

# Multi-use equipment

by STEVE AND SUZ TRUSTY

**M**anufacturers design equipment to do a specific task better than any other piece of equipment. Extensive research and development, including manipulation of detailed drawings and computer-generated graphics, project the possible uses of a machine long before the first prototype hits the field for intensive hands-on testing.

Once field testing begins, engineers consult with products users and sales and marketing personnel to fine-tune components that will enable the unit to operate successfully under a broad range of actual working conditions to deliver the desired results.

The input provided can be incorporated to make a prototype machine worthy of production or to improve a good machine already on the market. The most successful product improvements answer the needs of turf managers.

Consider just a few changes that cut operating time because time is money in

today's demanding marketplace. Manufacturers have developed wider-deck and multiple-deck mowing units that are capable of following ground contours to deliver a clean cut without scalping yet allow one person to cut more grass in a shorter time. Manufacturers have developed systems for fast and easy attachment and detachment of the various working units of tractors and other multi-use equipment. Other improvements have made turf management easier and more efficient. But innovation doesn't stop there. New options by an equipment manufacturer means more opportunities for turf managers.

New equipment buys are based on how closely the performance capabilities of a specific machine match the jobs that it must tackle. The more hours a unit is "on the job," the more quickly it pays for itself. Ease of operation, machine quality, durability and serviceability are factored into those decisions as well.

The best turf managers are continuously rethinking each step of their daily operations, looking for methods to do the job better, quicker, and easier in a more cost-effective manner. Making the most of their equipment is a key part of this process.

Gary Vandenberg, Director of Grounds, and David Mellor, Assistant Director of Grounds, for the Milwaukee Brewers Baseball Club not only oversee a professional athletic team's facility at Milwaukee County Stadium, they're also pros when it comes to innovation. Mellor's response to the question, "What additional uses have you found to get the most from a specific piece of equipment?" follows.

## Tiller distributes clay around infield

"Because so much of the game is played on the skinned area of a baseball field, we



The scarifier located under the middle of this motorized field rake does a good job of working up the skin portion of a baseball infield, particularly the area around home plate.

A blade attached to the front of this field rake makes snow removal a lot easier. The unit's wide tires have a light footprint on fine turf, and even on stadium field tarp.

put a lot of work into getting it just right. We mix two different clay products together at a 1/2 to 3/4 ratio to achieve the consistency we want. Rather than devoting labor hours to hand-mixing, we build a pile of clay in the desired proportions, mount the tiller on the back of our front-end loader, lightly mist the clay pile with a hand-held hose, and use the tiller to mix the two clays uniformly.

#### Versatile sprayer

"Our spray unit has booms for rapid application of materials over the field," explains Mellor. "It also has a hose adapter unit that we use for spot treatment of problem areas. We've found that this same spray rig, filled with water, and with the hose adapter unit attached, provides a quick method of irrigating the flower beds around the stadium."

#### Two mowers

"We mow the infield turf with a walk-behind reel mower," says the Milwaukee field manager, "and the outfield turf with a triplex reel mower to get a precision cut and develop the distinctive 'patterns' that add aesthetic appeal to the field. With both units, we'll mow as usual, then disengage the blades and cover specific areas, using the rollers only, to 'etch in' the lines and to make certain areas 'jump out' for the fans in the stands and viewing on TV."

#### Field rake an MVP

"Our most versatile machine is the field rake with the 'ballpark package.' We use the pointed, scarifying blades, located at the middle of the machine, right under the seat, to work the skinned surface of the homeplate area. Because we don't want to leave 'tracks' on this surface, we use the light-tread tires during this procedure. This same blade can be used to prepare sections of the field for seeding.



PHOTO COURTESY DAVID MELLOR, MILWAUKEE BREWERS.

#### Mat attachment breaks up cores

"The machine's mat attachment, equipped with controllable hydraulic pressure, is designed for dragging the skinned area," says Mellor. "We'll use the mat, with full down pressure, to break up the cores following aeration. The same mat, with a lighter degree of down pressure, does a good job of 'slightly bending' the grass blades to enhance or 'sharpen' one of our field patterns.

#### Sod positioning with blade

"The standard method of positioning 48-inch wide-cut sod, in sections or in 'big' rolls, is to have multiple crew members use rake teeth or forks to grip the sod and push it tightly against the row previously put in place. The process can be handled with fewer people by using the front blade on the field rake, evenly lined up with the outer edge of the sod, to 'push' the sod into position.

"Because the field rake is the same machine used on golf courses as a bunker rake, it's designed with a light 'footprint' for little or no compaction and with great traction. We switch over to the 'knobby,' high traction tires and put on the front aluminum blade for 'on-the-field' snow removal. The

aluminum blade is slightly curved on the bottom so it moves the snow without tearing up the turf or the tarp."

Mellor even suggests multiple uses for the hand tool, the action or stirrup hoe.

"We use the action hoe to repair uneven spots on the mound. By gently moving it back and forth, it cuts through clay like a hot knife through butter. We also use it to cut along the edge of the baseline to slice away a high spot that might develop into a 'lip' where the turf and skinned area meet. And, we use it to 'scuff off' paint from a line that we want to repaint or reposition.

Putting equipment to work on multiple tasks does require thinking "out of the box." Once the concept catches on, however, everyone brings their own unique perspective to problem solving and brainstorming innovations. That's how improvements are made. □

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