#### MID-RANGE TOPDRESSER

Turfco introduces a Mete-R-Matic tow-type topdresser that now features a mid-range hopper capacity for larger turf areas. The hopper capacity is 60.75 cu. ft., and it can carry a maximum load weight of 6,000 lbs. Turfco Mfg./763-785-1000 For information, circle 089 or see http://www.oners.ims.ca/2910-089



#### ARTICULATOR

rotary mower for budget-minded customers needing extra capacity without sacrificed cut quality. This lightweight mower is powered by a 33-hp turbo diesel, the 3386 features 86 in. of production with the accuracy of a 52-in. mower. The 34-in. articulating wing deck has side reach and trimming capabilities and folds for trailer transport

transport. Lastec/800-515-6798 For information, circle 086 or see http://www.oners.ims.ca/2910-086



#### HONDA LAWNMOWERS

Honda Power Equipment has introduced The Honda HRX(tm) mowers, a completely new lawnmower line pioneering the unique Versamow System that, for the first time on any mower, enables simultaneous distribution of grass clippings to both the bag and the ground.

Honda Power Equipment/800-426-7701 For information, circle 094 or see http://www.oners.ims.ca/2910-094

### Desperately searching for the perfect Bermudagrass?



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The Celebration Bermudagrass and Sod Solutions names and logos are trademarks of Sod Solutions, Inc

Circle 131 on card or www.oners.ims.ca/2910-131

#### **VERSATILE MOWERS**

CLASSEN

Swisher offers a full line of zero-turn mowers available in 36, 42 and 50in. cutting decks. Mow around shrubs, trees and other obstacles; the 350degree turning radius and commercial cutting widths greatly reduce mowing time. Models include 14-hp with 36-in. mowing deck; 18.5-hp with 42in. deck; and 22-hp with 50-in. deck. Swisher/800-222-8183

For information, circle 083 or see http://www.oners.ims.ca/2910-083

#### **COMPACT UTILITY TRACTORS**

Allmand has two new model compact utility tractors with diesel engines and mechanical four-wheel drive. Multiple gear range selections on the 8435 model are available to manage different implements. Cruise control enables the operator to maintain a set speed for extended periods without footpedal pressure, and it automatically disengages when the brake is applied. Allmand Bros./800-562-1373 For information, circle 090 or see http://www.oners.ims.ca/2910-090



#### **NEW WALK-BEHIND**

Better Outdoor Products has launched the Quick 36, the first in a series of commercial-grade walk-behind mowers designed to be affordable. Product weighs almost 200 lbs. less than comparable mowers, and is sold directly to end-user customers through Internet sales and other direct marketing, thus leading to a lower price. Shipping is free. Better Outdoor Products/866-290-7295 For information, circle 122 or see http://www.oners.ims.ca/2910-122

#### **DRILL SEEDER**

The Classen DS-20 Drill Seeder with saw-tooth blades creates a slit in the soil then with shoe injectors or disc blades drops desired seed into opening. Self-propelled with 8.0 hp Honda engine can seed up to 22,000 sq. ft. per hour. Has 20" overall seeding width and adjustable seed density and depth. Its twist grip throttle and clutch design make unit extremely user friendly. Classen Mfg./ 402-371-2294

For information, circle 092 or see http://www.oners.ims.ca/2910-092

#### **CAT SKID STEER LOADER**

The new Caterpillar 268B Skid Steer Loader features the high flow XPS hydraulic system, a load sensing, pressure-compensating system that delivers maximum power regardless of work tool speed or load. The 268B also features vertical lift linkage for efficient truck loading and materials handling. The 268B has an operating capacity of 2,700 lbs. and a maximum lift of 127 in. Caterpillar/309-675-4228 For information, circle 093 or

see http://www.oners.ims.ca/2910-093



### The smartest land maintenance move you'll ever make

"Get a VersaGrader and you'll wonder how you ever got along without one." - Richard Confoey, Inventor

Like the fax machine, the cell phone and the Internet, once you start using it, the VersaGrader will soon become vital to your work. And it's such a great value - buying a VersaGrader will be the smartest land maintenance move you'll ever make.

#### NOTHING LEVELS YOUR PLAYING FIELD LIKE A VERSAGRADER

Our exclusive, patent-pending Balance Equalizer System keeps VersaGrader parallel to the ground even when the pulling vehicle goes over a bump. Level the entire field faster than you ever thought possible. Then easily maintain it with the optional rake, broom and sod cutter attachments. Keep your playing fields, lots, landscape and roadways in peak condition with one super-efficient piece of equipment. VersaGrader replaces power rakes, rollers, old levelers and more.



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IT'S SO VERSATILE IT'S INCREDIBLY WELL-BUILT

**IT'S A GREAT VALUE!** 



Call (330) 337-3439 or visit VersaGrader.com

Circle 132 on card or www.oners.ims.ca/2910-132

#### **TURF DRAINAGE** MACHINES

WaterWick has literature available detailing their turf drainage machines and construction machines. The former use a stateof-the-art patented drainage process to enhance playing surfaces damaged by weather, traffic, and poor drainage. WaterWick/888-287-1644 For information, circle 091 or see http://www.oners.ims.ca/2910-091

#### WIDE-AREA MOWERS

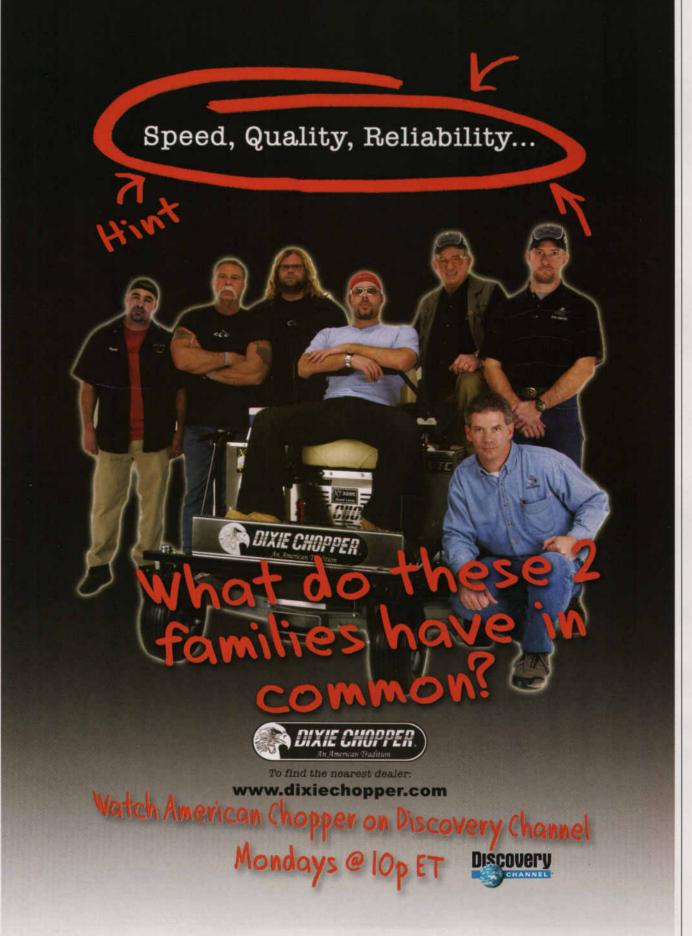
is our 15.5-ft. TD65 tri-Deck model, which is for wide area mowing of playing fields where a finished appearance is mandatodepending on model. Progressive Turf Equipment Inc 800-668-8873 For information, circle 087 or see http://www.oners.ims.ca/2910-088



#### **NEW HR-6010**

Jacobsen's newest wide-area rotary mower, the HR-6010, uses a 60-hp diesel engine and features a parallel series hydraulic 4x4 drive with 4-wheel locking differential with internal wet disk brakes in the wheel motors. The servo controlled variable displacement pump provides greater control and responsiveness with less operator fatigue. Jacobsen/888-922-8873

For information, circle 079 or see http://www.oners.ims.ca/2910-079



Circle 163 on card or www.oners.ims.ca/2910-163



#### **NEW ZT MOWER**

The EverRide Warrior zero turn radius mower from Auburn Consolidated Industries, the original equipment manufacturer for Kubota, Honda, John Deere, Case New Holland and others. Features include 7-gauge tunnel deck with 149 sq. in. of discharge area; frame laser-cut from Grade 50 steel; and hydrostat system with top-mounted cooling fans. Auburn Consolidated Industries 402-274-8600 For information, circle 175 or see www.oners.ims.ca/2910-175



#### LARGE-AREA MOWERS

The Turf Cruiser allows you to mow large acreage while still being able to trim in and around trees and other obstacles because of its front-mount deck. Features include electric clutch blade engagement, dual oil reservoirs and spin-on oil filters, electric deck lift, and 2-yr. warranty. SnapperPro/800-935-2967 For information, circle 176 or see http://www.oners.ims.ca/2910-176

#### **INFIELD GROOMERS**

The Kromer AFM grooming system's multi-function unit can be equipped to take care of every infield need: spring-tined harrow, leveling blade, and finishing broom; ridge remover broom to eliminate the lip; spray boom for dust control; and dry line and paint liners. Kromer Company/800-373-0337 For information, circle 177 or see www.oners.ims.ca/2010-177





#### **INFIELD MACHINE**

The Infield Pro is available with a 16 or 18-hp Vanguard engine and all the tools required to keep your skinned areas in shape. Patented three-wheel series/parallel traction drive gives you the control, and machine has 7 1/2-in. ground clearance. Attachments include the tooth rake, spring rake, weeder/cultivator, spring rake, 40-in. dozer blade, 58in. spiker, debris blower, finish grader, and drag mat.

Toro Company/800-348-2424 For information, circle 178 or see www.oners.ims.ca/2910-178

#### MID-SIZE WALK-BEHIND

The Yazoo/Kees Kutter is a midsize walk-behind features 7-gauge side skirts and a "rolled" front edge. Transmission is Peerless 5speed 700 Series with speeds up to 6 mph and assisted reverse and 9-spline output shaft. Engine options are Kawasaki or Kohler, in 32, 36, and 48-in. decks. Yazoo/Kees/877-368-8873 For information, circle 179 or see www.opers.ims.ca/2910-179



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Circle 134 on card or www.oners.ims.ca/2910-134

#### BY DAVE FEARIS, CGCS



any of us that have been in the turf management industry for a number of years assume that we know how to safely handle pesticides. However, after putting this article together, I was surprised how many of the "Do Nots" that I actually was guilty of doing. So, I hope that this article

will make you more aware of safely handling pesticides. You, as a supervisor or a pesticide applicator, should have one goal in mind when dealing with pesticides: The utmost concern for the safety of your employees and the environment.

#### **Common sense**

• Do not mix pesticides near a water source (well, stream, river, lake, etc.).

• Do not put the filler hose into the pesticide mixture. This could allow for the pesticide to siphon out of the tank into the hose.

• Do not leave a pesticide tank unattended when filling or leave any container (empty or not), unattended at the application site.

Do not eat, drink, or smoke when handling pesticides.

• Do not use your hands to stir the pesticides. Also, keep your head high enough above the tank opening to prevent pesticides from splashing in your face.

• Do not store pesticides in old bottles or food containers where they could be mistaken for drink or food for people or animals.



#### MAINTAIN A COMPLETE, UP-TO-DATE INVENTORY LIST AND SHARE IT WITH YOUR FIRE DEPARTMENT

Can you relate to any of these? I would guess that many of us could.

BEFORE HANDLING OR USING ANY PESTICIDE READ THE LABEL! The label will tell pertinent information concerning items like:

• Personal protective clothing to wear when mixing, loading.or applying the product

User safety recommendations

· First aid if swallowed, inhaled, eye and/or skin contact.

- · Signal words like Danger, Warning, Caution
- · Environmental hazards of the product
- Directions for use

These are just a few of the items on a label. Time should be taken by both the supervisor and the applicator to thoroughly read the label.

#### Storage

Here are some suggestions for properly storing pesticides:

 Check Federal, state and city regulations and consult with your facility's insurance company.

• If possible, the storage facility should be separate from the main facility. In many cases, if the pesticide storage facility is part of the main facility and catches fire, the fire department will let the whole structure burn because of potential contamination problems to any drains leading to water sources or actual water sources like streams, lakes, rivers, etc.).

• The storage facility should contain an impervious floor such as concrete (easier to contain spills and leaks and is easier to keep clean). It should be dry, well lighted, and ventilated, maintained at a temperature range between 50-75 degrees, equipped with fire protection, marked with signs (DANGER, PESTICIDE STOR-AGE) and secured by a fence and/or locked doors. Pesticide containers should be stored on metal shelves in rows with labels plainly visible. If possible, store pesticides according to use (fungicides, insecticides, herbicides, etc.) Regularly check all containers for corrosion or leaks.

• Maintain a complete, up-to-date inventory. Give this inventory list to your fire department along with home and/or cell phone numbers of responsible persons at your facility.

• Never store spill and/or first aid kits, MSDS, and personal protective clothing in the actual storage facility.

#### **Protective clothing**

Pesticides can enter the body through the skin, the mouth, the nose, and the eyes. Remember to read the label to find out what personal protective clothing should be worn.

• Some of the clothing that may be required include goggles or face shield, rubber boots and gloves, a respirator, rubber apron, or water-retardant protective clothing.

• Personal protective clothing should always be worn when mixing pesticides but also before stopping or containing any spill.

· Launder protective personal clothing separate from other laundry.

#### Mixing

The greatest chance for a pesticide poisoning exposure can come from the mixing operation.

• Remember that small quantities of pesticide spilled over a period of time in one area may accumulate and cause a potential contamination problem.

• In many states it is mandatory that you provide an available water source at the mixing site for emergency decontamination. Soap, paper towels, and an additional change of clothing must be available to the applicator as well. An eye wash station is also recommended.

• In close proximity to your mixing or storage area, have a pesticide first aid kit readily available. Check the product label for instructions; in the event a pesticide is swallowed or serious dermal or inhalation exposure occurs, call the nearest poison control center. This number should be posted at various, prominent locations throughout your facility.

## **OF PESTICIDES**

• A spill kit should also be located near the mixing or storage area. This kit should include absorptive material such as activated charcoal, vermiculite, or cat litter, drum/drums with a lid for storing the contaminated material and personal protective clothing.

• Rinse pesticide residues from application equipment before storage and/or repair.

• Clean pesticide containers as soon as they are emptied. Triple-rinse and slit them. Spray the rinsate water to varying turf areas versus repeatedly spraying the same area.

• Have several empty drums available in case a sprayer tank needs to be drained.

• Some states require rinsate pads. It is best to check with the appropriate state officials to see what these requirements are.

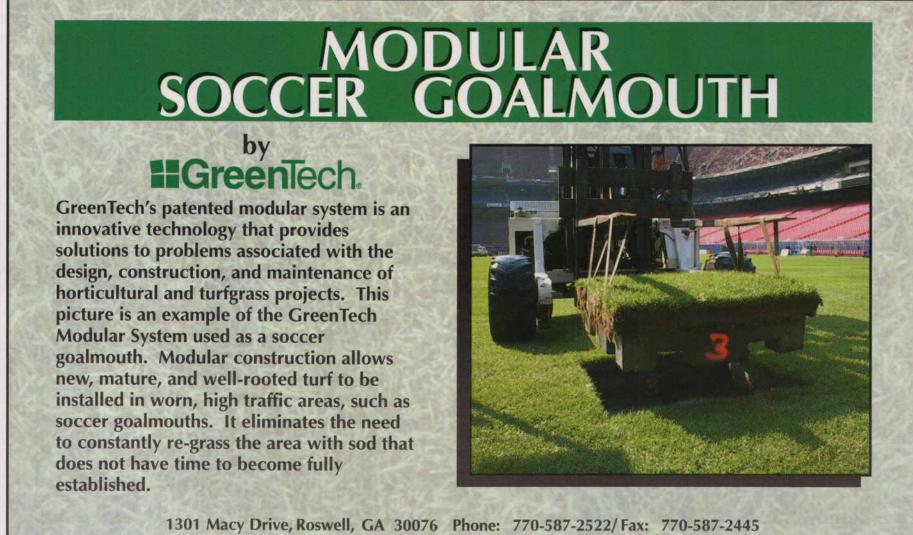
#### Training

Time should be taken with your staff to review proper pesticide handling methods and also planning ahead to handle pesticide spills. Training in these areas will provide invaluable, especially when an emergency arises.

Many states now require all certified pesticide applicators to have a written plan outlining proper pesticide handling and spill response procedures for their individual operation. This plan could include: methods and procedures for properly handling pesticides, pesticide containers and application equipment; methods and procedures for inspection and repair of pesticide application, storage and application equipment; methods and procedures for rinsing/washing pesticide containers and application, storage and transportation equipment; methods and procedures to be used to contain, recover, handle and dispose of pesticide spills either inside or outside of the pesticide storage facility.

Emphasis must be put on regularly training employees and providing them with proper equipment to safely apply pesticides. OHSA regulations stipulate that you must document your training efforts.

Dave Fearis is a turf & ornamental product specialist for PBI/Gordon Corporation, www.pbigordon.com.



Email: info@greentechitm.com Web: www.greentechitm.com

#### in & on the ground



#### **CENTRAL CONTROL SOFTWARE**

Rain Bird introduces Version 4.0 central control software, which offers Rain Watch and Minimum ET; the former can make irrigation decisions based on the type of rain event happening, while the latter precisely determines the watering cycle, as opposed to scheduling run times in advance for alternating days. Rain Bird/800-984-2255

For information, circle 098 or see http://www.oners.ims.ca/2910-098

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For Detailed Information and a List of Licensed Growers Visit:

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BERMUDAG

All Stripes

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#### CONTROL PYTHIUM BLIGHT

and prevention. BASF Professional Turf/800-545-9525 For information, circle 096 or see http://www.oners.ims.ca/2910-096



#### NEW HERBICIDE

Lifeguard herbicide from LESCO uses the active ingredient dithiopyr to control crabgrass and other annual grasses and broadleaf weeds in established turf. It comes in 5-oz., water-soluble packets and is labeled for use in most states. LESCO/800-321-5325 For information, circle 120 or see http://www.oners.ims.ca/2910-120



#### NEW KENTUCKY BLUEGRASS

With a compact, aggressive growth habit, North Star is a truly unique bluegrass for "high use" turf. It is outstanding for wear tolerance and excellent for mixes requiring aggressive growth and quick recuperation. Featuring very good salt tolerance, excellent rust tolerance, and 'Top 10' performance in the most recent 1996-2000 NTEP trials. Turf-Seed, Inc/503-651-2130 For information, circle 106 or see http://www.oners.ims.ca/2910-106

#### ARC ADJUSTMENT

The new TR70XT Series combines simplicity and ruggedness in one commercialgrade rotor by offering Toro's exclusive arc-adjustment band technology plus a highpressure rating. The rotor's gray arc adjustment band allows precise settings from 30 to 360 degrees, minimizing the need for fine-tuning. Toro Irrigation/800-664-4740 For information, circle 103 or see http://www.oners.ims.ca/2910-103





#### HOSE/TUBING CLAMPS

OETIKER manufactures various clamp styles in both zinc-plated steel and stainless steel. The design provides speed of installation, tamper resistance, low profile posture while maintaining a constant seal that will hold against pressure, vacuum, and vibration. OETIKER/989-635-3621 For information, circle 107 or see http://www.oners.ims.ca/2910-107



#### KNOW SOIL MOISTURE LEVELS

Acclima is the first commercial provider of sensor-based irrigation control technology that relies solely on soil moisture levels. Other sensor-based systems are based on "relative" sensors that respond to a number of soil variables, including temperature and chemistry. Acclima's product has "absolute" sensors, the only variable being measured is the actual moisture content of the soil. Acclima/208-887-1470 For information, circle 104 or see http://www.oners.ims.ca/2910-104 Jump Into The Sea

Most Salt Tolerant Turfgrass
Darker Green Color Than Bermudagrass
Tolerates Gray Water, Effluent and Many Medium-to-Poor Quality Water Sources
Low Fertilization Requirements
Handles Wide Range of Soil pH Levels: 4.0-9.8
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 Minimal Pesticide Requirements • High Tolerance to Salt Spray, Water Logging and Periodic Inundations • Good Rooting in Sandy, Clay or Muck-Type Soils
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### FERTIGATION UPDATE

he sports turf market continues to grow as do sports complexes. Some larger complexes now encompass more than 50 acres. These major complexes are assets to their cities and turf quality is crucial to their success. Heavy, constant turf traffic can make maintenance a problem, of course.

To complicate this problem, maintenance budgets are heavily scrutinized and subject to cuts, meaning quality sometimes can be compromised.

Turf managers looking for solutions should consider fertigation, the practice of injecting liquid nutrients into the irrigation system.

Fertigation converts ordinary irrigation water into fertile water. Notice after a summer thunderstorm the dramatic growth and restored green of turf. This phenomenon is caused by the lightening in the storm, which converts nitrogen in the air into nutrients in the rain, therefore creating fertile rain. Fertigation can provide a thunderstorm for your sports field each time you irrigate.

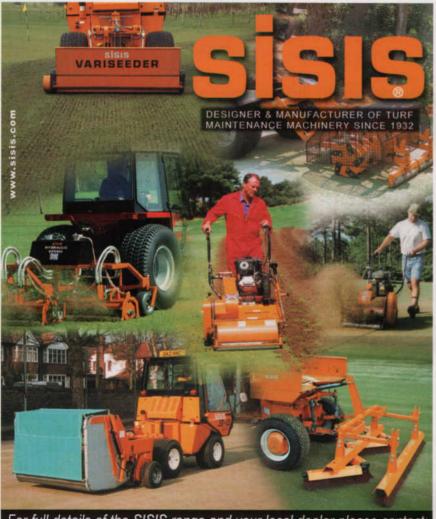
This method of feeding the turf lightly with each irrigation cycle will control plant growth, build the health of the plant and soil, and produce a deeper and

denser root system. Fertigation gives the option of pushing the growth after heavy play, reduce labor, completely eliminate or reduce the use of pesticides, and conserve water.

How can fertigation save water? It is the most efficient way to apply fertilizer both through foliar and deep root application. The soil and the plant health are allowed to reach maximum health and stability. Healthy plants do not require as much water, nutrients, herbicides, or pesticides. A horticulturist for a casino in Las Vegas reported that he had not used a single drop of pesticide in the past 5 years since he began injecting special organic fertilizers, and has significantly reduced water use.

There are fertigation systems to accommodate 1-acre baseball fields as well as large sports complexes, including sites as large as one with a pump station that runs at 3,000 gal/min @ 150 psi. **ST** 

This article was supplied by Turf Feeding Systems, Houston, TX, a leading fertigation company, www.turffeeding.com or 800-728-4504.



For full details of the SISIS range and your local dealer please contact: SISIS INC., PO Box 537, Sandy Springs, SC29677 Phone: (864) 843 5972 Fax: (864) 843 5974 Email: idc@sisis.com

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#### MICRONUTRIENTS

ioGain WSP

Becker Underwood's BioGain is a dry, water-soluble combination of chelated iron micronutrient, natural humic substances, cold water kelp, and a proprietary blend of natural sugars, vitamins, amino acids and beneficial bacteria. BioGain WSP is designed for use in spray application programs to reduce stress and stimulate root growth through enhanced water and nutrient uptake, and correct iron deficiencies in grasses and landscaping plants. Becker Underwood/515-232-5907 For information, circle 110 or see http://www.oners.ims.ca/2910-110