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Golfdom

SPECIAL ADVERTISING SECTION

Advanced Aeration Systems

11231 U.S. Highway One, Suite 384, North Palm Beach, FL 33408

Phone: 561-625-3301 • Fax: 561-625-1983

Web Site: www.advancedaer.com

ADVANCED

AERATION

SYSTEMS

E-mail: Lou Merlini, Imerlini@advancedaer.com (Eastern states)
Tom Armitage, tarmitage@advancedaer.com (Western states)

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Advanced Aeration Systems Inc. (Advanced Aer) is a pioneer in the design of sensor-based sub-surface aeration system for golf greens.

Sub-surface aeration has been used for years to pull excess moisture from greens. It has evolved from crude homemade systems to modern permanent in-ground units. These units are effective; but without up-to-the-minute information about conditions in the soil profile, it can be difficult to determine when and for how long to apply airflow.

Advanced Aer is the only company marketing sensor-based systems for golf greens. Its patented technology and user-friendly software provide a real-time stream of data that, for the first time, gives superintendents the information needed to effectively use sub-surface aeration.



This compact, powerful aeration system incorporates patented soil gas analysis technology to continuously monitor subsurface oxygen, moisture and temperature levels. The sensor's data is sent to a green-side pedestal or a PC at the superintendent's desk via radio satellite commu-

nications. The system can be programmed to activate automatically and, depending on the situation, either vacuum (pull) or pressurize (blow) air through the root zone.

A vacuum applied to the drainage system pulls fresh air down through the turf surface to increase oxygen, reduce carbon dioxide and draw water out of the root zone. Air pressure applied to the drainage system forces fresh air up into the root zone.

The in-ground system consists of two compact 20-inch diameter by 24-inch tall stainless steel vaults that are connected to the under-green drainage pipes at a check valve off to the side of the green. Moisture, temperature, and/or salinity sensors



are inconspicuously buried in the green's soil profile, and an oxygen sensor is housed in the blower vault.

The Advanced Aer OMT system can be activated remotely from the superintendent's computer or at the green-side

pedestal, or it can be set to automatically activate when specific thresholds, pre-set by the superintendent, are reached. This level of knowledge and control is unprecedented in the industry. The end result is both healthier grass and a faster, firmer, more consistent putting surface.

The system features a unique regenerative motor design that regulates vacuum pressure in response to moisture levels in the green profile, applying

increased pressure when moisture levels rise and a gentler vacuum as moisture levels fall. Competing systems use standard "centrifugal" motors that only provide constant pressure, do not respond effectively to major rain events and have the tendency to over dry and stress the grass.

The Advanced Aer OMT system is ideal for new construction or retrofitting on existing greens. Installation of the vaults and control system is relatively non-invasive and can usually be completed in less than three hours per green. The system is designed to work with either 110-volt, single-phase power or a 220-volt configuration.

Greens are a golf course's most visible, most scrutized and most important asset, and golfers rank the quality of the putting surface as the greatest factor when judging the quality of a playing experience. Healthy turf is more resistant to disease and other problems and better tolerates low mowing heights. Excess moisture can lead to the development of algae or moss, which cause surface blemishes, and to a variety of diseases. A green with too much moisture plays slow and is more susceptible to ball marks and foot traffic damage.

With Advanced Aer, the superintendent now has a tool that monitors and measures the key factors of root zone health – oxygen, moisture and temperature – and effectively removes excess water from the growing medium to create the ideal conditions for healthy growth and optimum playing conditions.





Aquatrols

5 N. Olney Ave. Cherry Hill, NJ 08003

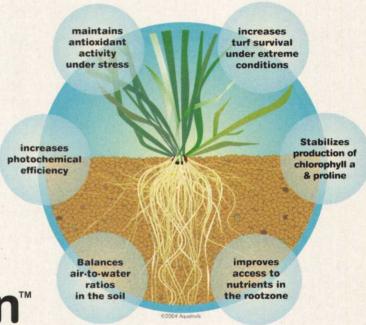
Phone: (800) 257-7797 • Fax: (856) 751-3859

Web Site: www.aguatrols.com E-mail: sales@aquatrols.com

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Since 1954, Aquatrols has led the industry in developing innovative products for effective resource management. Aquatrols effectively combines state-of-the-art research and development techniques, a technically knowledgeable sales force, and a long history of industry expertise to meet the changing needs of the professional turf industry.

The Aquatrols product portfolio includes an array of surfactants and other specialty chemicals tailored to meet the growing challenges of the industry, and all products undergo stringent quality control and assurance testing before they are shipped to assure your satisfaction and your turf's protection.





Revolution™

The amount of stress placed on today's greens is greater than ever. Increased traffic and the demand for faster greens speeds, coupled with heat and water stress, push turf beyond its physiological limitations. As a turf professional, maintaining quality turf under a variety of stresses is your greatest challenge, and establishing control over the growing environment is key to your success. Revolution™ lets you gain control of rootzone conditions so that your turf can perform to its greatest potential. It will withstand daily abuse better, use water more efficiently, and look spectacular even at the height of summer.

Why is it so important to manage your rootzone more effectively? Because it can greatly affect the quality of turf you grow out of it. Revolution™ takes the guesswork out of growing great turf from the bottom up. It works in the soil to stabilize moisture levels, balance air-to-water ratios and provide better access to nutrients in the rootzone.

Revolution lets the plant function at its greatest genetic potential. The result? Stronger turf throughout the season that will perform in all conditions.

This new class of block copolymer chemistry has been carefully engineered to provide a solid foundation for successful turf management, and is an essential tool for protecting turf against damage caused by environmental and cultural stresses. Revolution is a safe, reliable way to comprehensively maintain quality turf conditions throughout the season. And Revolution can be

tank-mixed with a broad spectrum of commonly applied chemicals for even greater convenience.

Revolution ensures that the soil works harder for your turf, so your turf can work harder for you.

Try Revolution to experience what high-performance soil can do for your turf:

- Increases turf resilience and stress tolerance
- Extends natural antioxidant activity
- Stabilizes proline production for better playability
- Increases chlorophyll production for consistent color
- Increases photochemical efficiency
- Increases production of non-structural carbohydrates
- Increases evapotranspiration for cooler canopy
- Increases overall plant health for better disease resistance



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Better turf comes from better products. At BASF, we offer a comprehensive portfolio of products specifically designed to help you keep your course weed-free and disease-free, with maximum efficiency of labor and other resources.

We know your career can be made or broken out on the course. That's why BASF offers the tools you need—including Insignia®, Emerald® and Curalan® fungicides, as well as Drive® herbicide—to keep your course in the peak condition that virtually eliminates player complaints.

Insignia®

Insignia® fungicide from BASF gives turf professionals an exciting new option for protecting turf from disease. BASF, the global leader in agricultural fungicides, has



again applied its expertise to the development of a fungicide specifically for turf. The result is Insignia, with the active ingredient pyraclostrobin, a brand-new, state-of-the-art class of strobilurin chemistry that offers exceptionally broad-spectrum, long-lasting disease control and prevention. In short, Insignia is the fungicide other fungicides dream of being when they grow up.

In university field trials conducted at multiple sites, Insignia has consistently demonstrated exceptional control of brown patch, Pythium blight, gray leaf spot, anthracnose, pink snow mold and summer patch, as well as 12 other diseases, for up to 28 days.

Emerald®

Emerald® is an all-new class of fungicide chemistry for dollar spot control. The active ingredient, boscalid, inhibits a system called complex II in the mitochondria of fungal cells,



depriving the fungal cells of energy, disrupting fungal growth and development and halting disease development. Designed specifically to control dollar spot, Emerald is effective on most major turf species, including:

- Creeping bentgrass
- Colonial bentgrass
- Perennial ryegrass
- Annual ryegrass
- Kentucky bluegrass
- Common bermudagrass
- Hybrid bermudagrass
- Annual bluegrass
- St. Augustinegrass
- Tall fescue
- Bahiagrass
- Zoysiagrass
- Centipedegrass

Curalan® EG

Curalan® EG is a broadspectrum fungicide that provides economical control of dollar spot in cool- and warm-season grasses, while



also aiding in the control of snow molds, patches and other turf diseases. Don't take our word for it, though:

"Recently, I had my worst battle with dollar spot. Toward the end of the season, I decided to try a combination of Curalan and Banner® on greens and tees and was amazed at the instant results on active dollar spot. I also got three to four weeks of control—and that's with a low use rate of 2.75 pounds per acre. This year, I am going to use Curalan on all turf areas, including fairways. It's a great stand-alone product and I don't have to put a lot of it out to get results, which helps protect the environment and the club's bottom line."

Paul Knulty, CGCS Superintendent, The Oak Club of Genoa Genoa, IL

Drive® 75 DF

Drive® 75 DF postemergent herbicide is the only postemergent that dependably controls a broad spectrum of



both broadleaf and grassy weeds. Quinclorac, the active ingredient in Drive, uses two powerful modes of action to control targeted weeds in a wide variety of cool- and warm-season turf-grasses. Drive works as an enzyme/cell wall disruptor to control grassy weeds and has auxin-type herbicidal activity to disrupt plant growth in broadleaf weeds. Whether you manage turf on golf courses, residential lawns, athletic fields or at sod farms, you can rely on Drive to eliminate such hard-to-control weeds as:

- Crabgrass
- Kikuyugrass
- Dollarweed
- Foxtail
- Clover
- Torpedograss

- Speedwell
- Bindweed
- Dandelion
- Signalgrass



Bayer Environmental Science

95 Chestnut Ridge Road Montvale, NJ 07645

Phone: 800-331-2867 • Fax: 201-307-6870

Web Site: BayerProCentral.com



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When your job depends on green, healthy turf, you need quality products that deliver consistent, reliable results. Bayer Environmental Science offers a complete line of turf-care products that guarantee you cutting-edge technology and the highest performance standards, season after season.

Bayer sets the industry's standard for disease, insect and weed control. Whether you're fighting unsightly weeds, destructive insects or tough diseases, you can count on Bayer products to protect your turf.

Backed by Bayer means we're building on an already solid foundation of proven products to help you succeed. But you purchase more than products when you do business with Bayer Environmental Science. What you're buying is an added measure of confidence. It's the assurance that comes from value-added programs, services and an ongoing commitment to the industry.



Merit revolutionized grub control with outstanding preventive and curative pre-damage control from egglay through second

instar. Merit also delivers systemic control of mole crickets and a variety of other pests at use rates that are up to 96 percent lower than most currently registered turf soil insecticides. Its unique mode of action allows Merit to provide strong residual activity and superior biological performance.

COMPASS[™]

Compass is a cornerstone product for disease management on fairways and greens. This broad-spectrum strobilurin fungicide controls a variety of diseases, including brown patch, anthracnose, rapid blight and leaf spot, while suppressing dollar spot. Compass provides longer residual protection than contact products and cost-effectively improves turf quality.

REVOLVER

Revolver provides post-emergent control of a variety of unsightly grasses, including Poa annua, goosegrass and others, in bermudagrass and zoysiagrass. Revolver also smoothes transition by controlling clumpy ryegrass and Poa trivialis. Based on foramsulfuron, Revolver's unique mode of action helps manage resistance.

Signature

Signature is the foundation of summer and winter decline programs. With multiple applications before turf stress hits, Signature activates turf plants' natural immune systems to ward off diseases in cool- and warm-season turf, improving turf quality. Signature makes an excellent tank mix with other fungicides for season-long healthy turf.

RONSTAR

Ronstar offers season-long control of 25 broadleaf and grassy weeds, including goosegrass, crabgrass and Poa annua, with just one pre-emergent application. Ronstar provides up to 120 days of effective control without inhibiting turf root growth or turf damage recovery. Ronstar may be applied weeks before weed seed germination, giving you unmatched application flexibility.

TEMPT®

Tempo is an advanced-generation pyrethroid that quickly controls a broad range of the toughest turf pests. Tempo provides residual control for up to 30 or more days and uses up to 80 percent less active ingredient than organophosphates.



Becker Underwood

801 Dayton Ave. Ames, IA 50010

Phone: 800-232-5907 • Fax: 515-232-5961

Web Site: www.beckerunderwood.com E-mail: request@beckerunderwood.com



ADVERTISEMEN

A rapidly growing company established in 1982, Becker Underwood develops cutting-edge biopesticides, colorants, specialty products and new technologies for a wide range of applications. Becker Underwood specializes in the discovery, scale-up fermentation and formulation of live organisms with its biopesticides and biostimulants, which offer turf care managers the opportunity to reduce the use of chemical pesticides and fertilizers. This is best evidenced with the Nematac and Nemasys lines of biopesticides, which are revolutionary weapons in the difficult battle against insects. Nematac S is the only product on the market consisting of insect-parasitic nematodes that reproduce to keep killing mole crickets. Other bio-agronomic products that Becker Underwood brings to the turf, ornamental, horticultural and agricultural markets include: Nematac S®, Rhizanova™, Bio-Gain®, Canteen® VigaRoot™ and Sprint®.

BioGain WSP® with Sprint 330

BioGain® WSP® + Sprint® 330 is a simple, yet effective combination of two proven Becker Underwood products that are designed to work in tandem to thoroughly reduce stress, stimulate root growth and prevent iron deficiencies in turf. BioGain is a fertilizer-free combination of natural humic substances, seaweed extract, and a proprietary blend of natural sugars, vitamins, amino acids and beneficial bacteria. The addition of Sprint iron chelates to BioGain is designed to help fortify the protection of plant-available irons in turf grass and ensure dark green, healthy turf. Sprint has long been recognized as offering the highest quality chelates available.

VigaRoot

Designed for professional golf and sports turf applications, VigaROOT™ is used in spray application programs to reduce stress and stimulate root growth through enhanced water and nutrient uptake and correct micronutrient deficiencies. VigaROOT™ is a dry soluble combination of iron-chelated manganese, chelated zinc, natural humic substance, seaweed extract, yucca, and a proprietary blend of natural sugars, vitamins, amino acids, and beneficial bacteria.

VigaROOT™ biostimulant programs are most beneficial applied at two-to-three week intervals during stressful summer conditions and as an establishment boost during overseeding. VigaROOT™ is ideal for sod, either preharvest or after installation to enhance root regeneration.

Canteen

Becker Underwood's Canteen® treats newly seeded or established turf, sod and landscaping plants. Canteen®, a performance-enhanced spreader and soil penetrant, loosens compacted

soils, improves seed germination, delivers pesticides and fertilizers to the root zone and assists wetting of spray tank mixes.

For dark green, healthy plants, Becker Underwood's Sprint® 330 and Sprint® 138 iron chelates provide unmatched performance. Unlike non-chelated or weakly-chelated irons, the strong Sprint chelates maintain and protect plant-available irons in turf, trees shrubs, field-grown plants and plants in a container. Sprint 330, a 10 percent fully chelated DTPA iron, performs best in slightly acidic to slightly alkaline soils with a ph of up to 7.5. Sprint 138, a 6 percent fully chelated EDDHA iron, is preferred in the most challenging soils, which are alkaline and calcareous, including soils with a ph greater than 7.0.

Rhizanova

Rhizanova increases water absorption, nutrient availability and survival rates of trees, shrubs and ornamental flowers. Designed to get your trees and plant material off to a fast start and give them the best chance of root colonization, Rhizanova puts the fungal inoculum at the roots were the opportunity for contact with feeder roots is highest.

The Rhizanova family consists of five products known as Mycorrhizal Fungi Inoculants. Mycorrhizal Fungi are beneficial fungi that form symbiotic relationships with plant roots. The fungal growth into the soil increases the absorptive area of colonized roots. The chemical activities of these fungal extensions or hyphae on minerals help make inorganic nutrients available to plants. Rhizanova is the best insurance a landscape contractor or arborist can use when getting new trees or plants established.

Nematac S

Becker Underwood Inc. introduces Nematac® S, a biopesticide that uses a natural enemy instead of chemicals to control damaging mole crickets on golf courses, sod farms, parks and pastures in the southeastern United States. Exclusively licensed by Becker



Underwood, the beneficial nematodes in Nematac S become active when applied to a soil profile and use mole crickets as hosts. The microscopic nematodes enter inside the mole crickets and release bacteria, which is lethal to the pest. The mole cricket becomes a food source for the nematodes, which will reproduce and continue to attack the mole crickets infesting the turf.



BlueYellow™

1400 West Ninth St., Brunswick, GA 31520 Phone: 800-667-3268 • Fax: 912-280-6808

Web Site: www.blueyellowpro.com E-mail: bypro@kochcellulose.com



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BlueYellowTM is a revolutionary engineered turf system that provides a one-step solution to turf establishment. The system combines a cellulose-based mat with a calibrated blend of high quality grass seed and fertilizer in the form of a lightweight, 100% biodegradable roll. The innovative product is specifically engineered to produce a sod-quality turf with a lot less labor and at a fraction of the cost.

MAKE GREEN: Lush, uniform turf establishment

BlueYellow™ yields exceptional results and is simple to install with seed, fertilizer and mulch all in one application. Just prep the seedbed, roll the product out where you want grass, and water it thoroughly. BlueYellow™ is biodegradable, so there is nothing to remove after installation. The moisture retention of the cellulose mat and the precise distribution of seed and fertilizer deliver an exceptionally uniform germination and grow-in.

BlueYellow™ is available in a wide range of standard seed blends or can be manufactured to your specifications with any variety of commercially



available seed and fertilizer-giving you a precise, prescription turf

for new construction and renovation projects.

MAKE GREEN: Help protect the environment

Blue Yellow™ is a safer alternative for the environment than traditional methods because the system reduces over-fertilization and is completely biodegradable. The improved moisture retention can reduce the frequency of watering, and the cellulose mat, which adheres to the soil when watered in, prevents seed migration. The substrate maintains its integrity for several weeks, protecting the seed and fertilizer, and reduces the potential for



contamination and costly rework. Upon completion of germination, the cellulose mat degrades completely, leaving absolutely nothing to remove. BlueYellow™ can easily be contoured around trees, irrigation components, drainage inlets and other obstacles, and serves to suppress weeds before it biodegrades.

MAKE GREEN: Easy installation and reduced rework saves money

No special skills or equipment are needed to install BlueYellow™ significantly reducing the time it takes to get the turf establishment process started. Why spend as much as 30 man-hours installing an acre of sod

and fertilizer, or up to 20 hours on traditional seed and fertilizer, when BlueYellow™ is easily installed in eight hours? (See chart) Plus, the uniform establishment reduces the time required to produce a playable surface.

BlueYellow™ offers quality turf the first time, every time, in less time.

Compare BlueYellow™ installation to traditional turf establishment methods



Chart figures represent an average of a variety of traditional application methods over various types of terra

BlueYellow™ is distributed in the United States and Canada exclusively through John Deere One Source. Call your local distributor for information. BlueYellow™ is owned by Koch Cellulose, LLC, a wholly owned subsidiary of Koch Industries, Inc., and is manufactured in Milwaukee, WI.

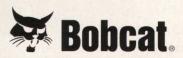
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Bobcat Company

250 E. Beaton Drive / PO Box 6000; West Fargo, ND 58078-6000

Phone: 701-241-8700 • Fax: 701-241-8704

Web Site: www.bobcat.com E-mail: infocenter@bobcat.com



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For more than 40 years, Bobcat Company has been a leader in manufacturing compact equipment. From the development of the first skid-steer loader to more recent introductions in the all-wheel steer loader, compact track loader, compact excavator, attachment, utility vehicle and loader backhoe markets, Bobcat continues to provide appropriate equipment solutions for its customers.

Bobcat has many products that are used in golf course maintenance and renovation, including compact track loaders, all-wheel steer loaders, the new Toolcat™ 5600 utility work machine, mini track loaders, and skid-steer loaders. Turf tires and low ground disturbance by many of the Bobcat products has increased their popularity among golf course superintendents.

A300 All-Wheel Steer Loader

The Bobcat® A300 all-wheel steer loader, with two steering modes, is in a class by itself and available only from Bobcat Company. Unlike conventional skid-steer loaders, which have a ten-

dency to damage turf when turning, the A300 has four steerable axles that allow the operator to turn on the golf course with little or no damage to turf, cart paths and parking lots. This vertical path loader has a rated operating capacity of 3,000 pounds, making it



ideal for handling pallets of sod, fertilizer and much more. The standard two-speed allows operators to travel quickly from one end of the course to another. For maneuverability in tight areas, flip a switch and you're in skid-steer mode.

Toolcat™ 5600 Utility Work Machine

The Toolcat 5600 utility work machine is an entirely new concept and the first of its kind in the compact equipment market. It's de-

signed to have the best features of a loader, pickup truck and attachment carrier. Allwheel steering provides a turning radius smaller than most golf cars for unmatched maneuverability around tee boxes, sand traps and mainte-



nance shops, and minimizes turf damage when turning on turf. Two-person seating increases efficiency by requiring only one piece of equipment to complete a task. No longer does one crew member have to drive a machine and the other drive a vehicle.

Compact Track Loaders

A Bobcat[®] compact track loader's strongest asset for today's superintendent is its low ground pressure. By distributing the operating weight throughout the tracks, these machines can enter or cross the course, carrying heavy loads, causing minimal turf damage. The track undercarriage also provides maintenance crews with the traction they need to work in wet and muddy conditions



where other loaders don't perform as well. With rated operating capacities of up to 3,000 pounds, they are capable of handling pallets of sod, seed and fertilizer.

Skid-Steer Loaders

Bobcat[®] skid-steer loaders are an all-purpose and work environment loader. Their ability to turn within their own length allows you to maneuver in the tightest areas, increasing your efficiency by decreasing the number of times you need to back up and reposition. With 10 models, whether it is lifting and carrying heavy pallets of

sod or filling top dressers with sand, Bobcat has the size you need to complete your fleet.



Mini Track Loader

The Bobcat® MT52

produces just 5.2 psi of ground pressure, which enables it to enter or cross a golf course with minimal turf damage. Designed to reduce or eliminate tasks normally done by hand, the MT52 is the only mini-loader on the market with a detachable ride-on platform, which can reduce operator fatigue. This model is extremely compact and is ideal for trenching and transporting material around confined areas, such as tee boxes, greens or in and around sand boxes.

Attachments

The ability to carry many different attachments is what makes Bobcat® equipment so versatile. By manufacturing more attachments than any other company in the world, Bobcat gives a superintendent the ability to tailor fit Bobcat equipment to many tasks on the course. Units such as trenchers and vibratory plows for installing irrigation, angle brooms for cleaning cart

paths, sprayers for applying fertilizer and pesticides, augers for planting trees, and buckets for moving material or cleaning up debris are just a few that can be added to increase the utilization of a golf courses grounds crew and equipment fleet.





EarthWorks Natural Organic Products

P.O. Box 278K

Martins Creek, PA 18063

Phone: 800-732-8873 • Fax: 610-250-7840

Web Site: www.soilfirst.com E-mail: eworks@soilfirst.com

EarthWorks Natural Organic Products has been formulating and manufacturing dry and liquid organic soil amendments since 1988. Our clientele are exclusively fine turf managers. Founders Joel Simmons and Jerry Brunetti have developed an in-depth product line that deals with the true dynamics of biological soils. All EarthWorks products are built using a carbon pyramid of short-, medium- and long-chain carbon sources. In 1991, Soil First Consulting was established as an independent division of the company. Today, using the lab services of Logan Labs, Soil First is running more than 12,000 soil tests for some of the country's most prestigious golf courses and athletic fields. Through the combination of a powerful soil-building product line and comprehensive independent soil consulting programs, Earth-Works produces sustainable results for turf managers worldwide.

Replenish 5-4-5-Formulated Organic Fertilizer

EarthWorks' flagship product is a uniquely formulated organic fertilizer. The foundation of this product is composted chicken

manure with 40 percent of the product made of rock minerals and carbon activators. Turf is a cover crop, one that is constantly de-mineralizing the soil; the 5-4-5 is the best way to "Replenish" this mineral content and provide the plant with a sustainable supply of needed macro and minor nutrients. Composts are the best way to feed microbial populations in the soil because they have gone through multiple digestion processes, through



the bird and in the compost pile, allowing the raw materials to be immediately available to microbes in the soil and then used as building blocks for proteins within the plant. Replenish 5-4-5 provides as much as 60 percent more organic matter than a meal-based product, which is the basis for using organics.

Replenish 10-2-5-Formulated **Organic Fertilizer with Ammonium Sulfate**

Replenish 10-2-5 is formulated by the same processes as the 5-4-5, but some of the compost is replaced by soluble forms of nitrogen, such as ammonium sulfate. This is an excellent soluble transition product that continues to feed the soil. Ammonium sulfate and organic food stuffs are a great combination in the spring



and fall to help warm cold soils and recover from summer stress.

Cal-Vantage

Cal-Vantage is the most complete and dynamic calcium liquid organic on the market. Developed with four forms of calcium for maximum potential calcium mobility, it also contains boron to allow calcium into the plant as well as nitrogen, sulfur and carbon, all which enhance calcium uptake. This product is ideal for mobilizing calcium into the plant to build turgidity and cell strength, reducing plant stress. It will also help to remove sodium and bicarbonates



from the soil.

Kick Soil Conditioner

Kick is the ultimate soil conditioner, with ingredients designed to feed microbes and open tight soils. Kick is primarily a humic acid product but also contains short- and long-chained carbons, surfactants, vitamins, trace nutrients and bio-stimulants. Kick is ideal for tight soils, feeding microbial populations in both soil and sand, stimulating nitrogen release, buffering sodium, bicarbonates and anaerobic conditions.



Potent Sea Plus Bio-stimulant

Potent Sea Plus is the best overall food amendment any soil could need. This product is made of equal parts fish meal and kelp extract, powerful food sources for beneficial soil bacteria. Added to this formula to create a dynamic synergy are short- and long-chained carbons, following the signature EarthWorks carbon pyramid. Surfactants, vitamins, trace nutrients and bio-stimulants are also part of this complex



product. Potent Sea Plus will help release nitrogen, as well as the basic building blocks that the plant needs to build proteins that help reduce stress and fight off disease.

Eco-Lite zeolite physical amendment

Eco-Lite is the original and premier zeolite mineral used in the

turf industry. This mineral has the highest CEC, nutrient holding capacity, of all physical amendments and is ideal as an amendment in new sand



greens and sports fields. Eco-Lite holds as much water as other physical amendments, allowing for better soil pore space, and has a strong affinity for potassium and ammonium nitrogen.



IVI-GOLF

60-100 Corliss Ave. Johnson City, NY 13790 Phone: 888-970-5111

Web sites: www.sandtrapper.com www.ivi-golf.com



Sandtrapper Continues Success, IVI-GOLF adds new product—Mighty Edge bunker borders



Sandtrapper continues to be installed nationwide with exceptional performance. Recently added, the GEO style complements their existing products (Sandtrapper I for moderate bunker designs, Sandtrapper II for extreme settings and washout control). The new GEO is a drastically different design. Being used for "contamination only" settings, its lighter construction creates a cost-effective solution. With all three product styles, facilities now have maximum flexibility in executing their bunker renovation project-all from one provider.

IVI-GOLF has also created a great, new bunker border material-MightyEdge. Constructed from recycled HDPE, it helps define perimeter shapes in new or renovation projects and can be used as a long-term, integral part of the bunker system. Packaged in rolls 200 feet long and 6 inches wide, the prescored anchor slots make installing MightyEdge easy with the supplied steel anchors.

IVI-GOLF carries a full line of golf course construction and renovation products ready for national distribution. For more information, contact John Brauer, National Sales Manager, or visit the IVI-GOLF Web site www.ivi-golf.com.





Jacobsen Golf and Turf

3800 Arco Corporate Drive Charlotte, NC 28273 Web: www.jacobsen.com



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Jacobsen manufactures a full range of vehicles and turf maintenance equipment for golf, turf, professional lawn care, sports field, municipal and industrial applications. The company markets Bob-Cat, Brouwer, Bunton, Cushman, Jacobsen, Ryan and Steiner products internationally through an extensive distribution network. Jacobsen is a Textron company.

E-Walk

Jacobsen's new E-Walk®, all-electric walking greens mower, is a revolutionary mower with no oil, no hydraulic fluids, no emissions and virtually no noise. The E-Walk is 22 inches wide, features a quick-release E-PacT sealed battery and uses two weather-sealed, 48-Volt DC electric motors. It has a

weather-sealed, 48-Volt DC electric motors. It has an electronically balanced, 11-blade reel that delivers a tournament quality, adjustable height of cut down to 3/64-inch.

HR-9016

The HR-9016 features a 16-foot wide cutting path and powerful 87-horsepower turbocharged diesel engine and can mow up to 16 acres per hour. With an 18-inch uncut circle turning radius, it gets around obstacles with ease. Operators will like

the fully adjustable air-ride suspension seat and fingertip controls.

The outboard cutting decks can be raised to 90 degrees for close-in trimming usually associated with smaller, less productive

machines. Each deck is designed with a rear discharge for a more even distribution of clippings as it mows. Standard 4-wheel hydraulic drive provides the traction needed for hilly or wet terrain without damaging turf in tight turns.

Verticut

Jacobsen Verticut 214 tractor-mounted control features a single hydraulic control lever that is placed within easy reach of the operator. The three 30-inch wide cutting heads easily float over ground undulations. Verticut 214's wide, 84-inch cutting path and 4-MPH cutting speed covers more than 3 acres an hour for high productivity.

Both mower and frame are constructed of heavy-duty



steel and can be quickly attached or detached from the vehicle. For rapid transport,
Verticut® reels are hydraulically lifted out of the way for sure ground clearance.

Lawnaire V Plus

For large aeration jobs or added stability on sloped terrain, the Lawnaire V Plus rotating aerator is the answer. With a 26.5-inch path, the Lawnaire V Plus covers more than 40,400 square feet per hour.

Dual weights help increase ground pressure by more than 25 percent and are spring-loaded for easy removal. With the added weights and water filled drum, aeration tines can penetrate soil down to a depth of 2.75 inches.

AR-5

The redesigned AR-5 is a third-generation fine-cut rotary mower and uses the popular LF platform as the foundation for the redesigned lightweight fairway mower. The AR-5 lift arms are re-

designed to continuously keep the cutting decks in the same vertical plane, allowing the decks to float straight up and down independently. The AR-5 is powered by a reliable, 60-horsepower Kubota diesel engine. The rotary mower decks are convertible from mulching to side discharge.



The Jacobsen Utilimax® offers outstanding versatility with features such as 4-wheel drive, articulated chassis and power-assisted steering.

Operators like the tilt steering wheel, fully adjustable padded seat, and well-placed hand and foot controls.

More than 30 "Quick-Hitch" accessories, including out-front rotary mower decks, blowers, aerators, snow and debris removal blades, chipper, edger, sweepers, snow blowers, posthole digger and trencher, are available. Engine choices include a 31-HP Vanguard liquid cooled gasoline engine and 34-HP Vanguard turbocharged diesel engine.

Mataway

The Jacobsen Mataway Overseeder/Dethatcher promotes healthier turf and improved grass seed germination rates. Lawn care professionals can dethatch or overseed lawns, or do both in one pass with this unique lawn-care product from Jacobsen. Heavy-duty snap-in/out slicing reels match

the blade type and spacing needed for each application. Dethatching reels can be adjusted to the proper depth and the overseeder flow to the disc delivery system precisely controlled to ensure maximum seed germination.



PRODUCK

John Deere Golf & Turf One Source

John Deere Worldwide Commercial & Consumer Equipment Division P.O. Box 13603

Research Triangle Park, NC 27709 800-537-8233 www.JohnDeere.com

JOHN DEERE GOLF & TURF ONE SOURCE

John Deere Golf & Turf One Source™ is a full-service platform that brings together a variety of products and services to better serve the expanding needs of golf course superintendents, owners, architects and management companies. Local John Deere Golf & Turf One Source distributors offer a full range of products from mowing and maintenance equipment, and irrigation, drainage and landscaping supplies, to credit, parts and service-all from leaders within the industry.

The official equipment and One Source supplier to the PGA Tour, John Deere is noted for more than 165 years of innovation, the highest quality products, and its product and operator safety initiatives.

John Deere 4000 TWENTY Compact Utility Tractors

The first compact utility tractor with a John Deere engine and an automotivestyle diagnostic control center, the 4000 TWENTY Series is



packed with features designed to handle the toughest jobs across the golf course.

- All four models in the series-4120, 4320, 4520 and 4720 are equipped with a John Deere 2.4L turbo-charged engine. offering up to 21 percent more horsepower and up to a 30 percent torque rise, providing more power on demand.
- The eHydro™ electronically controlled transmission is standard on the 4720 and optional on the 4120, 4320 and 4520. All eHydro models feature operator controls that provide easy electronic engagement of PTO, cruise control and our industry exclusive LoadMatch™.

John Deere 2500E Tri-Plex Electric Reel Greens Mower

Introduced in 2004, with full distribution available for 2005, the John Deere 2500E boasts reduced leak points, troubleshooting diagnostics and thermal motor protection. Equipped with an option of two engines, the 2500E gas model offers an 18-hp, four-cycle Kawasaki V-Twin engine, while an 18-hp, threecylinder John Deere Series 220 powers the diesel model.

John Deere has eliminated more than 100 leak points at the

reel circuit, while still providing superior cut quality and the power required to perform all normal mowing as well as verti-cutting and scalping for over-



seeding programs. It is compatible with all current greens mower attachments.

Additionally, John Deere engineers have designed a non-battery power source for the reel circuit, which allows you to mow all greens and keep the same frequency of clip. It also decreases the noise level of the machine.

John Deere C Series Fairway Mowers

Featuring the 3225C and 3235C models, John Deere C-Series Lightweight Fairway Mowers have been designed for greater productivity and operator comfort. For operator comfort, the command arm puts the key switch, mow switch, throttle lever and



raise/lower lever conveniently at the operator's fingertips, while the patented White box™ controller is easily viewed from the operator's seat. The controller also offers quick on-board electrical diagnosis, providing less downtime for the operator.

The 3225C is equipped with a three-cylinder, 38.5-hp, liquid-cooled diesel engine and can be equipped with a standard 22-inch, 7-blade or the 22-inch, 5-, 8- or 10-blade Extra Strength Precision (ESP) cutting units.

The 3235C is equipped with a three-cylinder, 48.5-hp, liquid-cooled turbocharged diesel engine and can be equipped with 7-blade 22-inch Standard or the 5-, 8- or 10- blade 22-inch ESP cutting units.

John Deere Utility Vehicles

John Deere offers its Gator™ Utility Vehicles in three product classifications based on payload capacity.

Light-duty Compact Series Gators (Gator CS

and Gator CX) are easy to maneuver and are equipped with a cargo box with a 400-pound capacity.

Medium-duty vehicles include the Standard Series 4x2 Gator, Turf Gator, 4x2 Trail Gator, 6x4 Gator, 6x4 Trail Gator, 6x4 Diesel Gator and 6x4 Diesel Trail Gator. These powerful 10- and 18-hp units boast payload capacities of 900 or 1,400 pounds, respectively.

The quiet, yet powerful, electric series E-Gator Utility Vehicle is a perfect choice for golf course superintendents and turf care specialists.



Links Seed LLC

32041 Cartney Drive Harrisburg, OR 97446

Phone: 541-995-6836 • Fax: 541-995-6906

Web Site: www.linksseed.com E-mail: sales@linksseed.com



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Links Seed LLC was founded in 2002 by career seedsman Robert Cook with the specific goal of bringing quality turf grass seed to the grass seed market. Links Seed serves as a complement to Cook's trading company, Emerald Commodities.

Links Seed brings the quality products from the breeding programs of Dr. Virginia Lehman (Blue Moon Farm) and Crystal Rose-Fricker (Pure Seed Testing). Cook is working to bring seed of the highest quality to the market to close the gap between the quality of seed that exists in breeding programs and the quality of seed that has previously been available to consumers. Look for and demand the quality of Links Seed brand grass seed. Those varieties include LS-44 creeping bentgrass, Terradyne tall fescue and Turnberry tall fescue from Dr. Lehman's Blue Moon Farm as well as Golden Nugget Kentucky Bluegrass from breeder Crystal Rose-Fricker. Links Seed looks forward to future interactions and business with the readers of *Golfdom*.

LS-44 Creeping Bentgrass

LS-44 is a new Creeping Bentgrass that performed better than established varieties in trials conducted by North Carolina State University. LS-44's high density rating provides a true, virtually grainless putting surface under various mowing heights without thatch buildup.



- Dense tillering and upright growth habit—helps crowd out Poa annua.
- Superior disease resistance—requires less fungicide.
- Fine uniform texture—produces a superior putting surface.
- Exceptional traffic and wear tolerance—less spiking damage.
- Excellent seedling vigor—establishes quickly.
- Outstanding low mowing performance.
- Superb heat, humidity and cold tolerance—Adapted to a broad range of climates and elevations.
- Recommended for new construction, interseeding existing greens and winter overseeding of Bermudagrass.

If you're planning to overseed with an old variety, why not use LS-44 instead. You can save money and get a better turf.

Golden Nugget Kentucky Bluegrass

Golden Nugget is a newly developed variety that is a result of the parental cross of Limousine and the original Nugget variety. Golden Nugget is a dense, ultra-low growing, aggressive Kentucky bluegrass that will truly tolerate low mowing better than most Kentucky bluegrasses. The density of the Limousine parent is apparent in observing the high density growth habit of Golden Nugget. Golden Nugget has a beautiful dark green leaf color that, combined with the low growth habit and high density, makes it the ideal Kentucky blue-



grass variety for home lawns, commercial landscapes, sod farms, and golf course tees, fairways and roughs.

Turnberry Tall Fescue

Turnberry is a high quality turf-type tall fescue suitable for use in a variety of locations throughout the United States. Turnberry would be useful



for home landscapes in both full sun and shade, and is especially well suited for home lawns and commercial settings maintained at high quality levels by landscape professionals. Turnberry is ideal for golf course roughs, both sun and shade in the transitions regions of the United States. Turnberry is a fine-textured, medium dark green, high-density tall fescue with excellent brown patch resistance.

Terradyne Turf Type Perennial Ryegrass

Terradyne turf type perennial ryegrass is a dark green, fine-textured variety with excellent overall turf quality. This new variety is

early to green up in the spring, developing a spring turf density that ranks near the top of the NTEP trials. Its dark green genetic color lasts all sea-



son, with especially dark color in the fall and winter.

Use Teradyne alone, in perennial ryegrass blends, in high quality cool-season turf mixes, or for winter overseeding of Bermudagrass turf.



Milliken Turf Products

920 Milliken Road Spartanburg, SC 29304 Phone: 800-845-8502

Web site: www.millikenturf.com



Sea®Blend

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Three Reasons to Use Specific Emerald Isle Solutions

CPR-TRUE FOLIAR NUTRITION PROGRAM

- Complete nutrition, not just fertility.
- Gives you controlled growth with great color and quality.
- Increases stress tolerance, disease resistance and root mass.

Nutri-Rational FOLIAR NUTRIENTS

Discussion

The CPR-True Foliar Nutrition Program is a complete nutrition program for increasing plant physiological fitness and root mass. By supplying small efficient amounts of nutrition regularly, the superintendent can have the controlled growth he needs for maintaining fast putting speeds without sacrificing turf quality. Furthermore, the increased plant health provides increased stress tolerance and disease resistance.

CPR

- 3-in-1: cytokinins (increase cell division and root mass) plus 17 amino acids plus vitamins.
- Increases stress and drought tolerance and disease resistance.
- Increases the turf quality and color.

CPR

Discussion

- Stress management (making the plant tolerant to stress) is critical to surviving and thriving during the unpredictability of summer. Seaplant-extract treated turf is more efficient at getting moisture and nutrients from soil, and seaplant extract increases the turf's photosynthetic efficiency and its physiological fitness.
- Turf quality, coverage and color are three significant factors that the golfer values in a golf course green. CPR is designed to address all three.
- Trying to grow a turfgrass plant with NPK alone in summer stress is cheating the plant when cytokinin-rich seaplant extracts are available to increase cell division and root mass.

GROWIN

- Provides faster turf establishment.
- Increases root growth and density.
- Increases turf health and stress tolerance.

Discussion

- The benefits of faster turfgrass establishment are many, including time to playability, time to summer stress tolerance, more ready for winter stress.
- Increasing fertility to get top growth can penalize root growth, causing subsequent loss of turf and no stress tolerance. GroWin gets simultaneous root growth and density while supporting top growth.

Using GroWin to reduce the amount of NPK applied reduces the excess nutrients in the plant and soil which can be detrimental.

SEABLEND 12-4-5 AND 12-1-12

- Fantastic color response and consistent release from slow-release synthetic and organic.
- Micro-greens grade particle size provides easy spreadability and dispersion with irrigation, so roller pickup is eliminated.
- Feeds the soil with calcium, plant sugars and high-quality organic ingredients.

Discussion

- SeaBlend is a high quality organic granular fertilizer, derived from the safest and best sources—including marine shells, seaplant extract, sunflower hull ash, Epsom salts, and kelp, fish, crab, lobster, and alfalfa meals. It contains no unsafe manures or bone meals. The sources of SeaBlend provide the turf with readily available major and minor nutrients and nourish the soil with a beneficial ratio of Calcium and Magnesium.
- The marine organics are high in chitin and calcium. Chitin in the soil has been shown to provide an environment that is inhospitable to nematodes.
- SeaBlend is unique among organic fertilizers in its ability to be dispersed by water, and the mower rollers will not pick it up. With an SGN of 100-105, SeaBlend is perfect for newer, denser turf varieties.

BLAZON

- Gives you precision in applying sensitive and expensive chemicals.
- Visible, yet temporary.
- Nonstaining; washes off skin, clothing, and equipment easily.



Discussion

Blazon is "the professional's SPI." It provides precision in important spray applications to closely mowed turf, especially with sensitive and/or expensive chemical applications, when misses or overlaps can be detrimental. Although highly visible, Blazon is the only SPI that washes off easily and won't stain skin and clothing. Blazon is available in blue or green.





Nature Safe Natural & Organic Fertilizers

4221 Alexandria Pike, Cold Spring, KY 41076 Phone: (800) 252-4727 • Fax: (859) 572-2574

Web Site: www.naturesafe.com E-mail: rgeise@griffinind.com



ADVERTISEMEN

Nature Safe fertilizers are constructed meal-based fertilizers derived from feed grade proteins such as meat, bone, blood, poultry, fish and feather meals as well as bakery by-products and humates, not waste by-products. Nature Safe has the highest amino acid concentration of any commercial fertilizer, ensuring product consistency and nutrient availability, resulting in an extremely predictable release.

Nature Safe promotes great turf color and builds stress tolerance. The slow, even feed minimizes top growth and enhances microbial activity to reduce thatch. Nutrition and fertility are critical to building root mass, improving density, and enhancing overall disease management properties to protect your turf.

Aeration is an ideal application opportunity. Nature Safe stimulates microbial activity that strengthens and deepens roots while encouraging lateral growth for quick recovery.

As a dormant feed, Nature Safe will build carbohydrate reserves for improved winter stress management resulting in improved turf health and vitality.

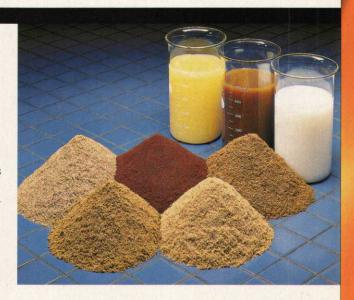
For overseeding applications, Nature Safe delivers a nutrition-based foundational feed for new seedlings for up to three months of residual growth based on temperature. Apply as a supplemental feed throughout the winter for turf establishment without stimulating Bermuda grass.



5-6-6 Starter Fertilizer-Ideal for aeration, new seedling establishment ornamental planting and color beds. Enhanced with meat and bone meal for improved root development and fortified with added amounts of humic acid, sugars and carbohydrates.

8-3-5 Stress Guard Fertilizer-Excellent on new or established turf or during renovation and overseeding. Amends stressed areas and is also an excellent aeration product. Tremendous product for greens.

10-2-8 All Season Fertilizer-Enhances root and shoot stability with controlled plant growth. Improves overall disease management by increasing the efficiency of fungicides. Ideal fertilizer for tees, fairways and ornamental plantings.



12-2-6 Ammonium Sulfate Fortified Fertilizer-Excellent product for warm season grow-in situations. Designed to balance color and growth during cooler temperatures. Improves management of patch disease problems.

15-2-8 with Meth-Ex 40®-81% Nature Safe with 19% Meth-Ex 40. A wonderful homogenous blend that provides a slow, even feed for 14 to 16 weeks. Ideal slow release product for fairways, roughs and tees.

21-3-7 Blended with UFLEXX™-60% Nature Safe with 40% UFLEXX (stabilized nitrogen). Virtually no nitrogen leaching or volatilization. Provides a slow, even feed for up to 8 weeks. Extremely economical product for fairways and roughs.

Special Offer with the purchase of Nature Safe Fertilizers:

Golf course superintendents are increasingly recognizing that good business decisions can have positive impacts on the environment. Promote your environmental stewardship through Nature Safe's sign program. Purchase two tons of Nature Safe and receive a complimentary display sign to inform your customers of your stewardship commitment.



North American Green

14649 Highway 41 North Evansville, IN 47725

Phone: 800-722-2040 • Fax: 812-867-6632

Web: www.greensp.com

E-mail: customerservice@nagreen.com



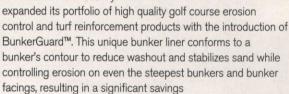
EROSION CONTROL Products Guaranteed SOLUTIONS

ADVERTISEME

North American Green is a leading manufacturer of erosion control blankets and turf reinforcement mats. Since 1985, the company's products have been developed to assist with turf establishment and erosion control in a variety of applications. North American Green has developed the GreenSP® Soil Protection Series designed specifically for golf course

construction, renovation and maintenance

applications. North American Green recently



Soil Protection Serie

Products:

The GreenSP permanent products prevent erosion while reinforcing vegetation in storm water swales, around water hazards and along streambanks. This eliminates the need for "hard armor" practices like concrete or rock riprap and at a fraction of the installed cost. Storm water runoff can be costly when precious topsoil, seed and amendments are washed off a carefully prepared course during construction; not to mention opening delays.

Permanent

- P550® Turf Reinforcement Mat is a permanent, ultra-high strength three-dimensional matting structure incorporated with a 100% polypropylene fiber matrix stitched with permanent thread, to provide both long-term, pre-vegetated erosion protection and permanent turf reinforcement for shoreline protection on pond edges and other water hazards.
- C350® Turf Reinforcement Mat is a permanent, super-high strength three-dimensional matting structure incorporated with a 100% coconut fiber matrix stitched with permanent thread. It provides both long-term, pre-vegetated erosion protection and permanent turf reinforcement for permanently protecting drainage swales and streambanks.



Temporary

Our temporary short-term degradable products provide you with 45 to 60 days of protection. Our extended-term degradable products will give you up to 18 months protection for low-maintenance sloped areas.

- SC150BN[™] is 100% biodegradable. It is constructed of 70% straw and 30% coconut fiber stitched with biodegradable thread between 100% biodegradable natural fiber top and bottom nets. SC150BN is ideal for placement on sloping roughs, moderate flow areas and shade areas.
- DS75™ is constructed of 100% straw fiber stitched with accelerated degradable thread to a lightweight accelerated photodegradable polypropylene top net. Special additives in the DS75 netting and thread cause it to break down in sunlight in 45 to 60 days. Therefore, DS75 is ideal for use in areas where close mowing will occur soon after vegetation establishment, such as fairways and gentle slopes.





Bunker lining

■ BunkerGuard™ utilizes patented construction and is a tan permanent, three-dimensional liner comprised of three polypropylene nettings incorporated with a 100% polypropylene tan fiber matrix. The corrugated structure provides a highly frictional surface to help hold sand in place and is proven to significantly reduce erosion.

This unique bunker liner conforms to a bunker's contour to reduce washout and stabilizes sand while controlling erosion on even the steepest bunkers and bunker facings, resulting in a significant savings in bunker maintenance labor and material costs.





Nutramax Agriculture Inc.

2208 Lakeside Blvd. Edgewood, MD 21040

Phone: 800-925-5187 • Fax: 410-776-4009

Web Site: www.macro-sorb.com E-mail: macrosorb@nutramaxlabs.com



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Nutramax Agriculture, Inc. pioneered the use of L-amino acids in the turfgrass industry in 1997. Nutramax products feature only biologically active L-form amino acids obtained through enzymatic hydrolysis of natural protein.

Nutramax products are backed by university research at Penn State University, Michigan State University, Virginia Tech and the University of Maryland. What distinguishes Nutramax's product line from other products is that all the products are manufactured to pharmaceutical standards with stringent quality control ensuring batch-to-batch consistency at the highest level.

Turfgrass professionals have found that by using the MACRO-SORB® and QUELANT® products, they have increased the stress tolerance of turfgrass allowing for reduced use of chemicals and even a reduction of watering, an important factor in a time of drought in many regions of the country.

Nutramax Agriculture, Inc. is a division of Nutramax Laboratories[®], Inc. a leader in the research of nutraceuticals for the consumer health, veterinary health and agriculture industries.

MACRO-SORB® foliar is a biofertilizer based on amino acids, produced by enzymatic hydrolysis, and some essential micronutri-

ents. It allows for greater absorption and transport of nutrients and other products through the leaves into the plant. The action of L-amino acids and substances with phytohormonal effect in MACRO-SORB foliar helps to regulate the opening of the stomata, increase water potential, regulate osmotic pressure, slow down photorespiration, and increase net photosynthesis.



MACRO-SORB foliar is a true systemic with no phytotoxic effects and is tank-mix compatible with soluble fertilizers, fungicides, insecticides, plant growth regulators and herbicides. Applied together, MACRO-SORB foliar improves the efficiency of these treatments by increasing their absorption and translocation within the plant. It helps to reduce fertilizer and pesticide use, decrease disease pressure and improves turfgrass quality.

MACRO-SORB® radicular is a biofertilizer based on amino acids, produced by enzymatic hydrolysis, and essential macronutrients. The action of L-amino acids and substances with phytohormonal

effect in MACRO-SORB radicular allows for greater absorption and transport of nutrients through the roots into the plant. MACRO-SORB radicular activates physiological and natural defense mechanisms of the plant, enhances net photosynthesis, and increases water and nutrient efficiency.



MACRO-SORB radicular has no phytotoxic effects and is

tank-mix compatible with soluble fertilizers, fungicides, insecticides, plant growth regulators and herbicides. Applied together, MACRO-SORB radicular improves the efficiency of these treatments by increasing their absorption and translocation within the plant.

QUELANT®-Ca is an amino acid-chelated calcium product developed to correct calcium deficiency of turfgrass and other plants. The calcium chelated with amino acids in QUELANT-Ca is

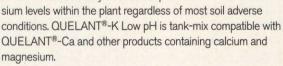
readily available and easily absorbed by the leaves and/or roots of the plant regardless of most environmental and soil conditions. The amino acids used not only increase absorption of calcium, but also enhance the translocation of this essential macronutrient to growing points of the plant. These biologically active, free L-amino acids also improve photosynthesis and offer maximum protection from stress.



QUELANT-Ca is environmentally safe and non-phytotoxic. It is tank-mix compatible with normally used agrochemical products. Applied together, QUELANT-Ca improves the efficiency of these treatments by increasing their absorption and translocation within the plant.

QUELANT®-K Low pH is a foliar-applied, amino acid-based potassium supplement. It contains free L-form amino acids that increase the uptake of the potassium and other nutritional elements by the plant.

Potassium may be present in large quantities in soils, but only very small amounts are in the available form (K+). Potassium is held strongly by clay particles in fine textured soils and is easily lost by leaching on sandy soils (greens). QUE-LANT-K Low pH provides the essential L-amino acids necessary to enhance potas-



QUELANT®-Minors is formulated for foliar application and absorption. QUELANT®-Minors provides turfgrass with readily available Mg, Mn, Fe, Zn, S, B, Mo and L-amino acids directly through the foliage. L-amino acids chelate micronutrients and enhance their absorption and translocation within the plant. QUELANT®-Minors is rapidly becaming the micronutrient shapes of many translocation.



coming the micronutrient choice of many turf professionals.

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5500 G.C.

Oxford Garden

1729 Research Drive, Unit A Louisville, KY 40299

Phone: 877-866-3331 • Fax: 502-719-8888

Web site: www.oxfordgarden.com E-mail: info@oxfordgarden.com



Inspired by the timeless design of traditional English garden benches, Oxford Garden uses the finest quality standards in manufacturing its furniture for a lifetime of outdoor use. Each piece is elegant yet affordable and will provide years of comfort, satisfaction and value in wood furniture. Benches, armchairs, dining and patio tables, and planters are all superbly crafted using mortise and tenon construction for durability and strength. We use only shorea, a dense and durable hardwood, known for its weight, hardness and weatherability. Shorea requires no finishing and will not rot when left outdoors, whereas rain and sun will damage lesser quality woods. Left untreated, shorea will weather to a soft warm shade of gray similar to the weathering of teak. Original color can be maintained by applying a seasonal coat of teak oil. Products ship partially assembled for ease of shipment, assembly and storage. Orders can be shipped within 48 hours. Oxford Garden is known for its heritage quality furniture and exceptional value.



Essex Design Collection

A traditional style that achieves harmony with its surroundings, the Essex is designed with attention to scale and detail, offering a range of sizes to accommodate an individual or group. The Essex Collection is constructed with dimensionally larger lumber and is suitable for use in landscape designs and settings requiring a grander scale. Essex benches are available in four-, sixand eight-foot lengths. The Essex Armchair and Curved Bench round out the collection.

Planters

Add a burst of color to your outdoor furniture grouping with our spacious 15- or 19-inch planters and your favorite bush or blooming flower. These English Planters have a slatted and removable bottom that allows you to place a pot into the planter or plant directly into the planter itself. Because it is made of shorea wood, this planter will handle many waterings and seasons. Sturdy mortise and tenon construction provides the highest quality joinery that will last for many years.

Sonoma Bar Stool and Table

The Sonoma Bar Stool and Table offer a sophisticated, yet casual option for outdoor dining and entertaining. The ample



size of the Sonoma Bar Stool will provide a comfortable seat, while the generous top of the Sonoma Bar Table ensures there is plenty of room for food and fun. Vented market umbrellas measuring 6 feet in diameter complement and shade these tables. Powder-coated black umbrella clamps are available.

Patented Signature Series Custom Laser-Engraved Collection (U.S. Patent Number 6,644,750 B1)

Begin with the graceful design and remarkable craftsmanship of the Chadwick Collection. This collection is tailored with a wide back panel to allow exclusive and precise customized engraving. Laser-engraved precision accurately reproduces your logo, an image or text message. The detail of the laser-engraving procedure on our benches and chairs assures a customized graceful design accomplished with extraordinary craftsmanship that guarantees lasting beauty. Graceful curves, fine lines and illustrations are accurately reproduced onto the wide center back panel, providing for a personal statement that is integrated into the furniture. Adding your company logo, personal image or message makes an enduring impression in any setting. It tells a story about





Par Aide Products Co.

6800 Otter Lake Road Lino Lakes, MN 55038

Phone: 888-893-2433 • Fax: 651-429-4519

Web Site: www.paraide.com E-mail: info@paraide.com



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Since 1955, Par Aide Products Co. has been providing the golf course industry with a superior line of golf course accessories. For a product to earn the Par Aide name, it must make superintendents' jobs easier, help them do it better or perform a service that makes them look good to the golfer. When describing our products, our favorite words are long-lasting, maintenance-free, dependable and value. We take great pride in having grown our full line of golf course accessories by listening to our customers and through innovation and acquisition.

Below are a number of our new and innovative product offerings that have been introduced this year.

Dura-Flex Signs

Par Aide's new super-durable
Dura-Flex™ signs are made from
molded resin, making them virtually unbreakable. These attractive,
easy-to-read signs are designed
to flex and withstand the worst
abuses on your golf course. The
3-D letters are molded into the
sign, meaning printing will not



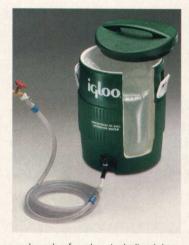
scratch off. The corrosion-resistant spikes are formed by a single "U"-shaped, stainless steel rod, and are molded into the resin for maximum strength. The many popular captions are available in three color options: white with green letters, green with white letters and yellow with black letters.



SAFE-TEE WATER

Safe-Tee Water

Providing safe and sanitary drinking water has become one of the biggest issues facing golf courses today. Finally there is a practical solution—Safe-Tee Water by Par Aide. This patent-pending system keeps the water supply sanitary by eliminating outside contact with the water during filling. It will



retrofit into the most common brands of coolers, including Igloo and Rubbermaid, so you will not have to replace all your coolers.

With the Safe-Tee Water fill and dispense system, you don't have to devote extra labor to sanitizing water coolers, because no part of the cooler comes into contact with the water. The water never comes into contact with the ice, either. Instead, the water goes directly from the dedicated water source into a one-use sanitary liner. There's no outside contact. Not with air. Not with human hands. Nothing.

The Safe-Tee Water system is certified by NSF International, "the Public Health and Safety Company."



Accuform Ace II Maintenance Rake

Par Aide has recently redesigned the popular 25inch Accuform Maintenance Rake by slightly tapering each end. By doing this, we have reduced the unsightly



furrows left by rakes with straight heads, as each pass of the rake blends with the pass before and after. Molded with impact resistant, high-density polyethylene, the patent-pending Accur

form Ace II Maintenance Rakes are built with the same Accuform quality that you have come to expect from the most popular rake on the market.





ProSource One

8700 Trail Lake Drive West, #100 Memphis, TN 38125

Phone: 877-350-3999 • Fax: 901-751-4502

Web Site: www.prosourceone.com

E-mail: Keith Woodruff kwoofdruff@prosourceone.com

ADVERTISEMEN

ProSource One is a Memphis, TN-based distribution company that supplies fertilizers, chemicals, seed and services to golf courses throughout the United States.

ProSource One represents the highest quality turf products from all the major manufacturers, as well as its own premium quality line of Proforma controlled release fertilizers and Proforma Blue Label Soil Penetrant and Gold Label Wetting Agent. They also provide premium Blue Tag Certifiable Seed varieties for both cool- and warm-climate courses.

ProSource One is dedicated to being the leading valueadded supplier of not just products, but also services and technical support-solutions that go beyond the label.

Sales reps are trained professionals who understand your business and have the technical expertise to provide effective solutions and recommend the best product for the job. ProSource One also knows the importance of having what you need when you need it and is committed to keeping in stock the products customers need and providing timely and accurate delivery and billing.

Proforma Fertilizer

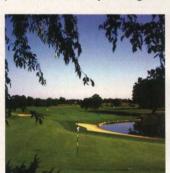
Proforma is ProSource One's own premium-quality private brand of geographically-specific fertilizers. Proforma fertilizers deliver a complete approach to turf health by providing balanced, long-term

nutrients for both the turf and the soil

microflora. By supplying the soil and turf with the plant materials needed to maintain a complete and healthy system, Proforma fertilizers perform more efficiently than traditional fertilizers.

Proforma Gold Label Wetting Agent

Gold Label is the most versatile product on the market and provides the flexibility of using conventional spray equipment



or an injection system for application. This wetting agent also provides an enhanced degree of compatibility with other chemicals and can be used monthly at lower rates for long-term residual results.

PROSOURCEON

Gold Label is a unique blend of surfactants that are derived from renew-

able and synthetic resources. This wetting agent provides up to 14 weeks of residual performance, while enhancing the respiration rates of the soil microbes.



PRO FORMA

Product features:

- For use on golf course greens, tees and fairways
- Prevents water repellency for extended duration
- Enhances soil microbes respiration rate
- Non-burning formula
- Contains unique nonionic chemistry from renewable resources
 - Provides an enhanced degree of compatibility and safety
 - For use with either conventional spray equipment or injection system
 - Enhances the effectiveness of plant protectants
 - Reduces water frequency while maintaining quality turf

Available in 2 x2.5 gallon jugs and 30 gallon drums.

Proforma Blue Label Turf & Soil Penetrant

Blue Label provides an economical, safe-to-use solution for relief of localized dry spots, either preventatively or curatively. This penetrant is ideal for frequent, in-season applications. Blue Label is a blend of nonionic surfactants that work to reduce surface, cohesive and adhesive tensions while expanding the surface area of individual water droplets. This university tested turf and soil penetrant expands the water droplet, allowing the water to infiltrate the soil profile.

Product features:

- For use on golf course greens, tees and fairways
- Helps alleviate localized dry spots (LDS)
- Enhances drought resistance
- Reduces water requirements for hydrophobic soils
- Reduces heat related stresses
- Provides consistent management of water repellency
- Safe for irrigation injection systems
- Safe-to-use, nonionic, liquid formulation Available in 2 x2.5 gallon jugs and 30 gallon drums.



Rain Bird-Golf Division

6991 E. Southpoint, Tucson, AZ 85706 Phone: 520-741-6100 • Fax: 520-741-6522

Web Site: www.rainbird.com E-mail: rbgolf@rainbird.com



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Rain Bird Corporation—Golf Division manufactures a wide range of irrigation products for golf courses: EAGLE™ gear-drive rotors, field controllers, map-based central control irrigation systems, decoders, swing joints, flow meters, filtration systems, valves and irrigation accessories. Rain Bird central control components are serviced and supported by a comprehensive Global Service Plan. These products are sold worldwide through an extensive network of specialty irrigation distributors.

Rain Bird was the first to develop computerized central|control, and the first to install a centrally controlled irrigation system on a golf course. As the world's leading manufacturer of irrigation products, Rain Bird continues to set an example by demonstrating its commitment to support golf course professionals in a shared effort to manage water wisely. Every new Rain Bird product is assessed for its contribution to The Intelligent Use of WaterTM before it is justified for development or acquisition.



Rain Bird® EAGLE™ 1100

This rotor is the industry's farthest-throwing gear-drive rotor and has closed-case top serviceable design, replaceable parts and easy adjustment-making capabilities, providing

superintendents with superior longevity and convenience. The closed-case valve-in-head EAGLE 1100 is a full-circle model. It provides an easy solution for quick coupler system upgrades and is designed for larger single-row or double-row irrigation systems with sizable spacing. The rotor can throw 115 feet at

110 psi regulated while using the largest nozzle.

Rain Bird® WS PRO LT

This feature-packed, valuepriced weather station helps conserve resources by eliminating the guesswork in determining accurate sprinkler run times. The WS PRO LT features automatic

ET download with optional ET override, weather data reports and easy installation. Sensors collect weather data used to calculate an ET value and the central control systems use this value to automatically program run times without over- or under-watering.

Rain Bird[®] RainWatch™

RainWatch maximizes irrigation efficiency by taking into account rain as it is falling and instantaneously recalculating irrigation, pausing and/or decreasing run times as necessary. RainWatch also distinguishes between quick cloudbursts or extended rainy periods, and reacts accordingly to promote ideal turf conditions.

This unique water management software program is only available with Rain Bird central control systems.

Rain Bird® FREEDOM-Pad™ II

This hand-held remote control makes program-

ming from the field more user-friendly and convenient. Superintendents save valuable time operating the irrigation system

while on the course and without leaving the cart path. FREEDOM-Pad II is easy to set up and gives users unprecedented real-time irrigation control through a map-based interface. It also comes with everything needed to quickly transfer all maps and station data directly from other



Rain Bird control systems. Sprinklers can be controlled directly, or irrigation programs may be operated with the tap of the stylus using simple commands (Turn On, Turn Off, Advance, Pause, Resume).

Rain Bird® PAR+ES Decoder Satellite

The Decoder Controller combines the features and benefits of a controller system with those of a decoder system, resulting in an easier and less costly installation for the superintendent. In addition, the Decoder Controller offers the opportunity for easier expansions as the course's irrigation system changes. The decoder controller allows for more versatility in programming and can be used in Stand Alone Mode or with a Rain Bird Central Control System, either through a two-wire or LINK (wireless) interface. Up to 72 decoder addresses and two valves per address can be added, depending on the type of decoder used.

Rain Bird® Lake Management Aerators

The Rain Bird line of Lake Management Aerators is designed to help maintain sufficient water quality in small lakes and ponds on golf courses, while adding aesthetic appeal. The aerators feature surface spray units and help maintain ecological balance by providing vertical circulation and most effectively introducing oxygen to the water. The units are available with ½-, ¾-, 1-, 2-, 3- and 5-horsepower pumps with three spray patterns for each, and are backed by Rain Bird's Customer Satisfaction Warranty.



Syngenta Professional Products

P.O. Box 18300

Greensboro, NC 27419

Phone: 336-632-6000 • Fax: 336-632-6278

Web Site: www.syngentaprofessionalproducts.com

E-mail: joseph.dipaola@syngenta.com

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Syngenta provides the best products and services in the industry and to build optimal packages of chemistries and technologies to help our customers achieve their goals. For golf course superintendents, Syngenta offers industry-leading products to prevent and cure diseases and manage turf-as well as a variety of resources to help customers better manage their operations.

In addition to its strong portfolio, Syngenta has the industry's most complete line of non-product-related offerings. These include the Web-based service GreenCast™ (www.greencastonline.com) that delivers customized pest, weather and product information directly to a customer's desktop and GreenPartners™ (www.greenpartnersonline.com), the industry's most flexible reward program that allows customers to earn and accrue points for Syngenta product purchases. Points can be redeemed for business tools such as computers, equipment, educational opportunities, or can be donated to support industry associations.

In addition, Syngenta has five field technical representatives. who include former extension agents and university researchers, all with many years of industry experience. Field technical reps live and work in all districts throughout the United States.

As the leader in the golf industry, Syngenta continues its strong connection with, and support for, the green industry's leading associations, like GCSAA and its local chapters.

Heritage® is a broad-spectrum and uniquely systemic strobilurin fungicide that offers superior preventive control of 21 turf disease organisms, including brown patch, Pythium, summer patch, snow mold, take-all patch and more. With the active ingredient azoxystrobin, Heritage offers up to 28 days of turf

disease protection, as well as control against all four major classes of fungi. Now available in an enhanced liquid

Heritage TL

formulation-Heritage TL-Heritage is ideal for disease management in golf course management, lawn care and commercial and general landscape turf.

unsurpassed protection even after heavy rains or irrigation, resulting in residual control for 14 to 21 days.

Banner MAXX® fungicide offers premier preventive dollar-spot control in turf. Banner controls a variety of diseases at low rates, in a low-odor, highly compatible, easy-to-mix formulation.

syngenta

Research proves that an application of Primo MAXX® plant growth regulator prior to the onset of stresses such as heat, drought, disease and traffic can strengthen the structure of turfgrass, helping it to withstand tough conditions throughout the season.

Primo MAXX is an odorless plant growth regulator designed for clipping management and superior pre-stress conditioning of turf. Offering the leading edge MAXX® formulation technology for the turf market, Primo MAXX provides premium turfgrass performance and works well as a tank-mix partner.

Unlike other PGRs. Primo MAXX targets the part of the plant that inhibits vertical growth while enabling rich color, lateral stems and root mass development. Golf courses treated with Primo MAXX are healthier, with more durable blades and a higher tolerance to weather extremes.

Versatile and effective, Monument™ herbicide offers outstanding post-emergence weed control for golf courses, sod farms and commercial property management. The active ingredient-trifloxysulfuron sodium-controls all major sedge species in warm-season turfgrasses, along with many other troublesome weeds. Monument is the only herbicide proven to control all major sedges. To aid spring transition, Monument removes overseeded perennial ryegrass and Poa trivialis to optimize Bermudagrass transition. Late summer to early fall,

Monument is ideal for Bermudagrass cleanup prior to overseeding. Monument can be

used in dormant, non-overseeded turf for control of winter weeds such as Poa annua, clover and henbit.

Daconil® fungicide is ideal for use on golf course tees, fairways, greens, non-residential turfgrasses and ornamental turfgrasses including sod. Daconil is a contact fungicide that provides

control of 14 diseases, including dollar spot, brown patch, gray leaf spot, algae, leaf spot, melting out, anthracnose, rust, Fusarium patch, Gray snow mold and red thread. Daconil exhibits extended coverage and



Barricade® herbicide is an effective pre-emergence herbicide used to control crabgrass, goosegrass and more than 30 other grassy and broadleaf weeds

without breakthroughs. It is available in 4FL and 65WG formulations and on fertilizer

options for low-rate, season-long control. Barricade is a non-staining active ingredient with application flexibility.



SYNLawn™

3060 Mercy Drive Orlando, FL 32808

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SYNLawn™ is the leader of synthetic turf specializing in landscape and golf applications. Formerly Putting Greens Direct, SYNLawn has been manufacturing synthetic turf for more than 15 years. With more than 80 synthetic turf products, SYNLawn offers the most variety of synthetic grasses in the business.

Product:

Introducing SYNSod™ the world's first non-infill tee-line product exclusively from SYNLawn™.

Made from 100 percent nylon fibers, SYNSod is the first product of its kind that does not require sand or rubber for stability. With a 11/4-inch pile height, SYNSod is thick and lush all on its own-so thick and lush you can freely swing down and through without slowing the speed of the club. It can even support a ball on a tee-no other synthetic can make such a claim. Unlike polyethylene products, SYNSod will not mark the club with green streaks or break down from use. It is truly the only maintenance-free synthetic tee-line turf to hit the market.

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Target Specialty Products

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Tee-2-Green Corporation manufactures, markets and distributes Penn bentgrasses, the highest quality seed available for golf course tees, fairways and greens. Tee-2-Green's Penn Pals have been developed for disease resistance, aggressiveness, low mowing properties and overall appearance and color. The products and their select consortium of Penn bent growers are subject to rigid production and certification standards governed by breeder Dr. Joe Duich and Oregon seed certification officials, as all Tee-2-Green seed goes through a rigorous process of cleaning and certification testing before being shipped for fall seeding. The Penn A's & G's must meet higher standards than any other creeping bentgrass variety now being sold.

The chart below is taken from the Oregon Certified Seed handbook and indicates the required standards:

	Other Varieties Certified (Blue tag)	A-1, A-2 A-4, G-1 G-2, G-6 Certified (Blue tag)	Penneagle Certified (Blue tag)	Pennlinks Seaside II Certified (Blue tag)
Pure Seed	98.00%	98.00%	98.00%	98.00%
Other Crop	0.50%	0.04%	0.50%	0.25%
Inert Matter	2.00%	2.00%	2.00%	2.00%
Weed Seed	0.25%	0.03%	0.10%	0.10%

In addition to its superior seed, Tee-2-Green has an experienced team of experts covering the United States and the world. This knowledgeable staff includes individuals formally educated in agronomy who can make recommendations for every region. At Tee-2-Green, customer relationships are viewed as ongoing partnerships, and many resources are available including studies and data, the Tee-2-Green website, informational videos, an annual field day and private tours.

Penn G-6 Creeping Bentgrass - Fall Special

(Contact your distributor or Tee-2-Green for more information.)
Penn G-6 creeping bentgrass provides high quality surfaces
not only on greens and tees but fairways as well. It displays a
medium green coloration and has a high level of resistance to
Brown Patch and Leaf Spot; the variety has also shown strong

resistance to Dollar Spot and Fusarium Patch. Penn G-6 grows well in moderate shade or low light intensity and performs especially well when blended with other Penn A and G series varieties.

In a recent trial conducted at North Shore Country Club in Glenview, IL, Dan Dinelli, CGCS, and Dr. Tom Voigt of the University of Illinois demonstrated that G-6 is very successful in out-competing Poa annua. This five-year NTEP trial was particularly significant because Poa annua was collected directly from North Shore's course and used to overseed the trial plots. Data collected from the trial proves conclusively that Penn G-6 is able to resist the invasion of Poa annua found on golf

courses. The conclusion of these onsite bentgrass tests found Penn G-6 to be rated second overall and was superior to all other bentgrass varieties tested that were not A's and G's.

For more information about G-6, the Poa annua studies, or the Fall 2004 special going on now for Penn G-6, contact Tee-2-Green at 800-547-0255 or visit their website at www.tee-2-green.com.



The Bridges at Rancho Santa Fe, Rancho Santa Fe, CA Architect: Robert Trent Jones, Jr. Superintendent: William Ousterhout



River Ridge Golf Club - Hole 17, Raleigh, NC Architect: Chuck Smith Superintendent: Craig Hooks

The Toro Company

8111 Lyndale Ave. South Bloomington, MN 55420 Phone: 952-887-8979

Web Site: www.toro.com/golf E-mail: jeff.lefever@toro.com



The Toro Company is the leading worldwide provider of maintenance equipment for golf courses. Together with its distributors, Toro provides the innovative products, agronomic expertise and exemplary service that helps superintendents enhance the game of golf.

Flex 21

The new Toro® Greensmaster® Flex 21 delivers better-looking, better-playing greens. Designed to perform on any green, the Flex 21 virtually eliminates the fear of scalping, allowing you to cut lower than you ever dared before. Its revolutionary flexible cutting unit excels on traditional bent and bermuda, as well as on the new ultradwarf grasses,

including the Penn A & G Series, TifEagle, Champion and others.

ProCore 648

The ProCore® 648 is an innovative new walking aerator from Toro®. The rear wheels are within the 48-inch aeration swath of

the machine, so the tires are not running over the freshly aerated turf. This eliminates the problem of smashing the cores into the holes, preventing topdressing from filling the holes. Easier cleanup produces a savings of time and labor.



Workman e2050

The Workman® e2050 electric mid-duty utility vehicle has the power to work as hard as you do. A powerful 500-amp drive train allows for superior hill-climbing capability under all load conditions.



Riding Greensmaster®

The new Greensmaster® riding cutting system offers a single high performance cutting unit for all models that cuts as low as 1/16-inch. The easy dual point adjust design for bedknife-to-reel adjust-

one click that adjusts as low as .0007 inch. No grease zerks will ease maintenance and there is also an integral groomer and rotating rear roller brush that fits all traction units. The precision manufactured die-cast aluminum design eliminates many of the adjustments of welded designs.





Reelmaster 3100-D

The Reelmaster® 3100-D is available with the exclusive Toro® Sidewinder® cutting system. Sidewinder gives operators the ability to shift all three reels left or right while on the fly, providing up to 23 inches of overhang and decreased tire tracking.

835S/855S Sprinklers with Trujectory™

Achieve superior water control with the 835S /855S golf sprinklers with the patented TruJectory™ that adjusts from 7 to 30 degrees. Now you can compensate for windy conditions, spray under tree canopies, over bunkers and out of sand traps, and provide precise head-to-head coverage. Both models are back nozzle capable for heads that need water behind.





Turfco Manufacturing

1655 101st Ave. NE Minneapolis, MN 55449

Phone: 763-785-1000 • Fax: 763-785-0556

Web Site: www.turfco.com E-mail: sales@turfco.com



Turfco Manufacturing is leading manufacturer of top dressers and material handlers for golf applications. In fact, Turfco developed the world's first mechanical top dresser in 1961, and continues to lead the industry with patented top dressing technologies, including the Mete-R-Matic® continuous chevron conveyor belt and ground drive system, and the WideSpin™ 1530 technology found in the company's broadcast top dressers. Today, Turfco offers the widest range of top dressers available, from the self-propelled models for greens and tees, to large pull-behind models appropriate for fairways and other large turf areas.

Turfco products are renowned as much for their solid quality and durability as they are for their unparalleled performance in the field. This is backed by the company's exclusive three-year warranty, the longest in the industry. In addition to top dressers, Turfco manufactures a wide range of equipment for commercial turf maintenance and upkeep, including aerators, overseeders, dethatchers, sod cutters and more. All are designed and manufactured at the company's Minneapolis headquarters.

WideSpin™ 1530 Broadcast Top Dresser

Turfco's WideSpin™ 1530 broadcast top dresser is ideal for superintendents who implement a light, frequent top-dressing



program. The machine can top dress as light as a fertilizer spreader up to 30 feet wide, allowing superintendents to top dress 18 holes in as fast as 90 minutes. The light, uni-

form and clean application means no dragging is required.

Thanks to its patented design, the WideSpin 1530 is the only top dresser that can switch from light to heavy top-dressing applications without attachments. Exclusive angleadjustable spinner plates allow up to 15 degrees of adjustment to maximize material penetration in varying turf conditions. As a result, the WideSpin 1530 is the first machine capable of uniformly applying 1/4-inch or more of top dressing up to 15 feet wide-nearly three times wider than standard spreaders.

The WideSpin 1530 is available in tow-behind and truckmount models. The truck-mount model is available for the Cushman® Turf-Truckster, John Deere® Pro Gator™ and Toro® Workman® utility vehicles.

CR-10 WideSpin™ Top Dresser and Material Handler

Turfco has introduced the patented WideSpin™ technology to its CR-10 broadcast top dresser and material handler. The CR-10 combines patented Turfco material handling technologies with WideSpin broadcast top-dressing technology to create an exceptionally versatile and easy-to-use golf course maintenance and renovation tool.

Utilized as a material handler, the CR-10 features a patented three-position hand-held control that provides operators flexibility and freedom to monitor material flow and placement from the



most convenient location. The flow control feature, in tandem with the 180-degree swing of the cross convevor, allows the CR-10 to effectively place material without moving

the machine, reducing shovel work. The large, four cubic yard (3.06 cubic meter) hopper capacity of the CR-10 makes it useful for filling other top dressers, bunkers, sand traps, washouts and more.

The CR-10 is capable of applying light or heavy top dressing applications at broadcast widths of 15 to 40 feet. Turfco's Wide-Spin technology, combined with the CR-10's exclusive angleadjustable spinners, also gives superintendents the unmatched ability to apply a full-range of top dressing depths, from light to 14-inch or more.

Mete-R-Matic XL

Building on the simple, dependable operation of its well-established Mete-R-Matic III, Turfco has introduced the Mete-R-Matic XL tow-type top dresser, which offers increased hopper capacity for larger turf areas on golf courses.

The Mete-R-Matic XL features Turfco's proven Mete-R-Matic design, which combines a patented chevron belt design with its patented ground drive system to ensure even



distribution of heavy, medium or light top-dressing materials, regardless of moisture content and vehicle speed. An adjustable metering gate accurately controls the flow of material from the conveyor belt to the brush, which drives material downward to penetrate the base of the turf. These features combine to make the Mete-R-Matic XL the easiest-to-use, most consistent large area top dresser available.

With a hopper capacity of 2.25 cubic yards (1.72 cubic meters), the Mete-R-Matic XL can carry a maximum load weight of 6,000 pounds.

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PRODUCTS PRODUCTS

Ty-Crop Manufacturing Ltd.

9880 McGrath Road Rosedale, BC VOX 1X0

Phone: 800-845-7249 • Fax: 604-794-3446

Web Site: www.tycrop.com E-mail: turfsales@tycrop.com



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Whether its topdressing or filling sand traps, completing a land-scape project, or building that new tee or green, "material handling" is a critical part of every superintendent's day. Our goal at Ty-Crop is to make sure our products are the right tools to help you get the job done. That's why our focus is on designing high-performance, simple-to-use, long-lasting equipment to transport, move, deliver, place and spread more kinds of materials more effectively.

Our innovation in material handling and topdressing is unmatched, including the first four-wheel walking beam low-impact suspension system in 1990, the first material handler in 1991, and the first multifunctional topdresser in 1997. Ty-Crop is proud of its leadership role in the professional turfgrass maintenance industry. But we're about more than great equipment. We see the big picture and have long been one of the strongest contributors of financial assistance for education, research and growth of the game.

Ty-Crop's turf products include a full line of material handling and topdressing equipment designed for the daily rigors of golf course or sports field maintenance. Customers can select from a range of sizes, configurations and prices to find the products that make the most sense for their facility, tow vehicle and budget. Product performance, simplicity and reliability have become the hallmarks of the Ty-Crop brand.

Every Ty-Crop representative has extensive experience and is happy to walk customers through the what, how and when of material handling, topdressing and everything related to these important operations. To learn more about how material handling and topdressing can help you affordably create the best possible playing conditions, visit www.tycrop.com or call 800-845-7249.

MH-400 Material Handling Unit

For more than 15 years, superintendents have relied on their Ty-Crop MH-400 to help them steadily improve playing condi-

tions. The MH-400 is the original material handler. It's perfect for daily maintenance, renovations and construction, surprisingly affordable for what it can do, very simple to use, and never needs a day off.



PP-180 Light and Frequent Topdresser

Imagine topdressing anytime, anywhere without anyone noticing, or even better—people giving you a smile and a thumbs up! The



ProPass delivers the lightest footprint and a level of spread accuracy that makes irrigating or brushing afterward optional. This technology makes light and frequent topdressing a cornerstone practice for creating greens that are faster and more consistent than ever.

QP-300 Multi-functional Topdresser

Customers all over the world rely on the QuickPass and the use of three quick-attach spreading options to spread almost any type of wet or dry material including top dressing mixes, compost products, sand,



lime, gypsum, inorganics and organics, cart path crush, stone, infield materials, wood chips, seed and sand mixes, soil conditioners, crumb rubber, grass clippings and more. The QuickPass can even be used without any spreading attachments for "tailgating," bulk unloading or simple material relocation tasks.

QP-450 Multi-functional Topdresser

The midsize QuickPass 450 and quick-attach options (no tools

required) is a perfect fit with most tow vehicles and offers the productivity to quickly top dress several fields in a single day. For added versatility, the QuickPass is designed with the ability to spread a variety of wet or dry materials at vary-



ing widths and depths. Standard features include Ty-Crop's low-impact 4-wheel walking beam suspension, endless floor belt (no seams or staples to come apart), simple to use controls, heavy duty long-lasting quality, and powder-coat paint.

TD-460 Large Area Topdresser

Top dressing is critical for creating smooth safe playing conditions and a healthy, deep roots growing environment. For facili-

ties with several acres of turfgrass, Ty-Crop's high capacity TD-460 is the ultimate topdressing solution. The 72-inch spread width, ability to spread a variety of wet or dry mate-



rials from %-inch to several inches in depth, and top dress with up to 7 cubic yards in a single load make it the right tool for the job. Proven performance, reliability and versatility are the hall-marks of the Ty-Crop brand.

Varicore Technologies

P.O. Box 131

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Varicore Technologies produces the Multi-Flow Drainage System. Varicore is dedicated to producing turf drainage systems that are fast-acting, convenient, durable and affordable. Its products meet exacting standards for strength and quality and they employ tested and fundamentally sound drainage principles. Varicore also provides valuable consultation and design services with each drainage system.

The Multi-Flow Drainage System

allow it to collect and

Today's superintendent faces unprecedented challenges to keep the course playable and attractive at all times. This requires technically sound drainage products and procedures. Multi-Flow is the solution. Multi-Flow's engineered properties

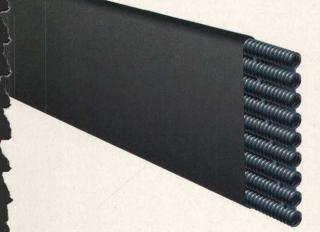
transport excess water quickly. This means less downtime and healthier turf.

Multi-Flow's design is not only technically sound but also convenient. Whether installed vertically in a narrow trench on a fairway or installed horizontally in a green, Multi-Flow's profile is attractive. Varicore also provides more than 50 connectors allowing for any configuration the situation demands.

Furthermore, Multi-Flow systems are strong and durable. When installed surrounded by coarse, clean sand, they avoid the blinding problem that leads to short life in French drain installations. Multi-Flow survives both heavy loads and silty or clay soils.

Multi-Flow is also an ally of the superintendent's budget!
When compared to a standard French drain, a Multi-Flow
system requires about half the cost. Imagine that—half the cost
for a system that is faster acting, more convenient,
and longer lasting.







Golfdom

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