material.

The United States Golf Association has been recommending lighter applications of topdressing material, and some superintendents are spreading sand at only 1/32 of an inch. To maintain such a light depth in a uniform application, a topdresser's feed system, gate, spinner

and controller all must work together to achieve results that are on target with individual needs.

Manufacturers have developed auger systems that feed a more accurate amount of material onto a precise spot on the spinner. With the help of a digital readout, the operator is able to see exactly how many pounds of material he is spreading per minute according to his auger speed setting. This technology can handle materials other than just pure sand. Since the auger diameter used in these units is typically 3-7 inches, they don't have the capacity to deliver as much material as large conveyors.

### LESS WASTE

Material waste is another important consideration in many new designs. Again, auger feeds should be more efficient than conveyors. But in order to reduce material waste upon

ners off a few seconds after the material flow stops.

New spinner enhancements have been developed to help accommodate personal preferences, including tiltable spinners, which help control how material is propelled into the turf canopy. Some designs incorporate spinners with adjustable paddles for further fine-tuning the spread pattern.

Even the gate plays an important part in the feeding process. It helps regulate material flow, and in some topdressers it can be electronically actuated from the seat of the towing vehicle. The positive locking feature on these electronic units is especially handy for quickly closing and opening the gate when moving from one green to the next. This prevents material from bouncing out during transport.

Regardless of the feed system used, any topdresser can be inhibited by material that lumps together, especially wet sand so now

many units now contain vibrators to eliminate the problem.

Finally, to manage all of these components, controllers have become more sophisticated. New technology allows the operator can mount electronic controls in the towing vehicle and manage each of the components independently from the cab.

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Until recently, most topdressers have been driven by an independent hydraulic system, but just as in every other industry, the big push to go green has changed the way turf managers think about purchasing equipment. They're beginning to favor self-contained equipment or avoiding hydraulic systems altogether in order to help prevent the spill of hydraulic oil. Electric motors can eliminate spills, lower gas consumption, reduce emissions and operate quieter.

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### HOW HEAVY?

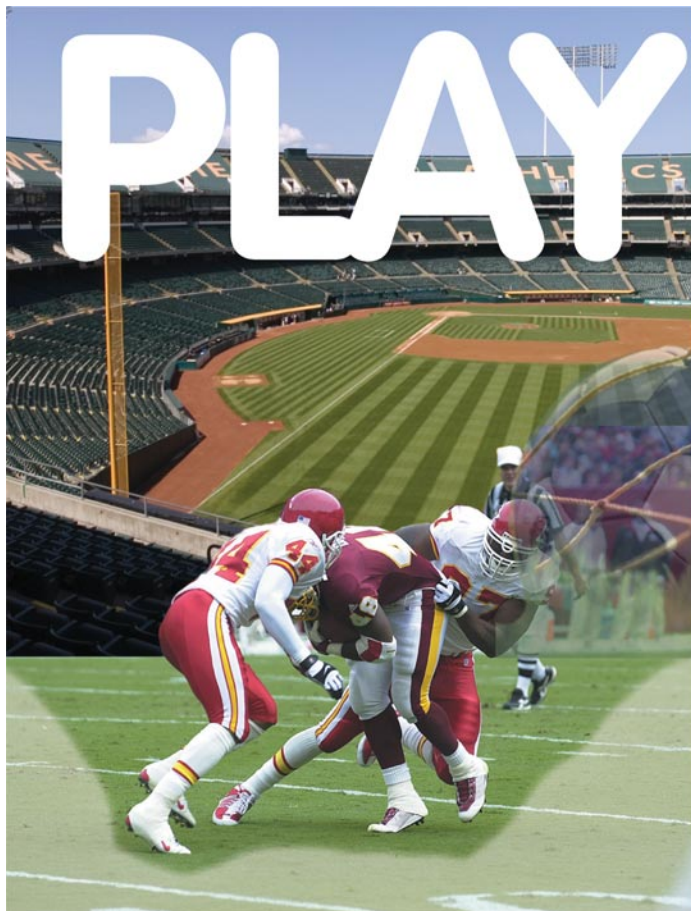
Manufacturers have taken strides in reducing the physical footprint. This is largely done by two methods: increasing the surface area of the machine's contact with the ground and, reducing the overall weight of the unit.

To spread out a machine's weight over a larger surface area, all topdressers use a similar type of wide turf tire. However, the biggest breakthroughs in reducing a physical footprint come in the weight reduction techniques by manufacturers. Obviously, the weight of material in the hopper cannot be reduced, but lightweight drive systems and hopper designs can make a huge impact in weight reduction without leaving an impact in the ground.

Hydraulic fluid alone can contribute more than 75 pounds to the machine. And if the

hydraulic system is powered by a separate gas engine, significantly more weight is added. Some manufacturers have eliminated the engine weight by designing their machines to hook up to the towing vehicle's central hydraulic unit, but even more, new models have replaced all hydraulic components with a lighter electric motor. By using the central hydraulic unit of the towing machine, they reduce the number of hydraulic components to maintain. And, by going to a completely electric-powered unit, they virtually eliminate the need for service on the drive system altogether.

Also, some turf managers are beginning to take advantage of lightweight hopper designs. They're looking beyond steel to new materials like polyethylene, which don't corrode. ■



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## Mete-R-Matic® III and Mete-R-Matic® XL

Go green with the Mete-R-Matic III and Mete-R-Matic XL topdressing machines from Turfco. Both machines allow you to just hook up and go. A patented Chevron belt delivers uniform application whether its sand, compost, crumb rubber or calcined clays, regardless of moisture content. An eco-friendly, patented ground drive system assures uniform spread, even at varying speeds. And with no hydraulics, PTOs or engines, speed calibration is not required. The Mete-R-Matic III features a 23 cubic feet hopper capacity, and the Mete-R-Matic XL is three times this size at 60 cubic feet. The Mete-R-Matic series of topdressers are the only machines on the market with a 3-year warranty.

[www.turfco.com](http://www.turfco.com)

## SafeMark field layout system

Newstripe's SafeMark field layout system is the safest way to layout any athletic field and never have to measure again. There are no holes to catch cleats or plugs to trip over. Key layout points are measured out and the UV protected high-density foam locators are installed flush with the ground. The unique locators have no holes or plugs and are held permanently in place eliminating the need to re-measure each time the field is striped. The SafeMark locators match the surrounding turf density so they can be safely

used even in the field of play. The locators can't be stolen, destroyed by aerators, vehicles or rust from sprinklers. Backed by a 36-month warranty, each SafeMark set comes complete with layout spikes, 600' of cord and the installation auger.

[www.newstripe.com](http://www.newstripe.com)



## Nozzle irrigates narrow areas

Traditional circular, semi-circular or wedge-shaped spray patterns can often result in inefficient overspray and runoff in these oddly-shaped areas, wasting water and creating dangerously slick conditions on paved surfaces nearby. Now, Rain Bird is making it possible to easily tackle those challenging spaces with the innovative SQ Series Nozzle. Featuring a square spray pattern with a throw radius of 2.5 or 4 feet, the SQ Series is designed specifically for watering small, narrow areas of turf and ornamental plantings like those found near walkways, parkways and street medians. Because these unique, low-volume nozzles offer pressure compensation, they use less water and eliminate inefficient overspray, saving time, money and water for both new and existing installations.

[www.rainbird.com](http://www.rainbird.com)

## Thatch Master field upgrade kit available

TurfTime Equipment has developed a field upgrade kit to owners that will bring their current Thatch Master up to 2010 specifications at roughly half the cost, says Glenn Musser of TurfTime. The kit includes a heavy hex shaft with new stackable spacers that interlock with the new seven-point carbide-tipped blades that come in 1, 2, and 3 mm thickness. The kit also includes a heavier drive line chain and sprockets.

[www.TurfTimeEq.com](http://www.TurfTimeEq.com)



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## Introducing GreenParksUSA

GreenParksUSA, presented by EnviroLogic Resources, Inc., is an environmental stewardship website that provides tools for creating Integrated Pest Management Plans and documenting Best Management Practices for park facilities. Developed by GreenCloudUSA, the developers of GreenGolfUSA, the park version of these tools allows a park manager to create a site-specific IPM Plan and BMP document for each park in the system.

The IPM Plan development tool works with drop-down menus and fill-in-the-blanks to allow you to create an IPM plan that accurately reflects the park or athletic field conditions and standard of care. Action thresholds, a primary basis for the IPM approach, are customizable to the way you operate. The result is an IPM Plan that makes sense for the different parks in your system. The BMP Generator allows you to select from a menu of best management practices to document how you manage the park. The tools are customizable so that you are able to add any pests, weeds, diseases, or pesticides that are not currently in the database to your IPM Plan. The data you enter are saved at the GreenParksUSA server, so when we prepare upgrades you can update your documents with only a few keystrokes. Maintain and update your IPM Plan as often as you wish.

[www.GreenParksUSA.com](http://www.GreenParksUSA.com)

## New clamp-on snow blades

Earth & Turf Products LLC introduces three new easy to install clamp-on snow blades for Compact Tractors. The SC series available in a 60" and a 72", wide 19.5" high blade designed for compact tractors under 35 hp. The S series is a 90" wide 26" high, clamp-on blade for tractors 35hp and over. All three are full featured blades with manual angle 30 degrees left or right, full blade spring trip that can be locked out for light grading jobs and bolt on reversible cutting edges to save money.

[www.earthandturf.com](http://www.earthandturf.com)

