

Check-up on equipment maintenance:

interview with Erik Sides of the Equipment & Engine Training Council

Editor's note: Erik Sides is the executive director of the Equipment & Engine Training Council, York, SC, eetc@eetc.org.



SportsTurf: What are the three most important routine (daily or monthly) maintenance tasks turf managers should do with their mowers?

Sides: Really simple here; each manufacturer usually has a daily/monthly/yearly check list of maintenance items to check. If we set aside some time to check these items as indicated by the manufacturer maintenance check list we could prevent a lot of headaches in the future.

Check fluid levels as suggested by manufacturer. Example: checking fluid levels as required would help us identify if the unit is leaking/using oil early on. A lot of times a leak or issue internally starts out small and gradually gets worse with more use. If we identify the loss of fluid early on it can save headaches and budget dollars.

Check for loose/worn/damaged components/parts/hardware. Example: This really becomes important on hydraulic driven mowers, chaffed/nicked or kinked hydraulic hoses. Generally these damaged hoses will burst when mowing the ball field or prize area causing damage to the turf.

Operator awareness/training. Although this is not on the maintenance checklist, having a well trained operator that stays alert of the unit and his or her surroundings is well worth the time and investment. Operators should be trained on proper operation but also about the warning indicator lamps/alarms and gauges. An alert operator trained what to do in case of an alarm or indicator light can prevent altogether or lessen the damage that may occur.

All manufacturers have an Operator Manual that details operation procedures and details what alarms and warning indicators are and what to do when is activated. If you do not have the manual search the manufacturer's website and download the manual. Develop a training program to cover each type of unit you have in your fleet. This can save not only maintenance budget but also has the liability risk to it as well.

ST: Is there something turf managers can do a few times annually that will increase life and performance of mowers?

Sides: Follow recommend fluid change intervals as per the manufacturer recommendations; if you pay close attention you may see a little statement that says (In Extreme/Dusty working conditions change fluids at XXX). Extreme working conditions could be high ambient temperatures (xx) degrees, or under a heavy load for long periods of time, etc. If the fluids operate in extreme temperatures they will need to be changed more often.

The air intake system is another one that may be overlooked. Look for loose/damaged air intake hoses/clamps/housing and change the filter at least once a year if not more. Follow manufacturers' recommended change intervals. Do not blow the air filter off with compressed air or bang up against something to clean. This will damage the filter medium and or damage the seals, replacing the filter is always best. Do not remove the filter/cover to check filter condition if equipped with a filter condition indicator. This keeps the possibility of dirt being intro-

duced into the unit. Engines and dirt do not mix well and is expensive when it does happen.

One other item to be sure of is when washing the unit, **it should be shut off.** I have seen bent piston rods where water was sucked in while engine was running.

ST: How large of an operation, like a college or school district, do you think can support having an in-house mechanic?

Sides: That's hard to say because of so many variables but looking at the annual maintenance budget and what is out-sourced vs. what is done in house would be a good start in making that decision. If you have had to replace complete units because of poor maintenance then this may be also be a deciding factor.

Some dealers do offer a yearly maintenance service program that can be used for smaller fleets but someone still needs to have the ability to perform the daily maintenance checks and setups suggested by the manufacturer.

ST: What's your advice for keeping smaller equipment like trimmers running their best?

Sides: Keeping the filter clean and the fuel quality. Ethanol in fuel has shortened the shelf life of gasoline. When moisture develops over time issues with small equipment take place causing idling issues, weak performance or no start conditions. This then becomes quite expensive for repair if not caught early.

Keep the fuel treated with a quality fuel stabilizer like Ethanol Shield year round. This will protect the fuel system from stale fuel as well as protect it from the harmful effects of ethanol.

ST: In your experience what are the most costly mistakes people make when it comes to equipment maintenance?

Sides: 1. Not having a plan (maintenance checklist). 2. Not following through (routine, routine, routine). 3. Not keeping accurate records (tracking parts used, hours when serviced etc.) 4. Not following proper procedures (can lead to more expense or liability exposure). ■

TURFTIME EQUIPMENT ADDS PRO-AERATORS TO ITS PRODUCT LINE

These commercial grade aerators offer affordable pricing for schools, landscapers and estate owners. With rugged steel construction and greaseable bushings on a 1" diameter shaft, the Pro-Aerator comes in widths of 42", 63", 84" and 105" and is operated behind 18-30 HP tractors. Coring spoons reach up to 4" depth depending of soil conditions. Independently mounted spoon wheels allow easier turning and minimize turf damage.

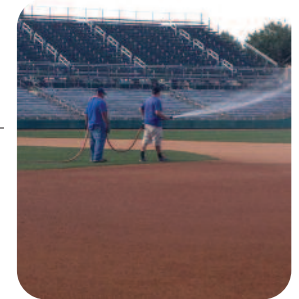
Turf Time Equipment



EP MINERALS LAUNCHES GAME CHANGER BASEBALL INFIELD CONDITIONER

EP Minerals, LLC announced the launch of Game Changer, a new clay conditioner designed specifically for baseball infields. Game Changer features patent pending KT3 surface technology, formulated to keep baseball infields moist, not muddy, while controlling dust and reducing water usage. When combined with the infusion of a proprietary blend of non-ionic surface treatment, Game Changer uses the absorptive properties of calcined clay as a conditioner to allow more water penetration. The product provides increased moisture retention even in extreme heat, lower water applications, and great dust control. That means reduced water costs and less maintenance, all with better playing conditions. EP Minerals has developed four versions of Game Changer for different infield uses: Game Changer with KT3 Technology, Game Changer Regular Conditioner, Game Changer Mound Clay, and Game Changer Drying Agent.

EP Minerals



NEW INDOOR "TERF"

ECORE International's Terf provides cushion underfoot, has sound isolating advantages, and adds a significant environmental story that does not exist with any other turf product. Terf was designed with an athlete's body in mind. Of particular importance is force reduction, which measures and evaluates a flooring system's ability to reduce impact, especially to the lower extremities. Terf is designated for indoor use only and meets specifications for competitive field hockey, lacrosse, and soccer fields. It is spike-resistant and ideal for heavy indoor sports training, including use with football pulling sleds and speed schools that promote speed, power, strength, flexibility, and endurance training. Terf is manufactured by fusion-bonding a nylon wear layer to Ecore's recycled rubber underlayment.

ECORE International



MARLINS PARK CONVERTS TO PLATINUM TE PASPALUM

When the Miami Marlins take the field this spring, the new Marlins Park stadium will feature a complete field conversion to Platinum TETM Paspalum turfgrass. Platinum TE meets specific performance needs of the team and of the retractable roof, warm season stadium, as well as addressing environmental priorities, such as predictability and reduced water and nitrogen usage. "Everything changes when you factor in a retractable roof," said Chad Mulholland, director of grounds for the Miami Marlins. "Field temperatures can reach over 100 degrees during the day and drop to as low as 72 when we close the roof on game days. But even more challenging is the shade. There are days when some areas of the field get no sun at all."

Turf Ecosystems

MEAN GREEN CLEANER & DEGREASER

With a blend of biodegradable detergents, Mean Green Industrial Strength Cleaner & Degreaser quickly cuts through grease and grime, speeding maintenance, repair and rebuild projects. This proven product contains 40% more cleaning ingredients to dissolve grease and grime more quickly than other cleaners. With 30% more solvents and 20% more surfactants, even the most stubborn stains are quickly removed from various industrial surfaces – including metal parts and housings, painted surfaces, vehicle interiors and exteriors, shop interiors and concrete flooring. Mean Green has doubled the amount of chelating agent. It is ideal for use with pressure washers.

CR Brands, Inc.



NEW PRO LEAGUE CHAMPION BROWN FROM TURFACE

Turfce Athletics introduces Pro League Champion Brown, the fourth color to its lineup of infield conditioners. Like all Pro League products, Champion Brown features smaller, uniform particles designed to ensure the ultimate fielding and sliding surface to keep skinned infields safe and playable. Moisture management is critical in keeping skinned infields playable. All Pro League conditioners absorb their weight in water to prevent puddles on the infield and stave off rainouts. That absorbed moisture will later release to prevent a hard, cracked field when it's dry. In addition to Champion Brown, Pro League conditioners come in Natural, Red and Heritage Red colors.

Turfce



TOOLS & EQUIPMENT

GRIGG BROS INTRODUCES RHIZONIFY, SOIL SPECIALTY PRODUCT

Introducing Rhizonify, a new technologically advanced, value-added formulation from Grigg Brothers designed to facilitate the interaction of turfgrass roots with water, nutrients, and sugars in the rhizosphere to improve rooting, enhance plant energy status, and promote turfgrass vigor in challenging soil conditions or during environmental stress. Applications of Rhizonify enhance and replenish plant and soil carbohydrates in the rhizosphere to successfully overcome limitations encountered during many conditions turfgrass managers face. Placement and solubility of the carbohydrate and nutrient contained in Rhizonify determine its efficacy.

Grigg Brothers



JACOBSEN LAUNCHES CONTOUR ROTARY MOWER

Jacobsen has launched the new AR722T contour rotary mower, designed to maintain sports and recreation fields. The AR722T features a 65.2 hp Kubota turbo-charged diesel that delivers performance and blade speed in the most challenging terrain without slowing down. The new AR722T is equipped with the SureTrac parallel-cross-series traction system, which provides superior performance on hills. The AR722T's advanced weight transfer system allows for balancing of the machine's weight between the traction unit and decks for optimal traction and ground following in varying terrains. The AR722T is also equipped with Jacobsen's exclusive TrimTek decks that feature a downdraft blade for superior mulching capabilities.

Jacobsen



NEW CUSHMAN HAULER PRO UTILITY VEHICLES

Cushman introduces a fully electric Cushman Hauler PRO with a 72-volt AC drivetrain that provides the range and power once exclusive to gas-powered machines in a silent, zero-emissions vehicle. Cushman vehicles are manufactured by the E-Z-GO Division of Textron Inc. The new Hauler PRO features a 72-volt AC electric drivetrain, upgraded from more traditional 48-volt systems, that offers up to 50 fully-loaded miles of range between charges. The patented AC Drive technology also ensures that the Hauler PRO maintains consistent power and performance from the first pre-dawn chores to the last light of dusk, without the noisy drone of a gas engine.

Cushman



SAPIP-IRT WIRELESS IR LEAF TEMP SYSTEM

The new SapIP-IRT wireless infrared temperature system from Dynamax, Inc. is the latest development in IR leaf temperature sensing for use in irrigation scheduling and plant stress detection. This new system allows for small IRT nodes to be distributed up to 500 meters (1600 ft) apart throughout a field, and data to be collected with a single wireless modem. Data is then displayed and graphed on a website where data files can also be downloaded to your PC. Plant stress models are used to determine if, and when, your crops need irrigation, and flags are used when irrigation is required.

Dynamax, Inc.



FMC INTRODUCES TRIPLE CROWN T&O INSECTICIDE

A multiple action insecticide providing fast-acting, long-lasting broad-spectrum control of more than 30 above- and below-ground turf and ornamental pests, Triple Crown® T&O insecticide is now available from FMC Professional Solutions. Triple Crown is a three-way combination of FMC bifenthrin, FMC zeta-cypermethrin and imidacloprid, offering multiple modes of action on key pests including ants, fire ants, grubs (masked chafer, European chafer, and Japanese beetle), chinch bugs, annual bluegrass weevils, ticks, mites, billbugs, mole crickets, and more. Research among university specialists in various parts of the country has shown that Triple Crown delivers fast results against damaging annual bluegrass weevil and billbug adults, chinch bugs, mole crickets and many other insects.

FMC Professional Solutions



SISIS TO LAUNCH TWO NEW MACHINES

SISIS will be introducing this year the Rotorake 600HD pedestrian de-thatcher and the Rotorake TM1000 tractor mounted de-thatcher which now features a new interchangeable reel system. Along with the two new machines, which are being launched into the US market for the first time, will be the highly popular Veemo MK2 heavy duty tractor mounted de-thatcher, Auto Rotorake MK5 self-propelled heavy duty de-thatcher and Multislit 1200 tractor mounted deep slitter. The Rotorake 600HD is a heavy duty pedestrian de-thatcher and linear aerator which can be used for regular, routine use at a shallow setting or a deeper setting. The SISIS Rotorake TM1000 is a tractor mounted unit which is now available with five quick release interchangeable reels to aid the removal and control of thatch and help reduce standing surface water by improving water infiltration.

SISIS

BEACON TARP CART WITH TARP PIN HOLDERS

This cart is a great addition to your grounds crew. Designed to store and transport up to four area tarps and your field weights or tarp pins. Conveniently keep rolled up tarps and pins together for easy transport and storage. Perfect for stowing area rain tarps, weighted tarps, infield protectors, sideline turf protectors, track protectors and growth covers. The cart may be manually pushed along in wheelbarrow fashion or towed by a utility vehicle

Beacon Athletics



SWEeper CUTS MAINTENANCE TIME ON SYNTHETICS

The 3-three-wheel Broce Turf Boss sweeper can groom a typical turf field in a single pass, with full 8' brush contact, reducing field maintenance time by up to two-thirds. Its reversible brush rotation, included as standard equipment, can double productivity by allowing the operator to sweep in both directions without turning around. Turf Boss sweeper's hydraulics are engineered to deliver more power to the brush, which enables full brush-turf contact for faster field maintenance. To combat overheating issues on turf fields, its radiator is designed to operate in 140°F ambient temperatures. It is the only sweeper of its kind to incorporate a hydraulic oil cooler as standard equipment. Comes standard with turf-specific 12-inch wide tires that tread lightly on turf.

Broce Manufacturing Co.



SELF-PRIMING CENTRIFUGAL PUMPS

Griswold Pump Company says that its H Series high head self-priming centrifugal pumps have been designed with key features and options that make them ideally suited for a wide variety of water applications, including turf irrigation where greater flows and higher heads are needed. Unlike standard end suction centrifugal pumps, the H Series is able to maintain its prime even when check valves or foot valves have failed. Since the suction line on the H Series is located higher on the pump housing than conventional centrifugal pumps, it keeps the impeller and mechanical seal covered with water at all times eliminating the need to re-prime the pump and protects the seal from running dry resulting in costly replacements.

Griswold Pump Company



KATANA HERBICIDE EARLY ORDER AND BUNDLE BONUS PROGRAM

Professional sports turf managers can get a head start on next year's maintenance plans while conserving valuable budgets with an early order incentive and product bundle bonus program, available from PBI-Gordon Corporation, for its Katana Turf Herbicide. The program includes different opportunities to save: Katana Incentive, with a minimum purchase of eight bottles or two cases of Katana, you can receive a \$100-per-case rebate. Katana is packaged with four 3-ounce bottles per case (receive \$100 per case with each additional case after minimum is met). Also Bundle Bonus Rebate, add 10 gallons of SpeedZone and/or SpeedZone Southern to each case of Katana ordered and earn an additional \$2.50 per gallon rebate on the SpeedZone products. Early delivery bonus also available.

PBI Gordon



BAYER CROPSCIENCE INTRODUCES SPECTICLE PLUS FERTILIZER

Environmental Science, a division of Bayer CropScience LP, has launched Specticle plus Fertilizer, an herbicide that provides warm-season turf managers up to 8 months of residual control at low use rates. The characteristics of Specticle deliver excellent weed prevention and fertility. Specticle plus Fertilizer is available in two different concentrations and a variety of fertilizer blends to provide for increased flexibility that meets the needs of warm-season turfgrass professionals. Specticle is a unique class of chemistry that offers an environmentally responsible solution and helps address weed resistance. Specticle plus Fertilizer delivers extended residual pre-emergent control of more than 75 broadleaf and grassy weeds, including annual bluegrass, goosegrass, crabgrass and annual sedge. The easy-to-use Specticle plus Fertilizer helps streamline turf management practices and simplify application.

Bayer

Specticle[®]
+ FERTILIZER

GET RID OF GEESE

Canada Goose deterrent company Away With Geese has a new product: the Sports Cage. The Sports Cage protects the Sports Unit, a unit designed to avert theft in public spaces, from vandalism. The two together get rid of Canada Geese from any public area, while also averting theft and vandalism of the unit. All Away With Geese products feature a solar-powered light that is scarcely noticeable to humans but is very disruptive to the sleep of the geese, causing them to find another habitat after just a few restless nights. Like all Away With Geese units, they are maintenance free; once placed and secured, they require no upkeep and are guaranteed to rid the area of Canada Geese.

Away With Geese

