

# Turf News

*A publication of Turfgrass Producers International*

The only magazine devoted *exclusively* to turfgrass production

## *Annual* Equipment & Product *Buyer's Guide*



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# IN THIS ISSUE

## FEATURE ARTICLES

### FOCUS: Annual Equipment & Product Buyer's Guide

#### 12 Introducing the Annual Equipment & Product Buyer's Guide

Read the summary of this year's guide and check the index to help you find just the items you are seeking.

#### 13 New For 2020

Check out the 28 new and/or updated products designed to help you grow your business.

#### 22 Annual Equipment & Product Buyer's Guide

55 pages of information from 42 supplier members including many pictures and QR codes to help you gain more information to assist you in determining what is going to best suit your needs.

#### 86 Annual Equipment & Product Buyer's Guide Supplier Listing

All the information you need to contact the companies listing products in the 2019 Buyer's Guide.

#### 90 Transportation of Agricultural Commodities—TPI Update

An update on progress between TPI, regulators, other groups, and constituents towards obtaining clarified and favorable regulations for transportation of perishable crops, including sod, to market.

#### 93 Market Research Explores Considerations Among Decision-Makers in Choosing Playing Surfaces

Explores how decision-makers choose playing surfaces and outlines what TPI is doing to provide injury study data to assist them.

#### 98 Razorbacks Return to Natural Grass

The why and how Arkansas football players are again playing on natural grass.

#### 102 Temperature Changes and Turfgrass

The third part of this series focuses on temperature changes and their impact on turfgrasses.

#### 106 Association Update—ETP Farm Tour 2019

Experience the 2019 ETP Norway Farm Tour in words and pictures.

#### 108 Discover the Magic

Discover why you should be in Orlando February 17-20, 2020.

#### 110 New Brochure Now Available on the TPI Website

A new brochure, *Turfgrass Installation for New Sod* is ready for TPI members.

## PLUS

TPI News.....6  
Turf Industry News ..... 115-116

## DEPARTMENTS

President's TURF.....2  
Executive Director's TURF ..... 4  
The Lawn Institute News .....8  
Welcome New & Returning Members .....119

## BONUS

TLI Helpful Hints Pass-Along.....9  
Happenings.....112  
Classified Ads.....118  
Advertisers Index.....119  
Turf Industry Calendar.....120

# PRESIDENT'S TURF



Eric Heuver

## WOW—What a Year!

As I look back at 2019 and all that TPI has accomplished, I'm grateful to have been able to be part of it. It's an honor to serve as your president and I thank you for giving me that opportunity.

TPI is on the right track, moving in a positive direction as a truly professional organization, leading industry-wide initiatives to educate decision-makers, governmental agencies and the public on the value and environmental benefits of natural grass. TPI is making your voice heard with regulatory agencies and standing up for natural grass against all detractors. I urge you to continue to support all the initiatives of the #KeepItREAL campaign globally and locally. Your support of The Lawn Institute has raised the money to fund that public-relations outreach as well as fund important industry-focused research that does and will continue to positively impact your business. That solid funding has allowed us to do some things we'd just talked about wanting to do in the past, and we're making progress on all fronts.

I appreciate all the work past TPI presidents and Board of Trustee members have done to develop the foundation of this association. We have strong roots that will anchor us as we continue to grow. The networking within TPI members has developed even more with the ease of connecting via improved technology and that gives us greater opportunities tap into the resources TPI is continually developing to work together to achieve our goals.

We're seeing membership growth and growing attendance at our Conferences. We've developed an excellent program for the 2020 International Education Conference & Field Day in Orlando, Florida, February 17-20, that should draw a record number of attendees. There's no better way to connect with long-time friends and meet new ones because of all the networking opportunities the Conference provides. The ideas you pick up during the educational sessions and those networking contacts will more than cover the costs of attending. And because the Conference headquarters is a Disney-affiliated hotel there are special perks for those who want to tie a theme park visit to their Conference trip. I hope to see you in Orlando!

I'm grateful for TPI's supplier members for their support of the association and for the innovative products they develop to help us improve our businesses. In turn, I encourage our sod producer members to seek out our supplier members for the products and services they need.

Looking forward, TPI has strong leadership already in place and the potential leadership within our membership, and the new members our initiatives are attracting, to keep the positive momentum going. The TPI Board and staff are committed to continuing TPI's leadership role within the industry to help you grow your business now and well into the future.

All the Best,

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# EXECUTIVE DIRECTOR'S TURF



Casey Reynolds, PhD

## 2019 Wrap-Up and 2020 Preview

It's hard to imagine but 2019 is almost behind us. I hope everyone is preparing for year-end and holiday celebrations around the world. As I look back on 2019, it's easy to understand why it flew by so fast. Someone once told me that many times in life the days are long, but the years are fast. That can certainly be said for career, parenthood, or other things that we often get so wrapped up in and I'm thankful to have these opportunities and try to make the most of them. Having said that, let's take a quick look back at what's been going on this year and how we will continue to move forward in 2020.

We laid out our plan for 2019 at the 2018 Fall Board Meeting in Minneapolis, MN, and it's hard to capture it all here. A few 2019 highlights though could include: two conferences that attracted over 1,000 attendees, a new website and membership database, several new member-only publications, a public relations campaign for natural grass, attendance and speaking at eighteen turfgrass conferences or events, and working with the U.S. Federal Government on issues affecting sod producers with regard to transportation, crop insurance, and herbicide registration. We also picked up fifty-five new or returning members. Of course, none of this could have been done without the support of our members, the hard work of our staff and contractors, and the vision of the TPI Board of Trustees.

Moving forward into 2020, we are just coming off the heels of our 2019 Fall Board Meeting in October in Orlando, FL, where we discussed and set the budget, plans, and initiatives for 2020. Next year we'll start off with a bang at the International Education Conference & Field Day at the always popular Disney sites. We will continue to work on promoting natural grass through social media and new publications, and we also will likely enter new areas to reach different audiences with our message. One way we'll try to reach the consumer audience will include renovating the TLI website with homeowner-friendly information on the value and

environmental benefits of natural grass. We will continue to work on trucking regulations for sod haulers and be sure to check out pages 90-92 for a summary of the current status on this topic.

I also will personally be attending sod producer conferences in the U.S., Australia, and Europe in 2020 to support our members worldwide, attract new members, and continue to ask what we can be doing to serve our members better. As always, if you have ideas or issues that pertain to you locally, please reach out to me at any time to see what we can do to help. That's what we're here for, and we are always happy to do it. I hope to see you in Orlando in February. Be sure to check out our website for all the details on registration, speakers, field day, and more. Take care, Merry Christmas, and Happy Holidays. We wish you and your families, farms and businesses all the best in 2020 and beyond.

Cheers,

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*As always, if you have ideas or issues that pertain to you locally, please reach out to me at any time to see what we can do to help. That's what we're here for, and we are always happy to do it.*

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# TPI NEWS

## MARK YOUR CALENDAR

### FEBRUARY 17-20—TPI'S 2020 INTERNATIONAL EDUCATION CONFERENCE IN ORLANDO!

TPI members will descend on the Hilton Orlando Buena Vista Palace, February 17-20, for a week of learning, networking, and making new friends during the 2020 International Education Conference & Field Day. The week will begin with optional social tours and a clay shoot to benefit The Lawn Institute and will include two days of education and exhibit hall time. The annual Field Day will be hosted by H&H Sod Company, Inc. Our headquarters hotel is located directly across the street from the exciting Disney Springs area and is an official Walt Disney World Hotel, giving attendees who choose to include a visit to Disney World in their travel plans access to exclusive Disney park benefits, including FastPass+ early planning, Extra Magic Hours, and continuous shuttles to the parks. Hotel reservations are open now. Conference Registration is now open.



INTERNATIONAL EDUCATION CONFERENCE & FIELD DAY

Discover THE MAGIC.

FEBRUARY 17-20, 2020  
HILTON ORLANDO BUENA VISTA PALACE

### THE ROOTIN' TOOTIN' CLAY SHOOTIN' EVENT IS RETURNING IN 2020!

Start putting together your teams and get ready for the TLI Rootin' Tootin' Clay Shootin' event. It will be held on Monday, February 17. Registration is open! Don't miss your chance to support TLI with this fun event!

### A NEW EVENT FOR WOMEN IN TURF COMING TO ORLANDO IN 2020

TPI is proud to announce the introduction of a networking reception for women to be held in Orlando as part of the TPI's 2020 International Education Conference & Field Day, February 17-20. This is a long-overdue opportunity for the women in our industry to get together and network, collaborate, and share experiences. The event is tentatively scheduled for Monday evening prior to the President's Reception. More details coming soon.



### TPI HONORS AND AWARDS PROGRAM

Do you know a deserving individual who should be recognized for their contributions to the industry? If so, please consider nominating them for recognition through the TPI Awards Program. The program acknowledges the tremendous contributions of deserving individuals in several categories based on nominations submitted by their peers. Award categories include TPI's Honorary Member Award, Distinguished Service Award, Innovator of the Year Award, and Turfgrass Educator Award of Excellence. More information is available on the TPI website.

### 2020 DR. HENRY W. INDYK SCHOLARSHIP

The application process for the 2020 Dr. Henry W. Indyk Scholarship began October 1. TPI members, their family, their employees, and their employees' families who will be attending college or graduate school during the 2020-2021 academic year are encouraged to apply. The deadline for the receipt of applications is January 6, 2020. More information is available at <http://www.TheLawnInstitute.org/pages/science/scholarships/>.





# TPI NEWS

## WHAT TO KNOW

### CONSIDER SUPPORTING THE LAWN INSTITUTE BY SPONSORING A RAFFLE BASKET FOR ORLANDO!

TLI will be hosting a dessert reception in Orlando on Tuesday night after the exhibit hall time. This will be a fun family-friendly event with Disney characters on hand for photo opportunities! The fundraising activities will include the annual auction as well as a series of raffle drawings. We are looking for members to sponsor the raffle baskets so that we'll have an exciting array of options to attract raffle ticket buyers! The baskets available to sponsor range in value from \$400 - \$1,100 and are a fun way to show your support for TLI and TPI. Have other ideas for donations? We are welcoming additional donations for the TLI Auction. Please contact Casey Reynolds, PhD, at [creynolds@TurfGrassSod.org](mailto:creynolds@TurfGrassSod.org) or 847-737-1846 for a list of items available for sponsorship or to donate an item for either the raffle or auction!



### LOOK FOR YOUR TPI MEMBERSHIP RENEWAL DETAILS

TPI Membership Renewals for 2020 will be hitting mailboxes soon! Please be on the lookout for your 2020 TPI membership renewals and contact the TPI office if you have questions or would like to renew over the phone. You can also log into the membership portal at [www.TurfGrassSod.org](http://www.TurfGrassSod.org) and manage your account that way as well, but we are always here to help. Thanks for your support!

### 2020 MEDIA KITS MAILED

2020 Media Kits have been mailed to all TPI Supplier Members. This kit contains all the information for advertising opportunities in 2020 on TPI's website, Industry Harvest newsletter, *Turf News Magazine*, and more. If you did not receive your media kit, would like another copy, or just have general questions please contact Geri Hannah at [ghannah@TurfGrassSod.org](mailto:ghannah@TurfGrassSod.org) or at 847-649-5555.

### REQUEST TO U.S. DOT UNDER REVIEW

TPI's Exemption Request to the U.S. Department of Transportation is currently under review and should be decided on shortly. Check out the article on pages 90-92 of this issue for an update on the current status of ag exemptions for U.S. sod haulers. If you have questions about how this impacts sod hauling in your area, please contact Casey Reynolds, PhD, at [creynolds@TurfGrassSod.org](mailto:creynolds@TurfGrassSod.org) or 847-737-1846.

### TPI 2019 CONFERENCE VIDEO READY FOR VIEWING

TPI launches the 2019 Conference Recap Hype Video!! Please go to TPI's website home page at [www.TurfGrassSod.org](http://www.TurfGrassSod.org) to check out a video recap of 2019!

### TPI SEEKS MEMBERSHIP DIRECTOR

TPI is seeking qualified candidates for the position of Membership Director. Karen Cooper, who had filled that role along with other responsibilities and who you have worked with the last two years has accepted a position as Executive Director of The Modern Quilt Guild. Many of you know that quilting is a passion of hers. Want a chance to work with TPI members throughout the world? Please keep an eye out for a call for candidates in late 2019 to apply for the position as TPI's Membership Director. If you are interested in applying or have questions, please contact Casey Reynolds, PhD, at [creynolds@TurfGrassSod.org](mailto:creynolds@TurfGrassSod.org) or 847-737-1846.

### DID YOU KNOW TPI MEMBERS CAN VIEW PHOTOS FROM PAST TPI EVENTS ON SMUG MUG?

Visit <https://tpiphotos.smugmug.com/> to take a trip down memory lane!



# THANK YOU TO ALL 2019 DONORS

The Lawn Institute sincerely thanks ALL members that have already donated to The Foundation in 2019. In recognition of the Forever Green, Gold Benefactor, Green Partner and 500 Club members, the lists below recognize those who have donated as of 10/1/2019.

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For more information on how you can support TLI and make a donation in 2019 go to: [www.TheLawnInstitute.org/](http://www.TheLawnInstitute.org/) and click on SUPPORT TLI. Contributions help support turfgrass research, education, scholarships, and the campaign to promote natural grass. Donations made in the calendar year will receive personal recognition in our publications and in The Lawn Institute booth.

**PERSONALIZE THE NEXT PAGE (Helpful Hints from The Lawn Institute)** Insert your company's business address and contact information by going to [www.TheLawnInstitute.org/pages/helpful-hints-from-the-lawn-institute/](http://www.TheLawnInstitute.org/pages/helpful-hints-from-the-lawn-institute/) to access The Lawn Institute's easy-to-use template. Then print and share with your customers—it's free!



## GRASSY WEED CONTROL



There are many species of grassy weeds that can be found in home lawns and other turfgrass sites. Like all plants, they can have various life cycles, growth habits, and features that make them easier, or more difficult to control. There are fundamental differences between grassy and broadleaf weeds and some grass-like weeds are not grasses at all. They are sedges, rushes, or even broadleaf weeds that simply appear to be grass-like. Understanding key differences in features of each of these types of plants is important in controlling them successfully.

Grassy weeds are monocots with leaves that emerge alternately after germination, as opposed to oppositely (in pairs) like broadleaf weeds. They have hollow stems and leaves that emerge in a rolled or folded fashion from the sheath. Unlike broadleaf weeds, they have parallel veins that run the length of each leaf making them easy to distinguish from broadleaf weeds which have netted veins. One could almost say that if it looks like a grass, then it is likely a grass. Although, sedges, rushes, and even some dicots have long narrow leaves that can be mistaken for grasses.

Proper identification is extremely important in grassy weed control, because unlike herbicides for broadleaf weeds that control a wide-spectrum, many grassy herbicides only control a handful of grassy weeds. Furthermore, when trying to control a grassy weed in a grass lawn there are many sensitivities that can cause injury to desirable grasses. As a result, not only is it important to know the grassy weed species you are trying to control, it's important to properly identify the lawn grass as well.

Grassy weeds are most effectively controlled with pre-emergence herbicides that control the weeds immediately after they germinate but before they emerge through the

turfgrass canopy, hence the name pre-emergence. Grassy weeds are more easily controlled during this life stage and grass lawns are generally much more tolerant of pre-emergence herbicides than they are of post-emergence herbicides. Also, grasses are prolific seed producers so it is important to get them before they germinate in order to break the life cycle. Annual grasses such as goosegrass, crabgrass, annual bluegrass, etc. are successfully controlled with herbicides containing pendimethalin, prodiamine, dithiopyr, atrazine, simazine, and oxadiazon. These products will control a wide range of grasses at the pre-emergence stage but if allowed to mature there are fewer products that will control them.

Mature perennial grassy weeds are often the most difficult to control. Weeds such as dallisgrass and common bermudagrass cannot be controlled with pre-emergence herbicides after they are already present at which point there are fewer options and increased likelihoods for injury to the desirable grass. Perennial grassy weeds often have storage organs including rhizomes and stolons that can store vast amounts of energy deep in the canopy or underground that allow them to recover from herbicide applications. As a result, herbicides often result in visible injury but most, if not all, take repeated applications to fully kill the weed.

Be sure to apply pre-emergence herbicides before germination and split applications can be helpful under high weed pressure. With post-emergence herbicides, do not apply when the lawn is under heat or drought stress and do not mow 2-3 days before or after application. As always, follow labeled directions and use these products judiciously.



For more information on lawn care and helpful "How to" tips, visit The Lawn Institute at:  
[www.TheLawnInstitute.org](http://www.TheLawnInstitute.org)





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



# Fully Automated Big Roll Harvester SRA



BN-1720



Big Roll Harvester BR



Big Roll Net



Office: 510 South 1st Street // Louisburg, KS 66053  
Plant: 209 Central // Hillsdale, KS 66036



# WELCOME

## to the *Turf News Equipment & Product Buyer's Guide!*

This year's edition contains descriptions of more than 165 pieces of equipment, some of which have multiple model numbers with varying features. There also are over 70 other products. All of these have been developed to improve the turfgrass producer's efficiency and profitability. 28 new and/or updated tools for 2020 kick off this special guide starting on page 13.

42 supplier members have provided information on aerators, turf vacuums and everything in between. These companies support the ongoing activities and efforts of Turfgrass Producers International. Please give them special consideration when making your next purchase. Please use the Equipment Buyer's Guide Contents box below to quickly find product categories. Again, this year's Guide categories coincide with Supplier Category Types in the Membership Directory (printed and online). This should make it easier to find the categories you are familiar with and seeking.

If you have any questions or would like additional details on the products featured in this guide, please contact the suppliers listed on pages 86 and 87. You also can use this listing to see where their advertisements are located. In addition, many companies have provided QR codes by their descriptions or company listing which you can scan with a mobile device to be directly connected to the product or company information on their websites. In the digital version of *Turf News*, the listed websites are "live." Just click on the websites you are interested in and be connected directly to that site.

**Editors' Note:** *This is not a complete listing of each supplier's products, but items they have chosen to highlight for this issue. Check out their websites or contact your supplier representative for additional information on their complete product line. All claims and statements are those made by the companies submitting the information.*

## NEW FOR 2020

*TPI member suppliers have introduced 28 new and/or updated turfgrass production tools for 2020. These include aerators, biostimulants/soil amendments, cultivators/tillers, fertilizers, forklifts, irrigation, mowers, plant protectants, rollers, sod harvesters, software, tires and trailing (hauling). Suppliers continually work on updating and bringing out new products based on your expressed needs and input.*

## BUYER'S GUIDE CONTENTS

Aerators .....	22	Rock Removal/Rakes .....	55
Biostimulants/Soil Amendments .....	25	Rollers .....	56
Business Services .....	26	Seeders/Planters .....	58
Cultivators/Tillers .....	27	Sod Harvesters .....	62
Erosion Control Products .....	29	Sod Installers .....	74
Fertilizers .....	30	Software .....	75
Forklifts .....	32	Sprigging Equipment .....	75
Irrigation .....	33	Staples/Tacs .....	76
Levelers/Graders .....	33	Tires .....	76
Mowers .....	36	Topdressers/Spreaders .....	78
Netting .....	44	Tractors.....	80
Netting Installers .....	48	Trailing (Hauling) .....	80
Pallet Wrappers .....	48	Truck Covers .....	81
Parts & Supplies .....	49	Turf (Sod) Tubes .....	82
Plant Protectants.....	54	Vacuums/Sweepers .....	82



**NEW FOR 2020**

## AERATORS

### **STEC Equipment**

#### **NEW FOR 2020**

##### ***VGR TopChanger***

STEC Equipment is the North American distributor of the new VGR TopChanger, the only tractor mounted, PTO driven, WET SAND injecting machine of its kind.

The VGR TopChanger is a tried and true machine that has performed its unique aeration process on some of the most prestigious golf courses throughout Europe.

The TopChanger performs all the actions required to condition the soil in ONE PASS. The TopChanger aerates the soil with a high-pressure water blast, followed by the injection of WET or DRY sand directly into the soil profile. The TopChanger can add beneficial amendments or chemicals in that ONE PASS. Finally, STEC Equipment will offer the VGR TopChanger to an open market with no territories or restrictions.

STEC Equipment is proud to continue its tradition of bringing innovative products to the North American market. For more information, please visit [www.stecequipment.com](http://www.stecequipment.com).



## BIOSTIMULANTS/SOIL AMENDMENTS

### **Locus Agricultural Solutions**

#### **NEW FOR 2020**

##### ***Terradigm***

Locus Agricultural Solutions introduces our new probiotic soil amendment called Terradigm. The formulation of one bacteria and one trichoderma enhances the microbiome of your native soil to produce roots that spread further and penetrate deeper. Terradigm builds a shield around the root system to protect from most detrimental organisms that attack and cause root growth to be minimized. Terradigm starter is included to give the beneficial microbes a lunchbox to begin feeding on as they multiply quickly. Best management practices to date show that Terradigm should be applied at 30-day intervals up to 3-4 weeks before harvest. University and grower trials show that a 2x application of 6 ounces per acre, followed in 30 days by a single application of 3 ounces, will show significant results 45-60 days preharvest. For more information, or for a farm visit to discuss application, please contact David Bradley, Locus Ag Turfgrass Specialist, at [dbradley@locusfs.com](mailto:dbradley@locusfs.com).

### **Vereens Turf**

#### **NEW FOR 2020**

##### ***'Energy' Biostimulants and Soil Amendments***

Vereens Turf offers several 'Energy' branded proprietary biostimulants and amendments. Many utilize technology from AQUA-AID Solutions, EarthWorks and Pathway BioLogic. For more information visit [www.vereens.com](http://www.vereens.com).

## CULTIVATORS/TILLERS

### BLEC North America

#### NEW FOR 2020

##### **Blecavator 400 HD**

The New Blecavator 400 HD is equipped with a long-life drive system, and side gear drive (no chains), along with larger diameter screening tines, easily adjustable to achieve screening sizes of 14mm-20mm-40mm-52mm. Its curved rotor hood is made from 6mm steel for strength and durability. The Blecavator 400 HD features an adjustable leveling blade for accurate grading and rear packer roller, ballastable with water for firming up the surface.

For more information, visit <http://redexim.com>.



### Redexim North America

#### NEW FOR 2020

##### **Turf-Stripper 2400**

The New Turf-Stripper 2400 is used to mow, level, de-thatch, and renovate turf areas, as well as to harvest sprigs. It is ideal for use on sod farms, golf courses, and sports fields. Its rotary action removes material and deflects it onto a conveyor system to be hauled away. An optional verti-cut blade kit can also be installed. The machine is highly productive and can be adjusted in small increments.

For more information, visit <http://redexim.com>.



## FERTILIZERS

### Aqua-Yield

#### NEW FOR 2020

##### **NanoPhte™**

NanoPhte™ is a unique phosphorous formulation that targets whole plant health. Aqua-Yield's Enhanced NanoShield Delivery™ provides phosphite to any crop to improve natural defenses against environmental stress, pests and disease. NanoPhte has superior foliar activity for boosting plant vigor in-season.

- Unique formulation affects whole plant health
- Absorbed foliarly for fast results
- Improved crop quality and yield
- Increases uptake of other nutrients
- Can be applied in-season with herbicides and pesticides

For more information, visit [www.aquayield.com](http://www.aquayield.com).





## FERTILIZERS

### Aqua-Yield

#### NEW FOR 2020

##### NanoRise™

NanoRise™ uses Aqua-Yield's® Enhanced NanoShield Delivery™ (E.N.D.) to capture nutrients in solution and delivers them by creating nanocavities in the leaf and root surface to allow nutrients to enter the plant quickly and in high quantities. NanoRise can be added to any liquid fertilizer blend to enhance nutrient uptake.

- Highly compatible with most products
- The E. N. D. accelerates crop growth
- Higher percentage of nutrient uptake with less fertilizer used
- Improves efficacy of dry soluble and specialty liquid blends

For more information, visit [www.aquayield.com](http://www.aquayield.com).



### Sod Solutions, Inc.

#### NEW FOR 2020

##### Amp Agronomy™ Online Services

Amp Agronomy™, the most efficient nutrient delivery system on the market, introduces the capability to make online purchases while receiving online professional consulting. Customers can browse and learn about Amp Agronomy's family of foliar nutritional products with our new ecommerce checkout functionality. Read about a variety of our product features and benefits online, subscribe to our "Get Amped Up" blog, and contact us for more information or to get in touch with your local sales representative. For more information, visit [ampagronomy.com](http://ampagronomy.com) or call 855-267-0449.

### Vereens Turf

#### NEW FOR 2020

##### Vereens Custom Fertilizers

Vereens Turf has our own fertilizer, blending plant liquids and granular, where we customize fertilizers to meet customer's needs based on the results of soil and/or water testing. We can impregnate plant protectants and many other inputs on granular fertilizers. For more information visit [www.vereens.com](http://www.vereens.com).

## FORKLIFTS

### Hol-Mac Corporation

#### NEW FOR 2020

##### Donkey Forklift Features

In 2020, Donkey Forklift is focusing our efforts on continued advancement of our quality, process procedures, and new machine design and costing, building on the new features introduced to the Donkey lineup in 2019. Safety has always been our top priority and to further this goal we now offer seatbelt interlocks on 2019 models and on. Also new to our 2019 offerings is the option for multiple transmission programs. The always reliable 1305 engine will be augmented with a new "Turtle Mode" selector. This has shown dramatic results in close areas where extra torque is needed and still allows the operator to effortlessly switch back to "Travel Mode" when more speed is desired.

For more information, visit [www.donkeyforklifts.com](http://www.donkeyforklifts.com).

## FORKLIFTS

### **Load Lifter Manufacturing** **NEW FOR 2020**

#### ***Agri-Lifter "E" Series Rough Terrain Forklift***

Load Lifter Manufacturing is proud to offer members of the Turfgrass Producers International the all-new Agri-Lifter "E" series Rough Terrain Forklift. Built with the new 74HP Perkins tier 4 final engine that provides smooth, quiet operation and requires no DEF Fluid. The Agri Lifter also includes a new heavy-duty cooling package with a single pass tube & plate design that includes a heavy-duty transmission cooler, convenient battery location, excellent operator ergonomic controls and seating position. The Agri Lifter continues to offer a high visibility roller mast assembly and a range of carriage options built specifically for the turf industry unlike our competitors. The 2019 Agri-Lifter "E" series will have you moving large turf rolls with the optional Big Roll Carriage as well as standard pallets with ease.

For more information visit <http://load-liftermfg.com/> or call 1-888-AOK LIFT (265-5438).



### **Sales Midwest, Inc.** **NEW FOR 2020**

#### ***Donkey Forklift Refurbishing***

Sales Midwest is now offering full refurbishing done on your Donkey forklifts. Multiple levels of service are available. So, come bring us that diamond in the rough that's been sitting in your tree row for years.

We will get it back to its former glory. Call Colton or Tim today at 913-254-9560 for more information and availability on this process.

### **Trebro Manufacturing, Inc.** **NEW FOR 2020**

#### ***Trebro QuadLift***

The weakest link in your turf harvesting system could be the fast and efficient transport of turf from the field to your waiting truck.

With a four-pallet capacity, 180 degree pivoting operator's seat for driving either direction, and a 20 mph transport speed, the Trebro QuadLift is exactly what you need to keep up with the increased production of our one-man harvesting machines. This machine allows you to quickly move big rolls or pallets of turf, which further increases the overall efficiency of your harvesting operation.

For more information, please visit: <http://trebro.com/>.



## IRRIGATION

### **T-L Irrigation Company** **NEW FOR 2020**

#### ***Precision Point Touch Pivot Control***

T-L Irrigation's NEW Precision Point Touch features a full color 7-inch graphic touch screen for easy operation. This new technology provides four (4) VRI auxiliary application areas each direction and up to 120 VRI steps with Web Telemetry. The new Precision Point Touch allows for position stop by angle and firmware update via USB. With visual programming and two end gun outputs and a soft start feature that ensures a slow start speed, pivot control has never been easier. Contact [sales@tlirr.com](mailto:sales@tlirr.com) for additional information.



## MOWERS

### Campey Turf Care Systems

#### NEW FOR 2020

##### *Campey™ Fleischmann Mower*

The Fleischmann Electric 5 Deck Rotary Mower has 2.20 m (7.22 ft.) cutting decks, with 6 spindles per deck, giving 10 m (32.8 ft.) overall cutting width. Braked steering, rear axle, two point pivoting front mount hitch give high maneuverability and enable cutting speeds up to 20 kph (12.4 mph) to be achieved.

For more information, please visit [www.campeyturfcare.com](http://www.campeyturfcare.com).

### Progressive Turf Equipment Inc.

#### NEW FOR 2020

##### **NEW FEATURES**

For over 30 years Progressive has been introducing game changing features and designs and, in the process, establishing ourselves as the clear industry leader that other manufacturers try to copy. Bolt-on deck shells, galvanized decks, maintenance free blade spindles, mechanical Lift-N-Turn – and the list goes on.

A constant innovation strategy coupled with the mandate to ensure backwards compatibility whenever feasible ensures that Progressive mowers are your best value both today and tomorrow.

We look forward to seeing you at the 2020 TPI Convention and Field Day in Orlando, where we will reveal several new features that will make you and your Progressive mowers even more productive.



### Progressive Turf Equipment Inc.

#### NEW FOR 2020

##### **NEW Feature: Greaseable Hex Shaft Roller-End Bearings on all Roller Mowers**

As a result of positive customer feed-back, Progressive is pleased to release greaseable roller-end bearings as standard equipment on all Progressive roller mowers.

Several years ago, Progressive introduced sealed roller-end bearings to reduce the number of grease points on each mower. Large natural grass producers have told us they are now mowing in wetter conditions than in the past and would prefer to grease the roller bearings to purge any moisture that naturally accumulates within the bearing, thus extending the service life even further.

All Progressive roller mowers will be fitted with the heavy-duty 2-bolt greaseable flange bearings that accommodate the field proven HEX shaft roller design, which provides positive bearing engagement and ensures the shaft does not turn within the bearing. Special grease is NOT required. Recommended greasing intervals are set at 50 hours. Best of all, older Progressive roller mowers can be updated to the HEX bearing design.



## MOWERS

### Progressive Turf Equipment Inc.

#### NEW FOR 2020

##### **NEW Feature: Solid Tires TD92 and Pro-Max mowers**

Introducing a Solid Option for Your Progressive Mower. Suitable for all TD92 and Pro-Max mowers no matter the vintage, Progressive's proprietary name-branded solid tire has several advantages over other makes, regardless if you are buying a new mower or replacing just one tire on a mower you currently own.

- Same rolling diameter as the Progressive pneumatic tire, no change to the Height of Cut setting, unlike other aftermarket solid tires
- Directly interchangeable, mounts directly to the caster hub with the same wheel studs
- Tough, Durable, Solid, not foam filled, no worries about flat spots or uneven wear
- Puncture proof, so no worries or hassle with flats, keeps you mowing
- Reduced bounce, leaves a more consistent finished cut

Available from early 2020 as original equipment factory option in place of the pneumatic tires on the TD92 and Pro-Max mowers.

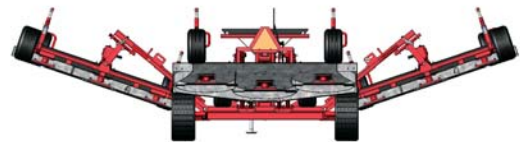


### Progressive Turf Equipment Inc.

#### NEW FOR 2020

##### **NEW Feature: Hydraulic Deck Lift Stabilizer – TD92 and TD65 mowers**

Designed for Producers who frequently change the height of cut, the Hydraulic Deck Lift Stabilizer option consists of a hydraulic lock valve assembly that will temporarily hold the decks off the ground at the height you choose. Available only on the TD92/TD92G and TD65B mowers, this option makes adjusting the cutting height much easier as it will hold the decks at a convenient height for repositioning the height of cut spacers on each caster. This option can also be easily installed as an aftermarket item to upgrade mowers now in service.



### TRIMAX MOWING SYSTEMS

#### NEW FOR 2020

##### **Vulcan (24-ft. Cut Width)**

Meet the highest return on investment maintenance mower on the market, produced by global leaders in cut technology. With 31% less PTO power requirements than comparable castor wheel mowers, the Vulcan has been tested and proven to use 13% less fuel than the previous market leading brand. The Vulcan is incredibly robust, suitable for full-time heavy-duty commercial use. Features include:

- Standard galvanized decks protect against corrosion
- Automatic belt tensioners
- 15-minute height adjustment ranging from ¾-in. – 5-in.
- Zero-turn ability
- Compacts to 8-ft. wide for road transportation
- Puncture proof tires that will not absorb water
- Four spindles per deck resulting in more cuts per yard and a finer clip
- SteadFast™ sealed spindles which eliminate regular greasing
- Stand-on covers and easy-clean wash openings
- Jack shaft PTO
- 3-year industry leading warranty

Learn more about the Trimax Vulcan or request a demo at [www.trimaxmowers.com/vulcan](http://www.trimaxmowers.com/vulcan)





## PLANT PROTECTANTS

### Vereens Turf

#### NEW FOR 2020

##### *Plant Protectants*

Vereens Turf carries products from multiple plant protectant manufacturers and can impregnate many plant protectants, along with fertilizer additives, on our granular fertilizers. For more information visit [www.vereens.com](http://www.vereens.com).

## ROLLERS

### Brouwer Kesmac

#### NEW FOR 2020

##### *Brouwer BTR30 PRO Heavy Duty Walk Behind Turf Roller*

The next generation of Brouwer Turf Rollers incorporates our advanced Drive System. The new design includes a dedicated pump, variable speed directional valve and external oil cooler. The Stainless-Steel Cooler dissipates the heat faster and the replaceable oil filter insures clean oil for longer life. The BTR30 PRO is designed to live up to the demanding workload of the Landscape Contractor and Rental Environment. The PRO Model includes the Heavy-Duty Traction Drum, the Power Protection Cover and is powered by a Dependable 5.5 HP Honda Engine. The edges of our Roller are curved to avoid damaging Soft Turf. The long handle makes turning easy, even when the drum is filled with water.



## SOD HARVESTERS

### Brouwer Kesmac

#### NEW FOR 2020

##### *NEW Brouwer 4000 Automatic Roll Sod Harvester Now with New Options*

The Brouwer 4000 blends 50 years of Sod Harvesting design, raising the standard for Automatic Sod Harvesters!

- Operator in-cab adjustments for several functions ensure best quality rolls and perfectly stacked, stable pallets
- Advanced Cutter Head design; with adjustable down pressure including a pre-roller
- Well balanced with light footprint on high-flotation tires
- Optional GPS Guidance
- 16-, 23- and 24-inch cutting widths
- Compact; maneuverable; tight turning radius
- Precise Automatic Flap Control ensures a perfect and stable pallet
- Fuel-efficient Caterpillar engine
- Hydrostatic drive, with cruise control, lets operator match ground speed with optimum harvesting speed
- John Deere air-conditioned cab offers a quiet ride, excellent visibility
- Optional dual cameras provide additional safety and convenience
- Brouwer Telematics allow our factory technicians to perform remote diagnostics, updates, adjustments and monitoring, utilizing GMS/GPS communication
- Optional NEW Gripper Head transfers a desired amount of rolls at a time allowing many more stacking patterns
- NEW Weight Scale option



## SOD HARVESTERS

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### **FireFly Automatix, Inc.**

#### **NEW FOR 2020**

##### ***New R300 Automated Roll Harvester***

The R300 automated roll harvester handles every grass type and condition with speed and FireFly's signature smooth movements. With mechanisms originally designed for the high cycles of slab harvesting, this machine boasts incredible durability. Without any metal-on-metal contact, the electric rollup provides long-lasting precision. The intelligent flap control and unique self-adjusting dual flipper produce tight rolls and stable, consistent pallets in varying conditions. The R300 easily accommodates varying roll lengths, from 8-12 ft. (.7-1.1 m.). Powered by a turbo-charged JCB engine that is perfectly suited for your turf production, the R300 has superior fuel efficiency. The fast, precise, and consistent SynchroStacker uses unique helical pickup screws for the most secure roll pickup on the market. Increase your yield and flexibility with factory integrated GPS guidance system (optional). Step into the comfortable TurfView Cab and start making perfect pallets on repeat. For more information, call 801-842-1327 or email [sales@fireflyequipment.com](mailto:sales@fireflyequipment.com).

### **Trebro Manufacturing, Inc.**

#### **NEW FOR 2020**

##### ***Trebro AutoStack 3***

As the newest, most refined, high-production machine on the market, the Trebro AutoStack 3 is the ultimate in turf harvesting production. Along with Trebro's industry-leading reliability, economy, and time-tested value, it combines tried and true design with many new features that set it apart.

Features Include:

- All-wheel drive and large high flotation tires for easy operation in wet, muddy conditions
- Dual 24-inch cutting heads with dual adjustable down pressure for outstanding quality of cut with minimum waste
- On the go scrap dump
- Centralized control box
- Dual shoeless autosteer for harvesting in both directions
- Telematics with remote service tool
- Plus many more

The state-of-the-art air-conditioned and heated cab uses curved glass on the front and rear for outstanding visibility of all harvesting and stacking functions.

The Trebro AutoStack 3 quickly pays for itself thanks to its one-operator system, maximum productivity and sod quality, with reduced waste and downtime.

Please visit: <http://trebro.com/>



## SOFTWARE

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### **Sod Solutions**

#### **NEW FOR 2020**

##### ***Turf Logistics Installation Module***

Turf Logistics™, the premiere sod farm management software, has introduced a new installation module with a drag and drop calendar view. This makes everyday installation management a breeze by allowing you to quickly move crews and equipment on the fly. For more information, visit [TurfLogistics.com](http://TurfLogistics.com) or email [jlong@sodsolutions.com](mailto:jlong@sodsolutions.com).



## TIRES

### Alliance Tire Americas

#### NEW FOR 2020

##### *Galaxy Garden Pro MPC*

Purpose built for compact tractors, the Galaxy Garden Pro MPC blends the features and performance found in the most common compact tractor tires into one single tire that performs a wide variety of jobs in all types of terrain. Built with a substantially deeper tread than what's commonly found on R-3 tires and a multipurpose tread pattern with significantly larger solid-to-void ratio than typical R-1s and R-4s, the Galaxy Garden Pro delivers great traction in soft soils and a long lifespan when operated on hard surfaces—all while protecting delicate surfaces.

With its radial construction, the Galaxy Garden Pro MPC has a wider footprint, which distributes the weight of a tractor across a larger surface, causing less damage to turf. It also provides a smoother ride and wears better than bias ply tires when used on hard surfaces, costing less over the life of the tire than other competitors. [www.atgtire.com](http://www.atgtire.com).

## TRAILING (HAULING)

### Sales Midwest, Inc.

#### NEW FOR 2020

##### *GV Haulit Trailers*

Sales Midwest is now a dealer for the GV Haulit trailer line. These heavy-duty utility trailers have a push off system as well as a dump feature. Increase your profitability today for small order deliveries.

Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.

## Turf News 2020 Media Kit

Lock in 2019 Rates

Frequency Discounts

TPI Works with Any Budget

New Advertising Opportunity



### TURF NEWS 2020 MEDIA KIT



Advertising Opportunities  
Turf News • E-Newsletter • Website  
Membership Directory • Pest Control Guide  
Event Sponsorships

The only magazine devoted exclusively  
to turfgrass production.

Contact Geri Hannah before **December 31, 2019** to lock in 2019 rates!

[ghannah@TurfGrassSod.org](mailto:ghannah@TurfGrassSod.org) or 847-649-5555

## AERATORS

### AQUA-AID Solutions

#### Imants ShockWave

The Imants ShockWave is a linear decompactor, designed to revitalize heavy wear areas by relieving soil compaction, improving aeration and removing surface water. The Imants ShockWave is one of the fastest PTO driven rotary, linear decompactors and is designed for use on fine turf and sports fields. All ShockWave models feature a no-chain, direct drive design, maintenance free 'sealed for life' bearings and no shear bolts.

Website: [www.aquaaidolutions.com/cultural-solutions](http://www.aquaaidolutions.com/cultural-solutions)

### Brouwer Kesmac

#### Brouwer Aerator

- Punctures surface to root level while maintaining ability to harvest or use turf immediately
- Allows water, air, fertilizer and chemicals to penetrate turf for more efficient use of fertilizer and pesticides
- Follows ground contours
- Special spikes for golf courses
- Heavy duty frame
- Depth Control
- Single lift cylinder for easy transport
- Simple and durable design
- Only a mid-size tractor required
- 6-inch teeth spacing for aeration
- Can be used multiple times each year
- Available in 8-ft. and 12-ft. models
- Patented tooth design provides clean entry and exit of tine



### First Products, Inc.

#### AGRI-Vator

The First Products AGRI-Vator uses a patented vibrating action to loosen and break up the soil without destroying existing turf on the surface. This unit will aerate, seed and accomplish renovations on all types of fields including sod, hay production and sports fields. The crushing action between the roots breaks up the soil in the root zone significantly improving infiltration of air, nutrients and water. That causes as much as 30 percent faster regrowth by stimulating the rhizomes under the surface, an advantage for producers looking for greater utilization of the rhizomes they already own. The AGRI-Vator minimizes lake and stream pollution due to runoff. The operator can vary the tine aggressiveness by changing the PTO and ground speed.

Year after year, the AGRI-Vator has proven itself to be the "most versatile piece of equipment on the farm."

For more information, visit [www.1stproducts.com](http://www.1stproducts.com).



### First Products, Inc.

#### AGRI-Vator with Seed Box Option

As seeding rates and re-growth methods change, producers seek ways to stay abreast of new products and technology to save time and money. The AGRI-Vator seed box option allows a new method of minimal seeding. By running the AGRI-Vator after harvest to stimulate regrowth, the optional seed-box allows producers to seed at a ten to twenty percent reduced seed rate. The lower rate saves on seed cost while allowing producers to continually introduce new seed varieties into existing turf crops and provide faster regrowth and faster harvest by cultivating the soil with the AGRI-Vator. The AGRI-Vator is available in 6-, 8-, and 12-foot widths. For more information, visit [www.1stproducts.com](http://www.1stproducts.com).





## AERATORS

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### **Redexim North America**

#### ***Level-Spike 1700***

The Level-Spike 1700, with four optional types of knives and spoon tines, improves the soil drainage. The rear roller assures a safe operation, and its adjustment sets the working depth accurately. The Level-Spike is built tough and can be operated at speeds of 8.7 mph or more. The choice of available widths enables the customer to match the machine to their tractor and their specific requirements. There is an exceptionally wide range of knife options. There is an optional hydraulic weight transfer system which utilizes the tractor's hydraulics to force the tines into the ground, providing maximum aeration and drainage. For more information, visit <http://redexim.com>.

### **Redexim North America**

#### ***Level-Spike 2200***

The Level-Spike 2200 is the wider version of the Level-Spike. The Level-Spike 2200 can drastically improve the drainage of the turf and is available with four optional types of knives and spoon tines. This wide range of knife options makes the Level-Spike applicable to a range of types of turf surfaces. The depth level is controlled by the rear roller, which also stabilizes the machines for safe operation. The Level-Spike is a fast and durable machine that can be operated at speeds of 8.7 mph or more. For maximum aeration and drainage there is also an optional hydraulic weight transfer system, which utilizes the tractor's hydraulics to force the tines into the ground. For more information, visit <http://redexim.com>.

### **Redexim North America**

#### ***SandMaster 2000***

The SandMaster is a one-pass aerator and slit drainage machine that allows the use of wet or dry sand, gravel or other soil amendments. The SandMaster, mounted behind the Verti-Quake, will create deep slits using vibrating coulter knives that leave playing fields ready for play. For more information, visit <http://redexim.com>.

### **Redexim North America**

#### ***Verti-Core 1600***

For a top quality aerator at an affordable price, look no further than the Redexim Verti-Core 1600. With working speeds up to 3.5 mph, the Redexim Verti-Core saves time and money and is one of the fastest aerators on the market today. Robust construction combined with simple adjustments makes the Verti-Core reliable and easy to use. Fewer moving parts insure simple service and less maintenance. A wide variety of tines are available. For more information, visit <http://redexim.com>.

### **Redexim North America**

#### ***Verti-Drain 2220***

The new Verti-Drain 2220 is our fastest deep tine Verti-Drain, running up to speeds of 3.34 mph in larger areas. The Verti-Drain 2220 is both fast and strong, penetrating 9 inches into the soil. The 2220 is also a versatile machine that can be utilized on virtually all types of turf from roughs to greens. The depth adjustments are done from the tractor seat and the adjustments of the front and rear rollers are done hydraulically. For more information, visit <http://redexim.com>.

### **Redexim North America**

#### ***Verti-Drain 7521***

The Verti-Drain 7521 incorporates all the innovative technology of the second generation Verti-Drain line. This makes it the first choice for anyone looking for a full 16-in. deep penetration and high productivity up to 49,800 sq. ft./hr. Available with a three-speed gearbox that will match up to any tractor. This unit is widely used by contractors and golf clubs on all areas, including greens, where half-inch tines can be fitted at 2.5-inch centers. For customers wishing to transport their 75 Series Verti-Drain on highways, a retro-fit bogie wheel system is available. For more information, visit <http://redexim.com>.



## AERATORS

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### **Redexim North America**

#### ***Verti-Drain 7526***

The Verti-Drain 7526 Series is the first choice for anyone looking for a full 16-in. deep penetration and high productivity up to 61,400 sq. ft./hr. Available with a three-speed gearbox that will match up to any tractor. The VertiDrain 7526 comes into its own in large open spaces, which includes fairways as well as football, soccer, baseball and sod production fields. The standard .75-in. diameter, 12-in. long solid tines can be replaced with a variety of solid or hollow tines. For customers wishing to transport their 75 Series Verti-Drain on highways, a retro-fit bogie wheel system is available.

For more information, visit <http://redexim.com>.

### **Redexim North America**

#### ***Verti-Drain 7626***

The 7626 is the heaviest and toughest Verti-Drain on the market. It is the ideal machine for the toughest of soil conditions, where high productivity is needed. It weighs considerably more than the 75-series, and it has a heavier gearbox, PTO and rear roller support. Its adjustments have been made simpler. The tine depth adjustments are made comfortably from the tractor seat via the hydraulic controls, while the original amount of "heave" on the tine is left intact. The optional wheel support is constructed extra robustly, while it falls within the 104 inch (2.6m) working width of the Verti-Drain. The forward speed is faster than that of the 75-series.

For more information, visit <http://redexim.com>.

### **Redexim North America**

#### ***Verti-Quake 2516***

The Verti-Quake 2516 is a rotary aerator that de-compacts the soil using a set of rotating steel blades. As these blades cut cleanly through the soil, they create a wave action that shatters compacted areas and opens up the subsoil. The Verti-Quake is available in two different models and can work at depths up to 10 inches (254 mm) with little or no surface disruption.

For more information, visit <http://redexim.com>.



### **Redexim North America**

#### ***Verti-Quake 2521***

The Verti-Quake 2521 is the larger of the two Verti-Quakes. The Verti-Quake is a rotary aerator that uses a set of rotating steel blades to de-compact the soil. The blades of the 2521 slice cleanly through the soil creating a wave action that shatters compacted areas and opens up the subsoil. The Verti-Quake 2521 can operate at depths up to 10 inches (254 mm) with minimal surface disturbance.

For more information, visit <http://redexim.com>.

### **Sales Midwest, Inc.**

#### ***New and Used Aerators***

Sales Midwest offers an assortment of new and used aerators. Featured is First Products Agri-Vator used to aerate, relieve compaction and renovate turfgrass farms, other turfgrass areas, pastures and hay fields. It is available in 6-ft., 8-ft. and 12-ft. widths.

Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.



## AERATORS

### STEC Equipment

#### GKB TOP AIR

The GKB Top Air is a great addition to your lineup of equipment. The DeEvolvente blades, minimize prying in the upper layer of your field, while giving you precision slicing to help maximize air flow to your roots. Multiple easy setup options allow you to aerate and level the field at the same time while also adjusting the depth and pressure. The high operating speeds of the Top Air allow you to quickly introduce water and air throughout your field. For more information, please visit [www.stecequipment.com](http://www.stecequipment.com).



### STEC Equipment

#### VGR TopChanger

STEC Equipment is the North American distributor of the new VGR TopChanger, the only tractor mounted, PTO driven, WET SAND injecting machine of its kind.

The VGR TopChanger is a tried and true machine that has performed its unique aeration process on some of the most prestigious golf courses throughout Europe. The TopChanger performs all the actions required to condition the soil in ONE PASS. The TopChanger aerates the soil with a high-pressure water blast, followed by the injection of WET or DRY sand directly into the soil profile. The TopChanger can add beneficial amendments or chemicals in that ONE PASS. Finally, STEC Equipment will offer the VGR TopChanger to an open market with no territories or restrictions.

STEC Equipment is proud to continue its tradition of bringing innovative products to the North American market. For more information, please visit [www.stecequipment.com](http://www.stecequipment.com).



## BIOSTIMULANTS/SOIL AMENDMENTS

### AQUA-AID Solutions

#### Worm Power Turf

Worm Power Turf is a vermicompost extract produced in an environment tightly controlled from end to end. Worm Power Turf strengthens the physical and biological aspects of the soil around a plant's root zone. Worm Power Turf improves soil health, and the health, vigor and strength of your plants.

Worm Power Turf is consistent and proven and has been awarded 17 peer reviewed research grants from State and Federal Agricultural Agencies. 10 years and 3 million dollars in research have demonstrated Worm Power Turf produces stronger, healthier and more vigorous plants.

Website: [www.aquaaidolutions.com/biological-solutions/worm-power-turf](http://www.aquaaidolutions.com/biological-solutions/worm-power-turf)

### Aqua-Yield

#### NanoGro®

NanoGro® uses Aqua-Yield's Enhanced NanoShield Delivery™ to speed up germination, to provide fast, strong establishment of all crops, and stimulate growth all season long. The E.N.D.™ makes NanoGro a completely unique and powerful product for superior farming.

- Faster establishment
- Earlier fruiting and larger fruit size
- Improves yield and productivity
- Adds vigor to root, stem and leaf growth
- Improves soil health

For more information, visit [www.aquayield.com](http://www.aquayield.com).



## BIOSTIMULANTS/SOIL AMENDMENTS

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### **Locus Agricultural Solutions**

#### ***Terradigm***

Locus Agricultural Solutions introduces our new probiotic soil amendment called Terradigm. The formulation of one bacteria and one trichoderma enhances the microbiome of your native soil to produce roots that spread further and penetrate deeper. Terradigm builds a shield around the root system to protect from most detrimental organisms that attack and cause root growth to be minimized. Terradigm starter is included to give the beneficial microbes a lunchbox to begin feeding on as they multiply quickly. Best management practices to date show that Terradigm should be applied at 30-day intervals up to 3-4 weeks before harvest. University and grower trials show that a 2x application of 6 ounces per acre, followed in 30 days by a single application of 3 ounces, will show significant results 45-60 days preharvest. For more information, or for a farm visit to discuss application, please contact David Bradley, Locus Ag Turfgrass Specialist, at [dbradley@locusfs.com](mailto:dbradley@locusfs.com).

### **Plant Food Company, Inc.**

#### ***KelPlant® 1-0-1***

Plant Food Company's KelPlant® 1-0-1 contains an extract of 75 percent North Atlantic *Ascophyllum Nodosum* SeaWeed Extract (SWE) plus 20 percent Humic and Fulvic Acids. KelPlant® 1-0-1 provides added stress tolerance and root enhancement while increasing microbial activity. KelPlant® 1-0-1 relieves stress in the plant, resulting in superior quality in turf density and hardness.

For more information, please visit [www.plantfoodcompany.com](http://www.plantfoodcompany.com) or call 800-562-1291.

### **TIMAC AGRO USA, Inc.**

#### ***Fertiactyl® GZ***

##### **Features**

The Fertiactyl series are combinations of highly available nutrients, activated humic and fulvic acids and our patented GZA complex. The formulations are designed to provide the plant with a critical nutritional and physiological boost at early growth stages during times of stress. Available in five formulas that provide specific nutrient combinations to match a grower's unique situation.

##### **Key Benefits**

- Activated humic and fulvic acids to improve soil nutrient availability and uptake
- Flexible formulations to provide ideal nutrients for early growth stages
- Formulated with the patented GZA complex

For more information, visit [www.us.timacagro.com](http://www.us.timacagro.com).

### **Vereens Turf**

#### ***'Energy' Biostimulants and Soil Amendments***

Vereens Turf offers several 'Energy' branded proprietary biostimulants and amendments. Many utilize technology from AQUA-AID Solutions, EarthWorks and Pathway BioLogic. For more information visit [www.vereens.com](http://www.vereens.com).

## BUSINESS SERVICES

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### **Cameron Financial**

#### ***Equipment Leasing & Financing Specialists***

"We've got your equipment needs covered," states Cameron Financial. Since its inception in 1992, the company has arranged leasing and financing solutions for customers in need of equipment throughout the United States. "Our experience extends to helping in all types of agricultural commodities, including the sod industry. When you work with us, you gain access to unique financing experience that's different from the rest," Cameron Financial states. Visit [www.cameronleasing.com](http://www.cameronleasing.com) for more information.



## CULTIVATORS/TILLERS

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### **AQUA-AID Solutions**

#### **IMANTS KORO FTM**

The Imants Koro FTM is available in four working widths with the 2.0- and 2.5-meter machines being ideal for sprig harvesting when fitted with the Universe Rotor. The FTM 2.0 is a heavy-duty fraize mower for removing unwanted surface matter such as Poa-annua, thatch, weeds or the entire surface to a depth of 2 inches. A side arm conveyor removes debris directly into a trailer, leaving a level, even surface. The KORO® FTM 2.0 is designed for turf farms and sports turf applications like football and soccer fields.

Website: [www.aquaaidolutions.com/cultural-solutions](http://www.aquaaidolutions.com/cultural-solutions)

### **Campey Turf Care Systems**

#### **Campey™ UNIRAKE™**

The Campey™ UNIRAKE™ is designed for and by leading groundsman to accurately maintain natural and synthetic grass, including hybrid surfaces. The UNIRAKE offers high intensity grooming that can be calibrated in its severity. A brush can be fitted on the back of the UNIRAKE for use on different playing surfaces.

For more information, please visit [www.campeyturfcare.com](http://www.campeyturfcare.com).

### **Kassbohrer All Terrain Vehicles, Inc.**

#### **Cherrington Screeners**

The Cherrington cleaning process, with our unique powered sand and soil screening method and design, are the most effective mechanical mobile screeners. They clean by lifting the sand or soil from the surface, screening it through a powered screen, and returning it to the seed bed.

Cherrington screeners lift and carry the surface material over the screen using loading paddles. The Cherrington system powers the sifting screen for effective separation of the debris. The sand or soil is immediately returned to the surface, while the loading paddles carry the debris that is larger than the selected, and easily changeable, screen-hole size, into the hopper.

This screening method will remove rocks, roots and ribbons of unharvested sod – everything bigger than the chosen screen-hole size. Only Cherrington's Screen Clean Method truly removes all the trash and debris and produces a perfect seed bed.

For more information, find us at [www.cherrington.net](http://www.cherrington.net).

### **Northwest Tillers**

#### **Turf Tiller**

If you are looking for a reverse or forward tiller, you should take a look at the Northwest Turf Tiller. It eliminates your sod ribbons while giving you a superior seed surface for greater germination in ONE PASS. The Northwest Turf Tiller is extremely heavy-duty. Models start at 7 feet and go to 16 feet in one-foot increments. Standard features include: the oil cooler, hard-faced blades, plastic liner, and the finger bar behind the blades. Northwest Tillers has been manufacturing tillers for over 60 years. We offer the only Turf Tiller made in the United States, so parts are just a telephone call away. We have dealers throughout the U.S.A. If you are looking for a dependable, extremely heavy-duty machine, and parts within 24 hours, Northwest Tillers is your only choice. Next Show: TPI Conference, February 17-20, 2020 in Orlando, Florida. For more information, call 1-800-204-3122 or visit [www.nwtiller.com](http://www.nwtiller.com).

## CULTIVATORS/TILLERS

### Redexim North America – BLEC

#### **Blecavator BV145**

The NEW Blecavator compact series has been re-designed to work more efficiently and is supplied as standard with a quick fit attachment system offering a seed hopper as an option to increase versatility. The well-proven standard Blecavator is a one-pass, ground-preparer, cultivating and digging down to between 4–7-inches while lifting and screening the stones and debris down to between 0.5– 2-inches through the adjustable screening tines, burying the stones and debris, raking the ground level, and compacting the soil with the rear packer roll.

For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).



### Redexim North America – BLEC

#### **Blecavator BMV210**

The Blecavator BMV 210 is of robust construction for long life. The heavy-duty gearbox is protected by a PTO pre-set cam clutch. An optional seed hopper transforms the Blecavator into a one-pass operation. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).

### Redexim North America – BLEC

#### **Blecavator BV250HD**

The Blecavator heavy duty series are all equipped with a long-life drive system and side gear drive (no chains). Larger diameter screening tines, easily adjustable to achieve screening sizes of 0.5- 2-inches and a curved rotor hood made from 0.33-inch steel for strength and durability, adjustable leveling blade for accurate grading and rear packer roll. Water can also be used as ballast for firming up the surface. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).

### Redexim North America – BLEC

#### **Blecavator BV300HD**

The Blecavator heavy duty series are all equipped with a long-life drive system and side gear drive (no chains). Larger diameter screening tines, easily adjustable to achieve screening sizes of 0.5- 2-inches and a curved rotor hood made from 0.33-inch steel for strength and durability, adjustable leveling blade for accurate grading and rear packer roll. Water can also be used as ballast for firming up the surface. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).

### Redexim North America

#### **Turf Stripper 2000**

The Turf Stripper is used to mow, level, de-thatch and renovate turf areas, as well as to harvest sprigs. It is ideal for use on golf courses, sports fields and sod farms. Its rotary action removes material and deflects it onto a conveyor system to be hauled away. An optional verti-cut blade kit can also be installed. The machine is highly productive and can be adjusted in small increments. For more information, visit <http://redexim.com>.



### STEC Equipment, Inc.

#### **Rotadairon Soil Renovators**

Rotadairon soil renovators are a one-pass tilling and leveling machine. They are available in many different sizes, and to suit a variety of applications, including sod farms, landscaping, sports turf, and golf courses. They feature a reverse-tine rotor and screening system with the ability to bury rocks and create a finely tilled, level surface. Rotadairon also offers machines for skid steers and small implements. For more information, visit [www.steceequipment.com](http://www.steceequipment.com).





## CULTIVATORS/TILLERS

### STEC Equipment

#### GKB Stoneburier

The GKB Stoneburier is what you are looking for no matter if you are looking to get a new area ready for construction or to get a neglected area back to good. The Stoneburier is built for big jobs starting with the fully welded frame construction. The heavy-duty rotor, that has several easy to switch out blade options, is powered by an oversized drive chain and will have no issues going through the thickest landscapes. The Stoneburier with its radial pin clutch will help protect against overloading the machine. The GKB Stoneburier is the perfect piece of equipment to help you get your field ready for construction. For more information, please visit [www.stecequipment.com](http://www.stecequipment.com).



### STEC Equipment

#### GKB Combinator

The GKB Combinator is the ultimate tool for the removal of unwanted turf. The Combinator, with its patented penduling system with precision adjustments, can remove up to 2" of material in a single pass which leaves you with a surface that is ready for laying sod or reseeding. The solid steel rotor is driven by a high-speed belt system and its working depth can easily be adjusted without tools. The rotor can be set up with 3 different blade options in order for one machine to fraise, verticut and for digging sprigs. The conveyor system, equipped with tracking v belts to help reduce wear and tear, makes getting the removed material off site easier. The Combinator comes in a variety of sizes to help make this machine a perfect tool for your operation.

For more information, please visit [www.stecequipment.com](http://www.stecequipment.com).



## EROSION CONTROL PRODUCTS

### Hydro Straw/Summit Seed

#### Erosion Control Products

Hydro Straw, LLC is a manufacturer of erosion control products with specific focus on the latest in innovative erosion control technologies, as well as a full line seed company. Our goal is to produce quality erosion control products while providing superior service and customer satisfaction, and offer the latest in genetic seed advancements to the marketplace. We constantly strive to offer the best possible solution for your erosion control and seed needs. We pride ourselves in offering a wide base of knowledge, products and expertise that our customers require.

For more information visit: [www.summitseed.com](http://www.summitseed.com) or [www.hydrostraw.com](http://www.hydrostraw.com).

### ADVANCED EQUIPMENT SALES VAC-320 Sweeper Vac for your toughest clean-up jobs



- 13.3 Cubic Yard Capacity
- New 8 Blade Impeller Fan
- 4 Turf Wheels, Floating Axles
- Available with 10 or 12 ft. Pick-Up
- Now with 4 wheels on Pick-Up Deck for Better Floatation

Now with 40%  
increase in suction as  
seen at TPI Field Day!

Ask about the 10 Yard Vac with 7 ft. Pick-Up Head

### Advanced Equipment Sales

Phone: 519-527-2929 Fax: 519-527-2150  
P.O. Box 818, 21 Birch St., Seaforth, ON N0K 1W0  
Website: [www.advancedequipmentsales.ca](http://www.advancedequipmentsales.ca)

## FERTILIZERS

### AQUA-AID Solutions

#### Verde-Cal Products

Verde-Cal Products are formulated with technologically advanced active ingredients requiring lower product rates for optimum soil health. The addition of organic complexing agents enhances solubility with increased availability. Verde-Cal Products allow the plants to maximize Calcium uptake and chelation of other available nutrients to achieve a balanced soil profile for healthy plant growth.

Website: [www.aquaaidolutions.com/soil-solutions](http://www.aquaaidolutions.com/soil-solutions).

### Aqua-Yield

#### NanoPhos®

NanoPhos® uses Aqua-Yield's Enhanced NanoShield Delivery™ to deliver phosphorous directly to crops. NanoPhos offers highly efficient phosphorous delivery where soil conditions limit plant uptake. Applying NanoPhos ensures a strong root system and will result in faster plant growth and increased flowering and fruit set.

- Speeds up plant growth, seedling and sprig establishment
- Increases root mass and plant resilience
- Improves fruit set and size
- Increases stem strength and promotes tillering
- Increases uptake of other nutrients
- Improves stress tolerance
- Promotes root growth and tillering

For more information, visit [www.aquayield.com](http://www.aquayield.com).

### Aqua-Yield

#### NanoStress®

NanoStress™ uses Aqua-Yield's Enhanced NanoShield Delivery™ to reduce plant stress during critical times in the season. NanoStress is a powerful combination of phosphorous and potassium that absorbs directly to the plant where soil conditions limit plant uptake. When plants are damaged by extreme weather, NanoStress speeds up recovery and boosts vigor so plants continue to mature.

- Improves environmental stress tolerance and vigor
- Increases stem strength and promotes tillering
- Increases uptake of other nutrients
- Improves fruit set and size
- Can be applied in-season with herbicides and pesticides

For more information, visit [www.aquayield.com](http://www.aquayield.com).



### Plant Food Company, Inc

#### KelPlant® 1-0-1

Plant Food Company's KelPlant® 1-0-1 contains an extract of 75 percent North Atlantic Ascophyllum Nodosum SeaWeed Extract (SWE) plus 20 percent Humic and Fulvic Acids. KelPlant® 1-0-1 provides added stress tolerance and root enhancement while increasing microbial activity. KelPlant® 1-0-1 relieves stress in the plant, resulting in superior quality in turf density and hardness.

For more information, please visit [www.plantfoodcompany.com](http://www.plantfoodcompany.com) or call 800-562-1291.



## FERTILIZERS

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### **Redox Chemicals, LLC**

#### ***Flowable Fertilizers***

**Platinum Flowable** is a reacted plant nutrient high in phosphorous, potassium, and micronutrients. It reduces environmental oxidation stress and improves soil microbial activity due to short-, medium-, and long-chain carbon content while promoting very efficient plant response due to chelation and complexing technology.

#### **Key benefits:**

Reduces environmental oxidative stress under conditions of temperature extremes or water stress

Improved soil nutrient availability

Highly efficient phosphorus, potassium, and soluble carbon source

For more information, visit: [www.redoxchem.com](http://www.redoxchem.com).

### **Sod Solutions**

#### ***Amp Agronomy™***

Amp Agronomy™ is a liquid foliar nutritional line featuring Catalyst Technology™ that makes nutrients more plant available for agriculture and the turfgrass industry. Custom solutions are developed for specific crops or applications based on a complete soil analysis. Amp Agronomy's complete line features foliar products that not only boost the strength and health of the plant and soil but are also more environmentally friendly due to ultra-low application rates with as little as one to two quarts per acre. An experienced staff of agronomists, chemists, and consultants make up the Amp Agronomy team. With years of real-world experience, Amp Agronomy's expert team provides solutions to aid in the optimum yield, health, and growth of plants upon application. For more information, visit [ampagronomy.com](http://ampagronomy.com) or call 855-267-0449.

### **TIMAC AGRO USA, Inc.**

#### ***Fertiactyl® GZ***

#### **Features**

The Fertiactyl series are combinations of highly available nutrients, activated humic and fulvic acids and our patented GZA complex. The formulations are designed to provide the plant with a critical nutritional and physiological boost at early growth stages during times of stress. Available in five formulas that provide specific nutrient combinations to match a grower's unique situation.

#### **Key Benefits**

- Activated humic and fulvic acids to improve soil nutrient availability and uptake
- Flexible formulations to provide ideal nutrients for early growth stages
- Formulated with the patented GZA complex

For more information, visit [www.us.timacagro.com](http://www.us.timacagro.com).

### **Vereens Turf**

#### ***Vereens Custom Fertilizers***

Vereens Turf has our own fertilizer, blending plant liquids and granular, where we customize fertilizers to meet customer's needs based on the results of soil and/or water testing. We can impregnate plant protectants and many other inputs on granular fertilizers. For more information visit [www.vereens.com](http://www.vereens.com).

## FORKLIFTS

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### **Hol-Mac Corporation**

#### ***Donkey Forklift***

Donkey Forklift offers a great lineup of products, including the new 2018 introduction of the D14T-5.5. With lifting capacity of 5,500 pounds, a Tier 4 50-HP Kubota Turbo Charged Diesel Engine, and a heavy-duty new frame design, the Donkey D14T-5.5 will be a new animal. Donkey Forklift also offers a gasoline powered forklift, equipped with a 50-horsepower Kubota WG1605 gasoline fuel injected engine that is smooth, quiet and powerful.

The truck-carried Donkey Forklift, reliable, fast and lightweight, features Kubota's Tier 4-compliant, 1305 diesel engine and can be suitable for single axle trucks. All Donkeys come standard with side shift, suspension seat, LED truck lights, strobe light and basic mounting kit. Available with 3,000-, 4,000-, 5,000- and 5,500-lb. lift capacities, lift heights from 67-in. to 144-in., reach lengths from 27-in. to 56-in., and load spacings from 53-in. to 68-in., they fit any situation.

For more information, visit [www.donkeyforklifts.com](http://www.donkeyforklifts.com).

### **Load Lifter Manufacturing**

#### ***Agri-Lifter "E" Series Rough Terrain Forklift***

Load Lifter Manufacturing is proud to offer members of the Turfgrass Producers International the all-new Agri-Lifter "E" series Rough Terrain Forklift. Built with the new 74HP Perkins tier 4 final engine that provides smooth, quiet operation and requires no DEF Fluid. The Agri Lifter also includes a new heavy-duty cooling package with a single pass tube & plate design that includes a heavy-duty transmission cooler, convenient battery location, excellent operator ergonomic controls and seating position. The Agri Lifter continues to offer a high visibility roller mast assembly and a range of carriage options built specifically for the turf industry unlike our competitors. The 2019 Agri-Lifter "E" series will have you moving large turf rolls with the optional Big Roll Carriage as well as standard pallets with ease.

For more information visit <http://load-liftermfg.com/> or call 1-888-AOK LIFT (265-5438).



### **Sales Midwest, Inc.**

#### ***New and Used Forklifts***

Sales Midwest offers an assortment of new and used forklifts. Featured products include Donkey/Burro Truck Carried Forklifts, lightweight truck carried forklifts that are easy to operate and maintain. Various lift capacities are available. In addition, Sales Midwest is now offering full refurbishing done on your Donkey forklifts. Multiple levels of service are available. So, come bring us that diamond in the rough that's been sitting in your tree row for years. We will get it back to its former glory. Call Colton or Tim today at 913-254-9560 for more information and availability on this process. Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.

### **Texas Sod Leasing, LLC**

#### ***Master Craft Industrial Forklifts***

#### ***C-Series CAT Tier 4 Final 95-hp Rough Terrain Lift—70 Percent CAT Components***

Others cut back to lower 74-hp Tier 4. Master Craft increases to 95-hp Tier 4 Final. Master Craft is the only rough terrain mast lift manufacturer using all Caterpillar components, for the most durable, highest quality power trains available; backed by CAT's 2-year/3000-hour power train warranty.

Master Craft, a preferred CAT Allied Vendor for over 13 years, supplies lifts to CAT dealers throughout North and South America. Parts off the shelf and service are available from any CAT dealer world-wide.

Master Craft uses the same components CAT puts in their 416 Loader/Backhoe: CAT Engine, Radiator, Air Filtration System, Transmission, Torque Converter, Drive Axle, Steer Axle, Differential Lock, Tilt Steering Column and Console, Padded CAT Steering Wheel, Push Button 4wd, Shifter, Parking Brake Group, Exhaust, Def Fluid System, plus many others down to the CAT rims.

For more information, call Nathan @ 1-888-246-4268.

Visit: [www.TexasSod.com](http://www.TexasSod.com)

*Hablamos Espanol, preguntar Jesus o Belinda*



## FORKLIFTS

### **Trebro Manufacturing, Inc.**

#### ***Trebro QuadLift***

The weakest link in your turf harvesting system could be the fast and efficient transport of turf from the field to your waiting truck.

With a four-pallet capacity, 180-degree pivoting operator's seat for driving either direction, and a 20 mph transport speed, the Trebro QuadLift is exactly what you need to keep up with the increased production of our one-man harvesting machines. This machine allows you to quickly move big rolls or pallets of turf, which further increases the overall efficiency of your harvesting operation.

For more information, please visit: Please visit: <http://trebro.com/>.



## IRRIGATION

### **R&R Products, Inc.**

#### ***Irrigation Products***

R&R Products supplies thousands of irrigation products including sprinklers, PVC & iron fittings, spray nozzles, hoses and much more. Call 800-528-3446 or visit [www.rrproducts.com](http://www.rrproducts.com).



### **Texas Sod Leasing, LLC**

#### ***Irrigation Products***

Texas Sod supplies thousands of irrigation products including sprinklers, PVC & iron fittings, spray nozzles, hoses and much more.

For more information, call Larry @ 1-888-246-4268.

Visit: [www.TexasSod.com](http://www.TexasSod.com)

*Hablamos Espanol, preguntar Jesus o Belinda*

### **T-L Irrigation Company**

#### ***Irrigation Products***

T-L Irrigation Company is a major manufacturer of center pivot and linear irrigation systems with worldwide distribution. T-L has devoted all expertise toward hydraulic design principles and is the only manufacturer to produce a continuous movement hydraulic powered irrigation system.

Our products are the most work-efficient and cost-efficient machines available today with industry-leading performance and warranty.

For more information, visit [www.tlirr.com](http://www.tlirr.com).

## LEVELERS/GRADERS

### **Redexim North America – BLEC**

#### ***Box Grader BG 1500***

The BLEC Box Graders are a low cost, easy to use landscape tool, ideal for cultivating, leveling and clearing—a must for the contractor. Adjustable ripping tines can be raised clear of the ground or set down to rip up the ground, the 'box' effect will allow soil to be dragged forward filling in any hollows, the reverse blade will backfill or back blade very effectively. An optional wheel kit permits accurate grading. It is also ideal for grading stone/gravel roadways. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).



## LEVELERS/GRADERS

### **Redexim North America – BLEC**

#### ***Box Grader BG 1800***

The BLEC Box Graders are a low cost, easy to use landscape tool, ideal for cultivating, leveling and clearing—a must for the contractor. Adjustable ripping tines can be raised clear of the ground or set down to rip up the ground, the 'box' effect will allow soil to be dragged forward filling in any hollows, the reverse blade will backfill or back blade very effectively. An optional wheel kit permits accurate grading. It is also ideal for grading stone/gravel roadways. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).

### **Redexim North America – BLEC**

#### ***Laser Grader LG 1500TPP***

The compact range of the BLEC Laser Graders are manufactured to a high standard using quality materials for long life, including proportional electric/hydraulic valves for smoothness and accuracy. All models have a 4-wheel frame, with each pair of wheels controlled by their own hydraulic cylinder for dual grading or all four wheels can be locked for single grading. For the accurate leveling of sports areas, ranging from golf tees to sports fields. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).

### **Redexim North America – BLEC**

#### ***Laser Grader LG 1800***

The BLEC Laser Grader is designed for the contractor who demands a quality, strong and accurate grader to cope with demanding conditions. All models are fitted with twin Danfoss proportional valves and a rear 4-wheel frame, with each pair of wheels controlled independently for dual grading. All graders are set up to accept any make of laser equipment and, if required, BLEC can supply a complete package with training. Designed for tractors 50-150-HP with a dual grading system that is standard. The Laser Grader has adjustable heavy-duty ripper tines for loosening compacted ground. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).



### **Redexim North America – BLEC**

#### ***Laser Grader LG 2400***

The BLEC Laser Grader is designed for the contractor who demands a quality, strong and accurate grader to cope with demanding conditions. All models are fitted with twin Danfoss proportional valves and a rear 4-wheel frame, with each pair of wheels controlled independently for dual grading. All graders are set up to accept any make of laser equipment and, if required, BLEC can supply a complete package with training. Designed for tractors 50-150 HP with a dual grading system that is standard. The Laser Grader has adjustable heavy-duty ripper tines for loosening compacted ground. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).

### **STEC Equipment Company**

#### ***Custom Laser Grader***

The STEC Custom Laser Grader comes in as many different setup options as applications that you and your crew can use it for. STEC can customize the box to best suit your needs or it comes standard in 4, 6, 8 & 10-ft., as well as added on ripper tines. The manually controlled proportional valves, which can be set up as either a dual or single grade valve, is a self-contained unit. The laser grader has multiple mounting options and can be pulled by equipment, from a bunker rake to a tractor. The removable drawbar arms make this machine an ease to transport from jobsite to jobsite. For more information, please visit [www.stecequipment.com](http://www.stecequipment.com).





# KWMI



**SLAB HARVESTER**



**SPRIGMASTER II**



**BIG ROLL HARVESTER 3030**



**BIG ROLL TURF INSTALLER**

KWMI Equipment provides innovative and affordable turf equipment for all cycles of turf production-planting, harvesting, and installing

Keeping your equipment on the job is our main priority, so we are fully-stocked with parts and consumables in our warehouse and will ship most items, same day.

**CONTACT: K&W Products**

26264 US HWY 98, Elberta, Alabama 36530

(800) 503-0076

EMAIL: [Sales@KWMIEquipment.com](mailto:Sales@KWMIEquipment.com)

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



## MOWERS

### Brouwer Kesmac

#### ***Kesmac Transportable Fairway Reel Mower with Single Point Adjustment***

This transportable fairway reel mower was designed for the turf industry to accommodate low mowing heights and contoured terrains. The scissor like cut promotes health and growth of the turf. The front anti-scalp roller, single point adjustment, float adjustment, proven mobility, low compaction and reduced stress on turf, make this a mower of choice for all of your grass cutting needs. Low horsepower requirements allow for a lighter tractor and reduced fuel consumption. It is available in 5, 7, 9 or 11 gang models with 5 to 9 bladed reels for mowing 25 ft. (7.6m) widths.



### Brouwer Kesmac

#### ***Kesmac Transportable Reel Mower 3, 5, 7, 9 & 11 Gang (25 ft. wide) With Single-Point Reel Adjustment***

Using only a 45 hp tractor, these units can mow up to 160 acres per day. A key feature is the mower's transportability. Fingertip hydraulic controls allow the operator to lift the mower frames for easy transport with a small transport width. This mower is designed especially for large turf areas. The scissor like cut promotes health and growth of the turf.

##### **Features include:**

- Quality cut from ½ inch to 3 ¼ inches with minimum turf stress
- Single point adjustment for operator convenience
- Follows field contours
- Improved reel design for good clipping flow
- High flotation for reduced compaction
- Outstanding cut in wet or dry conditions
- Heavy bed-knife holder and reel frame
- Available in 5, 6, 7, 8, and 9 bladed reels



### Brouwer Kesmac

#### ***Kesmac 5 Gang Transportable Vertical Mowers***

These mowers control thatch build-up, help prevent diseases, allow increased aeration, improve water penetration, and more effective utilization of fertilizer. For turf producers, add the benefit of up to two weeks earlier spring green-up at the start of the season. The Five gang model cutting width is 135 inches. A 45 hp tractor is required.



### Campey Turf Care Systems

#### ***Campey™ Fleischmann Mower***

The Fleischmann Electric 5 Deck Rotary Mower has 2.20 m (7.22 ft.) cutting decks, with 6 spindles per deck, giving 10 m (32.8 ft.) overall cutting width. Braked steering, rear axle, two point pivoting front mount hitch give high maneuverability and enable cutting speeds up to 20 kph (12.4 mph) to be achieved. For more information, please visit [www.campeyturfcare.com](http://www.campeyturfcare.com).

## MOWERS

### **FireFly Automatrix, Inc.**

#### ***M220 Mower***

The self-propelled M220 mower has been purpose-built for the fastest precision cut on the market. Its front-mounted mowing decks deliver a 22 ft. (6.7 m.) finishing-quality-cut at speeds up to 10 mph. This hybrid diesel/electric mower delivers precisely the right power where it's needed, giving you better fuel efficiency. With its patent-pending Adaptive Speed Control, the M220 monitors deck loads and adjusts speed for optimal mowing performance. Change height on-the-fly while maintaining the precise level of your decks with the patent-pending Digital Height Control. FireFly's proven TurfView Cab provides a climate-controlled view of the mowing decks from edge-to-edge. Easy to maneuver and convenient to tow, the M220 is designed for long life and quick, low maintenance. From your initial purchase through set up, training, and ongoing service, our customer success team is committed to be there for the long haul. Call 801-842-1327 to request a free catalog or email [sales@fireflyequipment.com](mailto:sales@fireflyequipment.com).

### **Progressive Turf Equipment Inc.**

#### ***TDR-26/26G Tri-Deck Roller Mower***

Larger is better! Building upon the success of our TDR-22 and TDR-30 roller mowers, Progressive is pleased to offer a roller mower with a wide productive 25-ft.-8-in. cutting swath per pass! The TDR-26/26G has been "Field Proven" as it has been operating in Europe in turf production applications since the summer of 2017.

The basic design and layout of TDR-26/26G is similar to the TDR-22. With wider wing decks and heavier suspension axels that accommodate the extra-wide low ground pressure tires, the TDR-26/26G is uniquely positioned to offer increased productivity in a value conscious wide-area roller mower.

The TDR-26/26G also has many components that are common to both the TDR-22 and or the TDR-30 roller mowers. Using these common field proven parts means less downtime and more production. The TDR-26/26G is proudly built in North America and is available with either galvanized or painted bolt-on deck shells.



### **Progressive Turf Equipment Inc.**

#### ***High Floatation Tires on Large Roller Mowers***

Progressive Turf Equipment has fitted the TDR-26 and TDR-30 as standard equipment, with an extra-wide high floatation turf tire (33x16 LL-16.1 10pr). It is available as optional equipment on the TDR-22. Ideal in very wet or soft ground locations, the larger contact area means significantly less ground pressure and minimal ground compaction. When the operator raises the decks using the Pro Lift-N-Turn™ system during a turn, the weight of the mower is distributed between the two, extra-wide high floatation transport tires and the tractor.

So not only are the headlands protected from damage caused by sliding rollers that is common with competitive mowers, the standard wide profile tire minimizes the potential for ground compaction as well.

A steel cover on the left wheel prevents clipping build-up in the deep rim.

Producers will equip their tractors with wide turf tires - shouldn't the roller mower be equipped with them too?





## MOWERS

### **Progressive Turf Equipment Inc.**

#### ***TD92 / TD92G Tri-Deck Finishing Mower - The Industry Leader***

Progressive's TD92 tri-deck finishing mower has been long regarded as the benchmark mower in the turfgrass production industry. With a cutting swath of 22-feet and a cut quality that is second to none, the TD92 is the most productive and efficient mowing system available today and offers dependable, long-term cost-effective service that has been proven for 30 years.

Following extensive customer input, the Next Generation TD92 / TD92G has several features that will both further enhance productivity and reduce long term ownership cost. The TD92 / TD92G retains many of the same components and design features that have been field proven since 1989! Proudly built in North America, there are two versions of the Next Generation TD92 available, the TD92G with galvanized bolt-on deck shells or the TD92 with painted, bolt-on deck shells. For more information on all the new features see [www.progressiveturfequip.com/td92\\_ps\\_details.php](http://www.progressiveturfequip.com/td92_ps_details.php).



### **Progressive Turf Equipment Inc.**

#### ***Next Generation PM-36/PM-36G Tri-Deck Finishing Mower***

Since 2001, the Pro-Max 36 mowing system has been the go-to mower for large scale turfgrass producers who demand high productivity and a large cutting swath.

Responding to customer suggestions, several features have been implemented to the 'front half' of the Pro-Max 36 mowing system, the PM-36, that will enhance operation and reduce long term ownership cost. This includes as standard equipment, maintenance free blade spindles and 100-hour greasing interval deck PTO shafts. The Next Generation PM-36 retains many of the same components and design features that have been field proven on the previous PM-36. It also includes several enhanced features that can be found on the industry leading TD92, which forms the back half of this mowing system.

Two versions of the PM-36 are available, the PM-36G with galvanized bolt-on deck shells or the PM-36 with painted, bolt-on deck shells. The PM-36 is proudly built in North America.



### **Progressive Turf Equipment Inc.**

#### ***TDR-30G Finishing Roller Mower***

Since 2013, the TDR-30G roller mower has exceeded all sales targets! Five contour following decks, a 29-ft.-6-in. cut width, ½-in. to 3½-in cut height and built in North America are the key aspects that have been welcomed by turfgrass producers. Even with this success, Progressive hasn't stopped the development of the TDR-30G and is pleased to include standard features that increase production and make the TDR-30G even easier to operate.

Without disconnecting the PTO and using only a single hydraulic function, the Operator can activate the exclusive mechanical Pro Lift-N-Turn™ system which lifts the decks just clear of the turf. Ideal when turning at the headlands, it prevents the rollers sliding and damaging the turf. Pro Lift-N-Turn™ is a simple mechanical system and does not require wires, sensors or control valves.

The TDR-30G: an example of Progressive's dedication to turfgrass producers and why Progressive is *The Better Built Choice*.



## MOWERS

### **Progressive Turf Equipment, Inc.**

#### ***TDR-22/TDR-22G – Roller Finishing Mower***

The TDR-22/TDR-22G is the most widely used 22-ft. roller mower in North America. It's available with bolt-on decks in either painted or the popular galvanized finish. Featuring enhanced fore/aft deck balance, beneficial in soft conditions, a cut height as low as ½-in. and an optional wide profile tire with 70 percent greater contact area to minimize ground pressure and soil compaction. Designed with maintenance free blade spindles and 100-hour PTO shaft greasing intervals for reduced maintenance. Equipped with the industry exclusive Pro Lift-N-Turn™ makes turning easier on the turf. Lifting all decks during a turn prevents crop damage from the rollers sliding across the turf, leaving more turf that can be harvested from the headlands. Automatic mechanical stops prevent the decks from raising too far. Pro Lift-N-Turn™ has eliminated the issues competitive models face when turning on the headlands and it's all done without needing wires, sensors or control valves.



### **Progressive Turf Equipment, Inc.**

#### ***HEX Shaft Rollers***

All Progressive roller mowers are equipped with hardened, HEX shaped shafts at the ends of each deck roller, as standard equipment. Field proven to increase component life and reduce routine maintenance, the HEX design provides positive bearing engagement and ensures that as the mower moves, the supporting bearings always turn. This eliminates any chance of a round roller-end shaft turning inside the bearing leading to pre-mature failure of both the bearing and shaft. No specialized collars or sleeves to worry about as you would with less robust designs. The heavy wall, full length steel rollers remain unchanged, including the rounded and internally reinforced anti-scuff ends. Like many of the other new features Progressive has introduced, older mowers can be updated to the new hardened HEX roller shaft design and HEX bearing without replacing the entire roller or side channels. Now that's Progressive!



### **Progressive Turf Equipment, Inc.**

#### ***Pro Lift-N-Turn™***

The productivity advantage of Progressive's exclusive Pro Lift-N-Turn™ is standard equipment on all Progressive 15.5, 22, 26 and 30-foot roller mowers. Using only one hydraulic function, operators have the ability to slightly raise the decks off the ground temporarily with the PTO still engaged. This makes turning easier on the turf as the weight of the mower is distributed between the tractor and the high floatation tires. It also reduces the number of PTO engagement cycles required. Lifting all of the decks prevents crop damage from the rollers sliding across the turf during a turn - leaving more headland turf that can be harvested. Automatic mechanical stops prevent each deck from raising too far (See arrow). No vulnerable cylinder position sensors, wires or electrical solenoid valves are needed as with other systems. Pro Lift-N-Turn™ has simply eliminated the issues competitive roller mowers face when turning on the headlands.



### **Progressive Turf Equipment, Inc.**

#### ***Reduced Maintenance***

Progressive designs our mowers as if we were maintaining the mower ourselves, so eliminating daily service requirements was an important design goal. For several years all of Progressive's mowers have been equipped with field proven, maintenance free sealed bearings in the blade spindles as standard equipment. This means you don't have to worry about a missed service. Adding in the extended 100-hour PTO shaft greasing intervals, and fewer grease fittings overall all mean more time cutting – less time maintaining; and more \$\$ in your pocket!

## MOWERS

### **R&R Products, Inc.**

#### ***Power Lift series Mowers***

The R&R Products Power Lift series of ground drive reel mowers is an economical and reliable mowing solution for anyone needing a quality cut on large turf areas. It is available in 5 or 7 gang configurations for a 133-in. or 180-in. cutting width. Call 800-528-3446 or email [sales@rrproducts.com](mailto:sales@rrproducts.com).



### **Redexim North America**

#### ***Red Diamond Roller Mower***

The all new Red Diamond Roller Mower is a heavily built PTO mower that is supported by front and rear rollers to minimize scalping even at very low heights of cut. This tough, low maintenance roller mower creates beautiful striping on large turf surfaces. The adjustable height and high blade speeds of the Red Diamond Roller Mower create a precise and clean cut every time. This heavy duty and efficient mower is perfect for large commercial jobs. For more information, visit <http://redexim.com>.



### **Sales Midwest, Inc.**

#### ***New and Used Mowers***

Sales Midwest offers an assortment of new and used rotary and roller finish Progressive mowers in various styles and sizes. Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.

### **Texas Sod Leasing, LLC**

#### ***New and Used Mowers***

Texas Sod keeps an inventory of new and used rotary and reel mowers in stock in various models.

Territory restrictions apply to new Progressive and Kesmac equipment.

For more information, call Nathan @ 1-888-246-4268

Visit: [www.TexasSod.com](http://www.TexasSod.com)

*Hablamos Espanol, preguntar Jesus o Belinda*

### **TRILO**

#### ***TRILO R10 Reel Mower***

The TRILO wide R10 reel mower delivers perfect cuts at a high speed and a very low tractor power. It combines simple propulsion with excellent mowing reels. Because of the ingenious folding system, using only a few cylinders, it is very easy to switch between the 10 meters working width and the compact transport position. Due to the low weight of the R10 mower in combination with a small tractor, the stress on the sod will be minimized and low fuel consumption is ensured.

- Save up to 40 percent fuel cost
- Capacity up to 80 ha per day
- Only 55-hp required
- Light weight machine
- Easy height adjustment
- Full floating cutting units
- Low maintenance cost
- Wide tires

For more information visit: [www.trilo.com](http://www.trilo.com).





## MOWERS

### Trimax Mowing Systems

#### ***Vulcan (24-ft. Cut Width)***

Meet the highest return on investment maintenance mower on the market, produced by global leaders in cut technology. With 31% less PTO power requirements than comparable castor wheel mowers, the Vulcan has been tested and proven to use 13% less fuel than the previous market leading brand. The Vulcan is incredibly robust, suitable for full-time heavy-duty commercial use.

Features include:

- Standard galvanized decks protect against corrosion
- Automatic belt tensioners
- 15-minute height adjustment ranging from ¾-in. – 5-in.
- Zero-turn ability
- Compacts to 8-ft. wide for road transportation
- Puncture proof tires that will not absorb water
- Four spindles per deck resulting in more cuts per yard and a finer clip
- SteadFast™ sealed spindles which eliminate regular greasing
- Stand-on covers and easy-clean wash openings
- Jack shaft PTO
- 3-year industry leading warranty

Learn more about the Trimax Vulcan or request a demo at [www.trimaxmowers.com/vulcan](http://www.trimaxmowers.com/vulcan)



### Trimax Mowing Systems

#### ***Pegasus S4 (16', 20' & 24' Cut Widths)***

When your customers require the finest turfgrass possible, the Pegasus S4 is your answer. Developed for wide-area mowing on sports fields and sod farms, Pegasus S4 reduces down time and requires minimal maintenance. The Pegasus S4 is engineered to provide superior cut quality and includes the following features:

- Clearly displayed cut height indicators allow for simple height adjustments
- Galvanized decks to protect against corrosion
- SteadFast™ sealed spindles which eliminate regular greasing
- LazerBladez™ fling-tip blades
- Full width rollers for anti-scalp protection
- LocTEK stubless roller system
- 3-year industry leading warranty

Available upgrades:

- Turf tires
- QuikLift to slightly raise the decks without disengaging the PTO
- Quattro blade system for a finer cut on warm season grasses
- Individual lift system allowing independent deck lifting
- Remote unlock
- & more!

Learn more about the Trimax Pegasus S4 or request a demo at [www.trimaxmowers.com/pegasus](http://www.trimaxmowers.com/pegasus)



## MOWERS

### Trimax Mowing Systems

#### **ProCut S4 (5'8", 6'9, 7'7" & 9'6" Cut Widths)**

Used on high profile turf around the world, the ProCut is the go-to small utility mower for sod farms and sports fields. With over 35 years of research and development, the ProCut S4 is reliable, operates in wet and dry conditions, and has an outstanding striping ability. The ProCut is equipped with a unique blade system resulting in a superior cut and finish at high ground speeds.

Standard features include:

- LocTEK stubless roller system
- Dual wash flaps
- Stand on Galvanized covers
- LazerBladez™ fling-tip blades
- RapidSet™ easy height adjustment system
- 3-year industry leading warranty

Available upgrades:

- Quattro blade system doubles the blade quantity creating a greater vacuum and a finer cut
- Front mount
- Galvanized
- Roller scrapers to reduce tension
- Anti-bounce skids
- Single Roller for long grass applications

Learn more about the ProCut S4 or request a demo at [www.trimaxmowers.com/procut](http://www.trimaxmowers.com/procut)

### Trimax Mowing Systems

#### **X-WAM (34' Cut Width)**

Speed, reliability and convenience all in one mower. The X-WAM can cut up to 33 acres per hour and perform zero-turns without raising any mower decks.

The X-WAM consists of a 2-deck attachment unit joined with a Trimax Pegasus for a total of 5 decks and a massive 34' cut width allowing unbeatable contour and clipping spread. All decks can be folded and retracted to 8 ¼' for road transport, and the cut height range is from ¼-4 1/3 inches.

Our robust design ensures minimum downtime and increased productivity. Equipped with steadfast spindles to remove the regular task of greasing, you'll see an increase in efficiency and a decrease in maintenance costs. The X-WAM is fitted with LazerBladez™ to produce a clean finish while moving at high ground speeds, resulting in a cut with a cylinder-like finish.

Learn more about the X-WAM or request a demo at [www.trimaxmowers.com/x-wam](http://www.trimaxmowers.com/x-wam)



## Just Ask the Sod Farmer that Grows Black Beauty®.

Korby Sod in Wellington, Colorado grows Black Beauty because water is so precious and great looking turf is demanded by Korby customers!

Steve Korby of Korby Sod has been growing Black Beauty Sod for five years. Colorado has an arid climate with temperature extremes. Steve needs a grass which will perform for him consistently, look good on his customer's lawns, even when customers don't do much to help their newly sodded lawns thrive.

Steve has succeeded with Black Beauty Sod because of its' very deep roots and waxy cuticle coating, that preserves moisture in the grass blades.



Simon Hilarides: 732-804-1743 / [shilarides@jonathangreen.com](mailto:shilarides@jonathangreen.com) • Barry Green II: 908-217-0818 / 800-526-2303 x202 / [bgreenii@jonathangreen.com](mailto:bgreenii@jonathangreen.com)

## MOWERS

### Trimax Mowing Systems

#### ***Snake S2 (10'7" & 13'1" Cut Widths)***

Used on some of the most prestigious golf courses around the world, the Snake provides a world class cut quality and outstanding articulation capabilities. Designed specifically for sports turf and golf courses, the snake is built for agility and ease of use.

The cutting system has been studied by the Sports Turf Institute of New Zealand and declared to produce a cut of equal quality to cylinder mowers, yet with the versatility and reliability of a rotary design.

The Snake S2 is suitable for compact tractors 35hp and above and includes the following features:

- QuikLift to slightly raise the decks without disengaging the PTO
- Automatic belt tensioners
- Zero turn
- LazerBladez™ fling-tip blades
- RapidSet™ easy height adjustment system
- LocTEK stubless roller system
- SteadFast™ sealed spindles
- 3-year industry leading warranty

Learn more about the Snake S2 or request a demo at [www.trimaxmowers.com/snake](http://www.trimaxmowers.com/snake)

### Trimax Mowing Systems

#### ***Warlord S3 (5'9", 6'8" & 7'8" Cut Widths)***

Designed for tree and turf farms, the Warlord S3 excels in mulching turf off cuts and trimming turf ribbons. With the ability to shred branches up to 3 inches in diameter and fitted with unique features such as a replaceable internal liner, pruning guide, and an adjustable rear flap for easy servicing, the Warlord is a serious commercial flail mower.

The Warlord features a hydraulic side shift allowing the mower to be quickly offset left or right, up to 20 inches along with heavy duty skids for the toughest environments. Taca coated flails add extra life to the blades, perfect for hard ground conditions and tuff scrap and ribbon removal. The Warlord S3 is suitable for tractors 45hp and above and comes with a 3-year warranty – the longest warranty on the market!

Learn more about the Warlord S3 or request a demo at [www.trimaxmowers.com/warlord](http://www.trimaxmowers.com/warlord).

### Nannings van Vuuren Sales

#### ***Eco Clipper Mowing System***

The Eco Clipper Mowing System is designed for the regular maintenance of large areas of cultivated turfgrass, such as turfgrass farms and sporting grounds, and provides improved efficiency, easy maintenance and low cost. It is an alternative for cylinder mowing that approximates the finishing quality of a well-set-up and well-operated cylinder mower—for considerably less costs.

The base of the mowing system is a 102-cm (40.16-in.) wide mowing module with 3 rotary blades. The deck modules can be linked together in a larger, but flexible, contour-following deck. Eco Clipper offers the possibilities for cutting widths from 2.07-m (6.79-ft.) up to 6.15-m (20.8-ft.) in the front. Different combinations of front mowers and rear mowers offer the possibilities of a total working width of 8-m (26.25-ft.) up to 14-m (45.93-ft.). Towed mowers are available starting with a mowing width of 8-m up to 14-m. For more information visit: [www.nannings-turftick.com](http://www.nannings-turftick.com).





## MOWERS

### Turf Tick Products

#### **Turf Tick Reel Gang Mowers**

The pulled type Turf Tick mower means more production per hour; its 50-foot construction cuts up to 250 acres a day with a 42-hp tractor. The mowers are durable, with heavy duty reels to ensure dependability year after year. The unique construction allows weight distribution over the entire area to reduce turf compaction and decrease the possibility of ruts in damp ground. The mowers are easy to maneuver with a zero turning radius and a pivoting frame. Floating mowers adjust to match uneven terrain. The positive belt lock system will not disengage or slip even over rugged ground or under heavy mowing conditions. Turf Tick mowers are available in widths of 10 to 50 ft., with 6- or 10-bladed hydraulically-lifted 9-inch reels. Hydraulic back-wheel-steering is standard for models 4017 and 5021. Transported lengthwise, the mower will be turned 90 degrees. For more information, visit [www.nannings-turftick.com](http://www.nannings-turftick.com).



### Van de Sluis / Copra sàrl / Vmow sàrl

#### **Vmow**

We are the inventors and constructors of our Vmow mowers; we built our first prototype in 2012. The hydraulically-driven Mowers are equipped with 15 or 23 Ransomes/Jacobsen Sport Cutter Units, lined up in V-form. The Vmow 15 has a working width of 34.45 feet (10.5 m). The Vmow 23 has a working width of 52.49 feet (16 m). Our mowers, sold all over the world, have the following features:

- Best visibility
- A low power request
- Perfect spreading of grass
- Ground pressure adjustable from the tractor

For more information, please see: [www.vmow.lu](http://www.vmow.lu).

## NETTING

### Magnum

#### **Magnum Big Roll Net**

Magnum's strong extruded big roll net is made from naturally degrading plastic with no toxic additives. Choose from the following options:

- 23-, 29-, 40- and 46-in. widths
- Brown for low visibility or standard clear
- Standard degrading plastic or Ultra Sensitive netting (additional fee for protective packaging)

For more information, visit [www.magnumenp.com](http://www.magnumenp.com).



### Magnum

#### **Magnum Field Net**

Magnum Field Net helps get turf ready quickly for harvest after planting. The strong extruded field net will not lose strength during the turf growing period. The Magnum Field Net features 20 percent more netting per roll and six-inch plastic cores that can be cut up for big roll tubes. For more information, visit [www.magnumenp.com](http://www.magnumenp.com).



## NETTING

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### **Sales Midwest, Inc.**

#### ***Netting and Sod Wrap***

Sales Midwest offers various sizes of degradable field netting and sod wrap.

Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.

### **SWM International**

#### ***Netting***

Schweitzer-Mauduit International (SWM) is a product engineering and manufacturing company that develops paper, film, netting and nonwovens for a wide range of innovative products and applications. SWM manufactures turf netting allowing growers to maximize growth, increase their yields and protect their crops against damage during transportation and weather events—all with less waste and labor. For years, turf producers have relied on SWM SodNet® for turfgrass reinforcement. SodNet® is designed to help grass seedlings germinate and grow in a uniformly strong structure.

For more information, visit: [www.swmintl.com](http://www.swmintl.com).

### **TAMANET (USA)**

#### ***Degradable Sod Net & Sod Wrap***

TAMANET markets degradable sod net and sod wrap. The net is available in 17- and 20-ft. lengths while the wrap is available in 23-, 29-, 40-, and 46-in. widths.

For more information, visit [www.tamanetusa.com](http://www.tamanetusa.com).

### **TAMANET (USA)**

#### ***Ecocycle***

TAMANET is the exclusive distributor of Ecocycle™, turf netting with accelerated degradation. Netting made from Conwed's Ecocycle is programmed to degrade quickly below ground when no longer needed. Turf growers and consumers will benefit from accelerated degradation which minimizes entanglements in turf maintenance equipment and trip hazards in heavily worn areas. Conwed netting is made in the U.S. and is available for use on all big roll harvesters and field net setters. For more information, visit [www.tamanetusa.com](http://www.tamanetusa.com).

### **TAMANET (USA)**

#### ***TAMA Big Roll Netting***

TAMA Wrap for Big Rolls supports the sod and keeps it as a perfect roll from harvest to laying. Available in 40-inch widths, it keeps the sod secured the full width of the roll, allowing safe moving in the field, safe loading and transportation, and safe unloading.

TAMA Big Roll Netting's flexible nature makes it easy to handle and very easy on the operator's hands. It eliminates the use of sharp and costly metal staples, which also lowers the risk of flat tires.

The unique production and knitted net features allow a small roll diameter and a 13,200-ft. roll length which means fewer roll changes during harvest. A red color indicator shows when the roll of netting is about to end. TAMA Big Roll Netting fits most harvesters.

For more information, see: <http://www.tamanetusa.com/category/turf-products/big-roll-netting/>.



## NETTING

### **TAMANET (USA) Inc.**

#### ***Extruded Field Net***

TAMA Extruded Turf Reinforcement Net can be used in all grass types to hold together young rooting sod. The net allows the root system to intertwine, giving it great stability, which allows the farmer to harvest the sod with confidence. It also allows the farmer to turn over fields much quicker, providing greater productivity and profit.

The Extruded Turf Reinforcement Net is very strong in both directions, yet easy to cut. Available as both Standard and Heavy Duty, it can be installed with an installer or manually (the traditional way). The Extruded Turf Reinforcement Net comes in both 17-ft. and 20-ft widths. New Degradable Extruded Netting is now available.

TAMA Extruded Turf Reinforcement Net is available from regional warehouses across the US, one of TAMANET's great services.

For details, see: <http://www.tamanetusa.com/turf-products/turf-reinforcement-extruded-net/>.



### **TAMANET (USA) Inc.**

#### ***TAMA Knitted Reinforcement Net***

TAMA Knitted Reinforcement Net can be used in all grass types to allow the root system to intertwine, giving it great stability. It allows the farmer to turn over fields much quicker, providing greater productivity and profit.

The unique, knitted net is more flexible, therefore it sits tighter on the ground, better adjusts to the ground's contours, and is easier to handle and to use. All that, combined with TAMA net's triangular shaped holes, makes it less likely to suffer from the "tenting-effect" of netting lifted by the growing grass. The brown color blends with the roots and soil. TAMA Knitted Reinforcement Net is produced whole, maintaining the entire 17-ft. (5.30-meter) width. The steel core is not influenced by moisture and will not bend, and its 6-inch inner diameter makes lifting by forklift easier. It is suitable for every type net setter.

For more information, see: <http://www.tamanetusa.com/turf-products/turf-reinforcement-knitted-net/>.



### **TAMANET (USA)**

#### ***FlexNet® Pallet Wrap Netting***

FlexNet®, the genuine stretch pallet wrap netting, is the only net with "Built-In Memory," which enables the load to be wrapped with little or no overlap (0-10 percent.) That means savings over other less efficient wrapping methods.

FlexNet for Turf grips every corner and curve and, due to its unique memory, keeps the load stable and secure throughout its journey, no matter how many twists and turns the road presents.

FlexNet allows nearly 100 percent free-flow air circulation which eliminates condensation.

FlexNet is uniquely suited to manual application, eliminating the need for physical strength to achieve the required tension. When wrapped over the top of the load, it supplies the third dimension of stability, pressing down on the top layer of the load, ensuring added security to your valuable sod.

Highly-elastic FlexNet Classic stretches at least 30 percent for better grip and many more wrapped loads per roll.

See: <http://www.tamanetusa.com/turf-products/flexnet-for-turf/>



### **Texas Sod Leasing, LLC**

#### ***Netting and Sod Wrap***

Texas Sod has you covered on all of your netting and wrap needs. Special pricing on pallet or 5-pallet (or larger) orders. For more information, call Nathan @ 1-888-246-4268

Visit: [www.TexasSod.com](http://www.TexasSod.com)

*Hablamos Espanol, preguntar Jesus o Belinda*





**GKB KIOTI ROTADAIRON STEC TRILO VGR**



**SPRIG DIGGING & FRAISE MOWING**



## NETTING INSTALLERS

### Magnum

#### **BN 1720 Field Net Setter**

The BN-1720 is a field net setter loaded with an automatic stacker. This machine has hydraulic loading of the roll of net, a hitch for easy transportation between farms, and adjustable depth control. No more labor intensive field net installation. Depending on soil conditions, now install 4-10 acres of field net per hour, cutting down time and labor costs. For more information, visit [www.magnumenp.com](http://www.magnumenp.com).



### Magnum

#### **Magnum SAS 300 Field Net Staker**

Make staking field net quick and easy with the Magnum SAS 300. Eliminate the labor and strain of staking by hand. The SAS 300 can be used as a 3-point behind a tractor or pull behind a 4-wheeler or golf cart by using the hitch. Using Magnum T Stakes to secure the field net, control the depth and fire the stake from your seat. The counter can be set to stake at different lengths and the engine and compressor makes this unit self-sufficient. For more information, visit [www.magnumenp.com](http://www.magnumenp.com).



### Sales Midwest, Inc.

#### **Used Netting Installers**

Various used netting installers are available.

Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.

## PALLET WRAPPERS

### Nannings van Vuuren Sales

#### **Pallet Wrapper PW 145**

Recently developed, the Nannings van Vuuren pallet wrapper, model PW 145, gives a high quality, stable wrapped pallet of turf. The wrapper works equally well with plastic film or netting. It is controlled from the cab. Due to the compact build of the pallet wrapper you can load a pallet of turf directly in the truck, wrapping during driving. The wrapper will be delivered custom made to mount directly on a forklift or loader (joystick and hydraulic hoses included).

Wrap pallet size: 32-in. x 48-in. (0.80m x 1.20m), 40-in x 48-in. (1.00m x 1.20m), 48-in. x 48-in. (1.20m x 1.20m). For more information visit [www.turftick.com](http://www.turftick.com) or [www.nannings-turftick.com](http://www.nannings-turftick.com).





## PARTS & SUPPLIES

### **Brouwer Kesmac**

#### ***Brouwer Kesmac Customer Care***

Brouwer Kesmac has built its name on Customer Care. Our parts department, service team and factory technicians, in conjunction with our dealers, provide prompt after sales service, support and training. We have added technology to improve service. Our NEW state of the art Brouwer Telematics for Automatic Harvesters allow our technicians to perform remote diagnostics, updates, adjustments and monitoring utilizing GMS/GPS communication without travelling to your farm. Quality original parts, matched with Brouwer Kesmac Customer Care, ensure that customers globally can have the correct parts, technical support and quick response necessary to maximize equipment efficiency and reliability.

Contact Brouwer Kesmac for more information at 1-888-341-5113 or visit us on the web at [www.brouwerkesmac.com](http://www.brouwerkesmac.com).

### **Brouwer Kesmac**

#### ***Brouwer Kesmac Global OEM***

#### ***Replacement Parts***

Brouwer Kesmac offers, through a growing network of global dealers, OEM (original equipment manufacturer) parts worldwide for all our equipment.



- Genuine original parts ensure long life and low overall replacement costs
- Free phone service calls with our experienced service team to reduce downtime
- The industry's largest dealer network
- Quick response and worldwide parts shipping from our global network of dealers and depots
- Competitive pricing
- Ensure quality, fit and warranty

#### **Brouwer Kesmac original engineered parts include:**

- Hydraulic components including: pumps, motors, cylinders, valves and filters
- Upgrade and update kits
- Bearings, bushings and belts
- Cutter head parts
- Electrical components including: sensors, cables and repair components
- Conveyor and pick-up head components
- Heavy Duty Conveyor mats
- Cutter blades (including the Brouwer V blade)
- Mower reels / bed knives

It pays to use the right parts. Contact Brouwer Kesmac for more information at 1-888-341-5113 or visit us on our NEW website at [www.brouwerkesmac.com](http://www.brouwerkesmac.com).

### **FireFly Automatrix, Inc.**

#### ***Replacement Parts***

FireFly has been driving innovation in harvester parts for ten years. Our **Part Source Catalog** offers an expanding selection of parts for all brands of harvesters, now including high quality blades. We manufacture most of our own parts in-house and keep a fully stocked parts warehouse. That means we will respond quickly to your needs with high quality parts at fair pricing. Once you experience our value, improved designs, and availability, we are confident FireFly will become your first and last source for harvester parts.

Call 801-698-5128 to request a free catalog or drop us an email at [parts@fireflyequipment.com](mailto:parts@fireflyequipment.com)



## PARTS & SUPPLIES

### KWMI PARTS



As the OEM for a wide range of turf installing and harvesting equipment, we carry a full line of replacement parts and consumables to keep your machines running like new. We provide quality parts, friendly service, live tech support and same-day shipping on most parts!

Our conveyor mats fit all KWMI Sod Harvesters and many other slab and big roll harvesters on the market. We carry all parts needed for replacing an old mat or keeping your current one running smoothly.

KWMI is also the OEM of the most durable, long-lasting sod rakes in the industry. Manufactured specifically for turf installation, the rake head is designed for easy penetration and release of the sod. These rakes are lightweight at approximately 5-lbs., but much sturdier than your average garden rake due to their fiberglass handle and tempered steel head.

### Magnum

#### **Harvesting Parts & Cutter Blades**

Magnum continues to expand in the parts business. Benefits include same-day shipping, grouping with net or tubes, and central U.S. warehousing.

Magnum has become one of the largest resellers of R&R blades for all types of harvesters. Producers also are encouraged to contact Magnum for other applications (e.g., erosion control, hay bale wrap, bird control). For more information, visit [www.magnumenp.com](http://www.magnumenp.com).

### R&R Products, Inc.

#### **Replacement Parts**

R&R Products manufactures thousands of replacement parts ranging from sod cutter blades (to fit Brouwer, Bucyrus, Kesmac, Trebro, Ryan, Poyntz, Texas Sod Harvesting, Princeton and Nunes) to reel, rotary and flail mower parts (to fit Jacobsen, Toro, Kesmac, John Deere, Ransomes, Roseman, Jerry Clipper, Mott & Ford) to aerating blades (to fit Ryan, Rogers, Jacobsen, Toro, John Deere and Hahn Westpoint).

Call 800-528-3446 or visit [www.rrproducts.com](http://www.rrproducts.com).



### Sales Midwest, Inc.

#### **Parts & Supplies**

Sales Midwest carries an assortment of parts for a broad range of companies including: Kesmac/Brouwer, Progressive, Donkey Forklift, WMI/K&W, Atmax Traxmax, First Products, and Master Craft.

Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.

### Texas Sod Leasing, LLC

#### **Parts Selection**

Texas Sod carries parts for most sod equipment, including: Texas Sod Harvesters (TSH), WMI harvesters, Bucyrus/Magnum equipment, Master Craft Forklifts, Texas Lifts, Progressive Equipment, and roller mowers. Order by part number or description.

Same day shipping with overnight shipping available.

For more information, call Larry @ 1-888-246-4268

Visit: [www.TexasSod.com](http://www.TexasSod.com)

*Hablamos Espanol, preguntar Jesus o Belinda*

## PARTS & SUPPLIES

### **Trebro Manufacturing, Inc.**

#### ***The Trebro Value Line***

Trebro offers a complete range of original manufactured parts for their full line of machinery through locations in Billings, Montana; Seaforth, Ontario, Canada; Freemans Reach, NSW Australia; York, England and Amersfoort, the Netherlands. Trebro provides fast reliable service from each of these fully stocked warehouses. The Trebro Value Line of original manufactured parts has been introduced to supply Trebro customers top quality parts at highly competitive prices. Trebro notes taking care of customers is the company's highest priority and they dedicate much time and many resources to customer service. As operators of their own family turf farm, the Trebro team understands that downtime is very costly so they focus on helping keep your equipment up and running. That includes providing free over-the-phone service calls 24 hours a day, 7 days a week. For more information, please go to <http://trebro.com/>.



### **Trebro Manufacturing, Inc.**

#### ***One Inch Pillow Block Bearing***

Trebro offers a full range of premium quality bearings at competitive prices. Keep your machine running smoothly and minimize down time by using the best original parts supplied exclusively by Trebro. For more information, please go to <http://trebro.com/>.



### **Trebro Manufacturing, Inc.**

#### ***200 Series OHLA with tapered shaft***

Superior quality OEM part ensures long life and dependable performance. For more information, please go to <http://trebro.com/>.



### **Trebro Manufacturing, Inc.**

#### ***Actuator Linear Six-Inch Assembly***

Trebro also offers hydraulic depth control conversion kits. "The new hydraulic Depth Control Kit we recently installed on our Trebro AutoStack is fantastic. There are not as many pins and bushings reducing potential wear areas. In the long run, it will be far less expensive to maintain. I would highly recommend it to anyone who has not made the switch." Tony Smith, Huggett Sod Farms Inc.

For more information, please go to <http://trebro.com/>.



### **Trebro Manufacturing, Inc.**

#### ***Roll Up Arms Long Weldment***

The broad selection of Original Trebro Manufactured components provide for peak performance and durability. Trebro places the highest value on customer satisfaction.

For more information, please go to <http://trebro.com/>.



## PARTS & SUPPLIES

### **Trebro Manufacturing, Inc.**

#### ***Sod Flipper Weldment***

The Sod Flipper Weldment is designed for reliable performance and longevity. All Trebro machines are supported by free over-the-phone service calls 24 hours a day 7 days a week.

For more information, please go to <http://trebro.com/>.



### **Trebro Manufacturing, Inc.**

#### ***Sensor Steering 24 Volt with 36-inch Cable***

Trebro's offers a complete range of electronic parts at the industry's best prices with fast on-time delivery from one of our fully stocked warehouses in five locations around the world.

For more information, please go to <http://trebro.com/>.



### **Trebro Manufacturing, Inc.**

#### ***Encoder with Plug***

To ensure peak performance and efficiency always choose a Trebro Original Supplied part. Trebro has 19 years of knowledge and expertise in manufacturing automatic turf harvesters. We know what parts are the best for your machine to keep it in top operating condition.

For more information, please go to <http://trebro.com/>.



### **Trebro Manufacturing, Inc.**

#### ***Hydraulic Motor S 22.5 CID with Rotated Flange***

Trebro makes it easier for turf producers to succeed with our innovative, hardworking harvesters that reduce labor costs. Taking care of our customers is the highest priority at Trebro Manufacturing. We dedicate a lot of time and resources to customer service.

For more information, please go to <http://trebro.com/>.



### **Trebro Manufacturing, Inc.**

#### ***Powered Roll Up Flap Control System***

The Powered Roll Up, Automatic Flap Control System conversion kits are available for the Trebro HarveStacks and SC 2010 Roll Harvesters. The system is designed to automatically place the roll flap in the same position every time for neat stable stacks of turf. For more information, please go to <http://trebro.com/>.



### **Trebro Manufacturing, Inc.**

#### ***Trebro OEM Parts and Responsive After the Sale Service***

"Our new Trebro AutoStack II is a great machine that is backed up with great service and support. The Trebro service team has always gone above and beyond the call of duty. If we have a problem they are on it right away and are quick to get it resolved.

When the owner of Trebro pays a visit to your farm, you know they are serious about building a quality product and standing behind it as well." Mike Braddell, Lakeside Sod Supply, Clarence Centre, New York.

For more information, please go to <http://trebro.com/>.



# High quality, low input turf varieties.



**STANDARD VARIETY**

**A-LIST APPROVED VARIETY**

*Use 40% less water without sacrificing turf quality with A-LIST approved varieties.*

The A-LIST is an independent, non-profit, industry initiative, fostering development of sustainable turfgrass varieties and related products that perform their function with less maintenance inputs, thus benefiting the environment. A-LIST monitors a voluntary evaluation program including metrics like water conservation, reduced fertility and traffic, heat, and drought stress tolerances, all with no fungicide or insecticide applications.

Products that meet the acceptance criteria can utilize the A-LIST Approved symbol in their marketing and receive the A-LIST Approved tag for use in packaging.

To become an A-LIST Approved Variety, a variety must have demonstrated superior performance in A-LIST trials as defined by:

- The top LSD group for drought tolerance as measured by percent green cover for each of two years in at least two locations.
- Acceptable or better turf quality for each of the two years in at least two locations.
- Have been entered into an NTEP trial for the species. For new cultivars that have met the approval standards for performance in A-LIST trials, final approval will be withheld until the cultivar(s) have been entered into an NTEP trial.

**SUSTAINABLE  
VARIETY**



**REDUCED  
INPUTS**



**DECREASED  
WATER USE**



**HEAT  
TOLERANCE**



**FOR APPROVED VARIETIES VISIT [WWW.A-LISTTURF.ORG](http://WWW.A-LISTTURF.ORG)**

## Members



## PLANT PROTECTANTS

### AQUA-AID Solutions

#### AQUA-AID Solutions Wetting Agents

Optimum plant health is dependent on maintaining uniform soil moisture in the rootzone. Our unique, patented surfactant chemistries put the control of moisture management and plant health in the turf manager's hands. Whether short term or multi-branched long-term activity is desired, select the correct product from the wide variety of chemistries. Blended chemistries are available to keep the surface firm while adequately hydrating the soil profile.

Website: [www.aquaaidolutions.com/moisture-management-solutions](http://www.aquaaidolutions.com/moisture-management-solutions)

### Aqua-Yield

#### NanoPro™

NanoPro® uses Aqua-Yield's® Enhanced NanoShield Delivery™ to capture molecules in liquid solution and delivers them by creating nanocavities in the leaf surface to allow products to readily enter the plant. NanoPro® can be added to any spray mixture to enhance plant uptake of specialty and generic herbicide, fungicide, and pesticide products. This product is field tested, and grower approved to change the way you manage crops and control weeds.

- Faster burn down of weeds
- Higher percentage kill on tough weeds
- Enhances fungicide absorption
- Unique formulation promotes cellular access
- Highly compatible with most products and adjuvants

For more information, visit [www.aquayield.com](http://www.aquayield.com).



### Vereens Turf

#### Plant Protectants

Vereens Turf carries products from multiple plant protectant manufacturers and can impregnate many plant protectants, along with fertilizer additives, on our granular fertilizers. For more information visit [www.vereens.com](http://www.vereens.com).



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[WWW.1STPRODUCTS.COM](http://WWW.1STPRODUCTS.COM)



## ROCK REMOVAL/RAKES

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### **Kassbohrer All Terrain Vehicles, Inc.**

#### **Cherrington Screeners**

The Cherrington cleaning process, with our unique powered sand and soil screening method and design, are the most effective mechanical mobile screeners. They clean by lifting the sand or soil from the surface, screening it through a powered screen, and returning it to the seed bed.

Cherrington screeners lift and carry the surface material over the screen using loading paddles. The Cherrington system powers the sifting screen for effective separation of the debris. The sand or soil is immediately returned to the surface, while the loading paddles carry the debris that is larger than the selected, and easily changeable, screen-hole size, into the hopper.

This screening method will remove rocks, roots and ribbons of unharvested sod – everything bigger than the chosen screen-hole size. Only Cherrington's Screen Clean Method truly removes all the trash and debris and produces a perfect seed bed.

For more information, find us at [www.cherrington.net](http://www.cherrington.net).

### **Redexim North America – BLEC**

#### **Power Box Rake PBR 80**

The BLEC Power Box Rake 80 is a multi-use quick fit attachment to suit the walk behind model. The powerful rotating carbide tooth rotor can penetrate hard ground, producing up to 3 inches of soil pulverizing, leveling and grading. The bi-angling rotor allows stones and debris to be windrowed to the side and, by folding down the side end plates, excess material can be easily collected up into a pile. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).

### **Redexim North America – BLEC**

#### **Power Box Rake PBR 1500H**

The tractor mounted BLEC Power Box Rakes are the perfect landscape construction tool for carrying out cultivating, earth moving, grading and raking. At the heart of the unit is a carbide pointed tooth rotor which contra rotates, pulverizing and separating the debris from the soil, leaving a clean raked finish. The hydraulic bi-angling rotor windrows unwanted stones and debris and, by folding down the side plates, all the raked material can be gathered up. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).

### **Redexim North America – BLEC**

#### **Power Box Rake PBR 1800**

The tractor mounted BLEC Power Box Rakes are the perfect landscape construction tool for carrying out cultivating, earth moving, grading and raking. At the heart of the unit is a carbide pointed tooth rotor which contra rotates, pulverizing and separating the debris from the soil, leaving a clean raked finish. The hydraulic bi-angling rotor windrows unwanted stones and debris and, by folding down the side plates, all the raked material can be gathered up. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).



### **Redexim North America – BLEC**

#### **Power Box Rake PBR 2400**

The tractor mounted BLEC Power Box Rakes are the perfect landscape construction tool for carrying out cultivating, earth moving, grading and raking. At the heart of the unit is a carbide pointed tooth rotor which contra rotates, pulverizing and separating the debris from the soil, leaving a clean raked finish. The hydraulic bi-angling rotor windrows unwanted stones and debris and, by folding down the side plates, all the raked material can be gathered up. An optional laser kit can be fitted on the PBR 2400 for accurate leveling and raking on sports turf areas. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).



## ROLLERS

### Brouwer Kesmac

#### ***Brouwer BTR 30 Walk Behind Turf Roller***

The BTR 30 walk behind Turf Roller is available with a traction or smooth drum with formed edges to prevent turf damage. It comes standard with two plugs for ease of draining or filling with water. A 5.5 hp Honda engine coupled with a hydrostatic drive and fingertip controls allow easy maneuverability even in the tightest areas. The total width is only 36 inches. It is also available with a power unit protection package providing a single lifting point. The heavy duty built BTR 30 Roller comes with a foldable handle for easy transport and storage: a must for landscapers, contractors and rentals. Standard 3/16-inch heavy-duty drum.



### Brouwer Kesmac

#### ***Brouwer TR 224 Ride On Turf Rollers***

##### **Features:**

- Lever assist steering for exceptional maneuverability
- Honda 5.5 hp engine for reliability and economy
- Proven single-lever F-N-R clutchless transmission
- Unique rounded-edge rollers prevent turf damage
- Two fill-drain plugs per roller for convenience
- 24 in. wide rollers for access to narrow paths



### Progressive Turf Equipment Inc.

#### ***Pro-Roll 10 and***

#### ***Pro-Roll 15 Wide Area Contour Rollers***

The Pro-Roll 10 and Pro-Roll 15 are versatile wide-area turf rollers featuring 10-ft.-8-in. or 15-ft. rolling widths. Ideal for flat or contoured turf, they have been shown to aid in reducing disease pressure and permit a reduction in mowing frequency and chemical usage, while still being gentle enough for use on new growth.

The Pro-Roll 10 and Pro-Roll 15 produce consistent compaction, regardless of the terrain profile as each roller is able to independently track changing contours. Solid ballast is easily added to or removed from each roller deck allowing even compaction across all rollers.

The Pro-Roll can make sharp turns without scuffing, all thanks to the four individually mounted transport tires, and Progressive's unique Pro Lift-N-Turn™ system.

Best of all, the Pro-Roll 10 and Pro-Roll 15 can be used with either a compact tractor or a wide range of utility vehicles. Learn more at: [www.progressiveturfequip.com/pro-roll\\_details.php](http://www.progressiveturfequip.com/pro-roll_details.php)



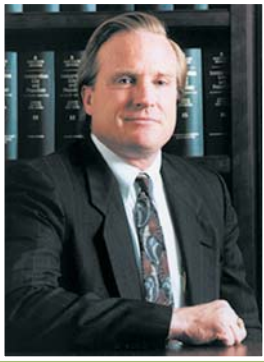
### Sales Midwest, Inc.

#### ***New and Used Rollers***

Sales Midwest offers an assortment of sod rollers. Featured is the Kesmac KTR30 Sod Roller with smooth or heavy duty traction drum and rounded edges. It is gentle on turf and easy to maneuver around tight spaces. The handle folds for easy transport and storage.

Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.

# NEED LABOR?



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—Robert Kershaw, Attorney at Law, The Kershaw Law Firm PC



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We represent ALL of the United States!**

**(512) 940.4282**

**Robert Kershaw, Attorney at Law**

The Kershaw Law Firm PC, 3355 Bee Caves Rd.  
Suite #307, Austin, TX 78746

**E-mail: [robert.kershaw@kershawlaw.com](mailto:robert.kershaw@kershawlaw.com)**



## SEEDERS/PLANTERS

### AQUA-AID Solutions

#### Vredo Seeders

The Vredo Seeders overseeding principle: two discs in the shape of a 'V' make a narrow slit in the turf. The support wheel provides the propulsion of the cam wheel for a perfect dosage. The seed is properly guided between the V-shape of the discs and is then dispensed into the slit at the correct, adjustable depth. The amount of seed dispensed can be infinitely adjusted to within a gram. The overseeder is equipped with skids to preserve the integrity of the existing turf. The compaction roller seals the slit and presses the turf back into place. The seed is well protected in the fertile soil and receives an optimal amount of light, air and heat.

Website: [www.aquaaidolutions.com/cultural-solutions](http://www.aquaaidolutions.com/cultural-solutions)

### Brillion Farm Equipment

#### Till 'N Seed®, Model BPSB-6

Designed and built from input received from customers and producers that desired a simple, reliable, and efficient overseeder, the Brillion Till 'N Seed® can operate under a wide variety of conditions and accurately plant a multitude of seed varieties and seed mixtures. The Till 'N Seed, featuring patented technology, utilizes ground-driven tillage and seed placement rotors that are self-cleaning to allow for operation in high residue conditions. These unique features make the Till 'N Seed the ideal tool for seeding into existing turf, renovating pastures, restoring athletic fields and lawns, and planting food plots. For more information, visit [www.landoll.com](http://www.landoll.com).

### First Products, Inc.

#### SEEDA-vator

- Loosens soil prior to laying sod
- Creates the seedbed for primary seeding
- Prepares the ground for seeding
- Uses a patented vibrating action to loosen and break up the soil in the root zone without destroying the established turf

The SEEDA-vator seeder provides turf professionals with the flexibility of primary seeding or overseeding with the same machine. The patented swivel hitch allows the operator to turn around objects without tearing established turf. The solid vibrating tines fracture and loosen the soil without disrupting the turf, while creating the seedbed. First Products designed the seed cup to enable use of both small and large seed. The ground driven seed box allows for variable ground speed without changing the desired seeding rate. For more information, visit [www.1stproducts.com](http://www.1stproducts.com).



### First Products, Inc.

#### SEEDA-vator with Multi Spike Shaft

First Products designed the SEEDA-vator with the full range of features as listed above, including the Universal Shaft System which allows the operator to change shafts for a variety of seeding jobs. The Multi Spike shaft is an optional shaft that can be changed in the Universal Frame. The Multi Spike shaft is a non-PTO powered shaft. Using its conical shaped tines, it creates more holes per square foot (over 55) than any other Universal Shaft, which provides high speed seeding to get the job done fast. This unit is available in 40-in., 60-in., and 80-in. widths. For more information, visit [www.1stproducts.com](http://www.1stproducts.com).





## SEEDERS/PLANTERS

### First Products, Inc.

#### **SEEDA-vator with Multi Tine Shaft**

First Products designed the SEEDA-vator with the full range of features as listed above, including the Universal Shaft System which allows the operator to change shafts for a variety of seeding jobs. The Multi Tine shaft is an optional shaft that can be changed in the Universal Frame. It uses a vibratory action to create the seedbed, with the 2-in. tines vibrating on a gentler offset of 2 degrees, which makes seeding into netting easier, and without ripping the net. The seeding depth can be controlled off the rear roller. This unit is available in 40-in., 60-in., and 80-in. widths. For more information, visit [www.1stproducts.com](http://www.1stproducts.com).



### Redexim North America – BLEC

#### **MultiSeeder BMS1600**

The BLEC MultiSeeder BMS 1600 is an ideal overseeder for working on both fine turf and amenity type areas, the floating twin spike rollers follow the contours, saturating the surface with small “flower pot” holes ready to accept the seeds, which are spread accurately via the stainless-steel metering sections which are adjustable. A drag brush sweeps the remaining seeds into the holes and a rear smooth roller firms up the surface. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).



### Redexim North America – BLEC

#### **MultiSeeder BMS2100**

The BLEC MultiSeeder BMS 2100 is an ideal overseeder for working on both fine turf and amenity type areas, the floating twin spike rollers follow the contours, saturating the surface with small “flower pot” holes ready to accept the seeds, which are spread accurately via the stainless-steel metering sections which are adjustable. A drag brush sweeps the remaining seeds into the holes and a rear smooth roller firms up the surface. For more information, visit [www.BlecMachinery.com](http://www.BlecMachinery.com).

### Redexim North America – BLEC

#### **Turf-Seeder BTM 2100**

The BLEC Turf-Seeder BTM 2100 is based on a proven method of seed incorporation, the large front notched ring rollers crush lumps, level the soil to create a firm surface also producing small pockets in the soil, ready to accept the grass seed, which is spread the full width of the worked area (not drilled into lines). The rear set of rollers split the shallow ridges formed by the front rollers, incorporating the seeds evenly in the top half inch of soil and surface disturbance is kept to a minimum. For more information, visit <http://redexim.com>.

### Redexim North America – BLEC

#### **Turf-Seeder BTM 2400**

The BLEC Turf-Seeder BTM 2400 is based on a proven method of seed incorporation, the large front notched ring rollers crush lumps, level the soil to create a firm surface also producing small pockets in the soil, ready to accept the grass seed, which is spread the full width of the worked area (not drilled into lines). The rear set of rollers split the shallow ridges formed by the front rollers, incorporating the seeds evenly in the top half inch of soil and surface disturbance is kept to a minimum.

For more information, visit <http://redexim.com>.

## SEEDERS/PLANTERS

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### **Redexim North America – BLEC**

#### ***Turf-Seeder 3000***

The BLEC Turf-Seeder 3000 is based on a proven method of seed incorporation. The front notched ring rollers crush lumps and level the soil to create a firm surface also producing small pockets in the soil, ready to accept the grass seed, which is spread across its full 10-foot working width. The rear set of rollers split the shallow ridges formed by the front rollers, incorporating the seeds evenly in the top ½ inch of soil, and surface disturbance is kept to a minimum. For more information, visit: [www.BlecMachinery.com](http://www.BlecMachinery.com).

### **Redexim North America**

#### ***Overseeder 1575***

The Overseeder 1575 has been completely redesigned, making it the fastest, most versatile and efficient version to date. With its innovative unequal disc slitting system, the Overseeder actually plants the seed firmly in the ground, providing outstanding seed to soil contact and providing unmatched germination. Boasting a tight spacing under 3 inches, each seed coulter is individually suspended and accurately follows terrain. The new seed box on the 1575 and 2075 utilizes a proven roller design allowing the machine an infinite range of feed rates with all seed types, from the very large to the very smallest bentgrass seed. With working speed up to 9 mph, the new Overseeder is capable of re-seeding a football field or golf course fairway in minutes. For more information, visit <http://redexim.com>.

### **Redexim North America**

#### ***Overseeder 2075***

The new Overseeder 2075 is big, fast, tough, versatile and efficient. The 2075 uses a cutting-edge disc slitting system which actually plants the seed firmly in the ground, providing unparalleled germination. Using a tight spacing under 3 inches, each seed coulter is individually suspended and accurately follows terrain. The new seed box on the 1575 and 2075 utilizes a proven roller design allowing the machine an infinite range of feed rates with all seed types, from the very large to the very smallest bentgrass seed. With working speed up to 9 mph, the new Overseeder is capable of re-seeding a football field or golf course fairway in minutes. For more information, visit <http://redexim.com>.

### **Redexim North America**

#### ***Verti-Seed 1204***

The Verti-Seed's unique action first opens the turf using special oval shaped discs followed by small chisels. The seed is then fed through the seeding funnel and released just above the slit where the wind cannot blow it away. The seed is deposited in the furrow accurately and can be precisely adjusted to give you exact rates even for very fine seed, like bents and fescues. The furrow is then sealed by the seeding shoe. Each seeding element is independently sprung, enabling the Verti-Seed to accurately seed on any ground contour. For more information, visit <http://redexim.com>.

## SEEDERS/PLANTERS

### Redexim North America

#### **SpeedSeed 1600**

The SpeedSeed 1600 is ideal for sports grounds and golf courses where economy and random seed dispersements are important. The SpeedSeed overseeding machines offer the same accurate means to produce thousands of holes, deliver the seed, and brush it in, all with a single machine. The spikes are conical shaped, so that more seed actually drops into the holes. The seed drops when the side wheel turns, so no spillage of seed occurs when the machine is not in operation. Optional, a second roller with spikes can be added for doubling the number of holes per pass. For more information, visit <http://redexim.com>.

### Redexim North America

#### **SpeedSeed 2100 and SpeedSeed 2400**

The new SpeedSeed 2100 and SpeedSeed 2400 are perfect for seeding or overseeding large areas of turf in a short amount of time. Each machine features a front spiked roller made of individual cast rings which create thousands of holes and can easily turn along any obstacles in its path. These seeders are designed for the turf manager that does not like the traditional rows created by other machines on the market.

The SpeedSeeder 2100 has a working width of 2.1 meters (47.2 inches). The SpeedSeed 2400 has a working width of 2.4 meters (62.2 inches).

For more information, visit <http://redexim.com>.



### Sales Midwest, Inc.

#### **Brillion Seeders**

Sales Midwest offers an assortment of new and used Brillion Equipment and parts. No matter how large or small your operation is, Brillion has the tool to help you with your tillage, seed bed prep and seeding equipment needs. Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.

### STEC Equipment

#### **GKB Combiseeder**

The GKB Combiseeder is a fantastic machine that is set up to maximize your seeding efforts. The Combiseeder can put up to 1500 cone shaped holes per square yard with a seed rate between 0.1 oz to 1.8 oz per square yard. These cone shaped holes and 2 brushes promote germination by creating conditions for optimal seed to soil contact. The independent cast rings allow for self-cleaning and no damage if seeding on contoured turf. They can also be reversed if you are seeding over netted areas.

For more information, please visit [www.stecelequipment.com](http://www.stecelequipment.com).





## SOD HARVESTERS

### Brouwer Kesmac

Brouwer Harvesters have Manual Hydraulic Controls to operate the harvester functions. The controls are mounted in a protected panel on the right fender; easy to reach and operate.

### Brouwer Kesmac

#### ***Brouwer 1570 Sod Harvester - Roll or Slab***

The Brouwer 1570 Harvester on the John Deere 5065E with a Tier 4.1 Compliant Power Tech Engine has a light weight floating cutter head that can reduce waste and increase quality even in tough, wet conditions. The unlimited control adjustment combined with the see-through design allows for easy maintenance and overall ease of operation.



### Brouwer Kesmac

#### ***Brouwer 1576 Sod Harvester - Roll or Slab***

The Brouwer 1576 (1560) on the John Deere 5065E with a Tier 4.1 Compliant Power Tech Engine is the most popular Model of Harvester in the World. It gained its reputation with an excellent quality of cut in a wide variety of conditions. The Floating Cutting Head has a front and rear pivot point that is close to the ground, giving it excellent floatation. The head is compact and pivots quickly to follow the smallest of undulations. The Heavy-Duty Outer Frame and Cutting Head provide significant weight to the roller to produce an even piece of Turf, even in extreme conditions; especially hard clay and stones. The design is built to withstand the stress of hard ground and long busy days of Harvesting. The high-torque motors are designed to cut through the hardest of conditions. This is a workhorse that will produce a quality Roll or Slab of Turf.



### Brouwer Kesmac

#### ***Brouwer 1580 Sod Harvester - Roll or Slab***

The Model 1580 on the John Deere 5065E with a Tier 4.1 Compliant Power Tech Engine is a Retro A3A/1500 Conveyor. This conveyor is ideal for soft conditions. The design combines the light weight and durability that the original Brouwer Conveyors were famous for. The current technology uses the Exclusive Low-Profile Rubber Belt that is gentle on Turf and durable for long life. Cut-off spring tension, thickness and pitch are all adjustments that are made easy to allow you to cut the best quality piece of Turf. Current Sprockets, Sliders and Hydraulics make this machine suitable for extreme conditions.



### Brouwer Kesmac

#### ***Brouwer 2200 Sod Harvester – Roll or Slab***

The Brouwer 2200 Harvester on the John Deere 5065E with a Tier 4.1 Compliant Power Tech Engine, with simple hydraulic controls is a workhorse that puts the best quality piece of Turf on the Conveyor that is possible. The Outer Frame surrounds a rugged floating cutting head that has easy pitch and roller adjustments to get the perfect cut. The low front pivot point and heavy pressure on the front roller makes sure that the head follows every contour that it encounters. The Pivot Bearing insures rapid action back and forth to provide an even cut from side to side, even cutting through curves. The heavy-duty construction makes this a perfect choice in the hardest conditions (stones included) or in Tender Turf where gentle handling is required.



## SOD HARVESTERS

### Brouwer Kesmac

#### ***Brouwer RoboMax JD Automatic Roll Sod Harvester***

The Brouwer RoboMax JD is featured on a John Deere 6110M Tractor!

##### **FEATURES:**

- Additional ground clearance
- Shorter turning radius
- Higher seating position for greater visibility
- Optional, adjustable front roller for perfect cutting quality and increased floatation in varying conditions, ideal for soft and wet conditions like peat soils
- Patented and proven Automatic Flap Control keeps the sod roll flaps consistent for a perfect and stable pallet
- On-the-go bad roll scrap ejection, drops scrap away from the uncut turf
- Variety of precision stacking patterns
- On-the-go pallet drop or can be easily backed out of the way of the cut line
- Wide profile tires for additional floatation
- Available in 16-in., 23-in., and 24-in. cutting widths
- Easy and economical to operate
- Optional Brouwer Telematics allow our factory technicians to perform remote diagnostics, updates, adjustments and monitoring utilizing GMS/GPS communication



### Brouwer Kesmac

#### ***Brouwer 4000 & RoboMax JD Multiple Stacking Configurations***

The Brouwer 4000 & RoboMax JD can harvest 16-, 21-, 23- or 24-inch cutting widths. This includes the ability to stack multiple configurations on different pallet sizes. Stacking configurations for pallet sizes of 48 in. x 48 in. (1.2 m x 1.2 m), 40 in. x 48 in. (1.0 m x 1.2 m) and 32 in. x 48 in. (0.8 m x 1.2 m).



16 inch - 1 meter



16 inch - 0.8 meter



16 inch - 1.2 meter



24 inch - 1.2 meter

### Brouwer Kesmac

#### ***Brouwer Sod Cutter Mark 2***

The Sod Cutter Mark 2 is built with a heavy-duty frame construction. The handles fold easily for storage or transport in a pick-up truck or the trunk of your car! This lightweight tool can be used anywhere that turf requires removing, repairing, renovating or lifting. The split blade feature makes it very smooth to operate.



## SOD HARVESTERS

### **Brouwer Kesmac**

#### ***Brouwer Kesmac Harvesters***

Brouwer Kesmac Hand Stack Harvesters blend the best from Brouwer and Kesmac. The Current platform is the John Deere 5065E with Tier 4 Compliant Power Tech Engine. The easy-access Operator Station positions controls for ease of operation for the driver and stacker (hydraulic thickness control). Hydraulically-Controlled Auto Steer, available on all models, provides accurate steering in varying conditions. The Cross Conveyor or the Curved Conveyor are Hydraulically-Driven and Fixed-Mounted to the Standing Platform, maintaining the same position floating or raised. The Beam (beam forward for excellent balance) and Fenders (piling cavity access door for service) are Heavy Duty for Durability. Roof and Canopy protect from sun and elements. LED Lighting allows Early and Late Night, Safe Operation. The Hydraulics are direct-drive from the engine, with a front mount tank and cooler for optimum performance. Optional Brush clears clippings and debris. Optional Variable Hydraulics for Roll Harvesters provide easy flap control.

### **Brouwer Kesmac**

Kesmac Harvesters have Joystick Controls that operate the hydraulic functions electrically. The Joystick is conveniently located to the right of the operator. This design is easy to operate and reduces heat by keeping hydraulic components away from the operator station.

### **Brouwer Kesmac**

#### ***Kesmac 2150 Sod Harvester - Roll or Slab***

The Kesmac 2150 on the John Deere 5065E with a Tier 4.1 Compliant Power Tech Engine is found in many warm season farm applications. The cutting head is simple and durable. The unique beam pivot point provides excellent floatation to follow the contours of the ground with the fewest moving parts. The long cut-off frame is ideal for chopping off in the tough rhizomes and hard soil conditions. The low-profile mat is gentle on turf and long on durability. The Cutting Head is easily accessible for servicing and making adjustments for the best quality of cut.



### **Brouwer Kesmac**

#### ***Kesmac 2200 Sod Harvester - Roll or Slab***

The Kesmac 2200 Harvester on the John Deere 5065E with a Tier 4.1 Compliant Power Tech Engine is a workhorse that puts the best quality piece of Turf on the Conveyor that is possible. The Outer Frame surrounds a rugged floating cutting head that has easy pitch and roller adjustments to get the perfect cut. The low front pivot point and heavy pressure on the front roller makes sure that the head follows every contour that it encounters. The Pivot Bearing ensures rapid action back and forth to provide an even cut from side to side, even cutting through curves. The heavy-duty construction makes this a perfect choice in the hardest conditions (stones included) or in Tender Turf where gentle handling is required. A frame mounted Curved or Cross Conveyor is hydraulically driven.





## SOD HARVESTERS

### FireFly Automatrix, Inc.

#### ProSlab 155B

FireFly's self-propelled ProSlab 155B reduces labor costs and maintenance, while improving productivity. With patented floating cutterhead and electric chop, and our proven depth control, the ProSlab produces a superb pallet with low field impact.

- Rotated tie-in layers
- Single/multi-slab modes
- Drop-on-the-fly pallets
- Single or double-sided pallets

In the TurfView cab, the operator always has a clear 360° view—without twisting or straining. The patented electric stacker is simply the smoothest, fastest, and most accurate in the industry. It's also one reason the ProSlab is the most fuel-efficient slab harvester.

With the factory integrated GPS guidance system (optional), you can open fields and harvest anywhere with straight lines—even in rolling terrain, slopes, or rough ground. Precision harvesting gives you a significantly higher yield. GPS guidance is just another way FireFly stands for "Automation made simple." Call 801-842-1327 to request a free catalog or email [sales@fireflyequipment.com](mailto:sales@fireflyequipment.com).

### KWMI

#### Rollmaster

The Rollmaster is a standard two-person operation. The operator friendly control panel, 32-tube dispenser, large flotation tires, long-lasting conveyor chain and self-contained hydraulic system with dual 22-gpm pumps make harvesting simple. Its hydraulic oil cooler with automatic electric fan ensures smooth operation in high temperature climates as well as for extended operations. Available in 30-, 42- or 48-inch solid cut and 42- or 48-inch double cut. *Innovations in roll positioning coming soon!*

Option: Bi-directional side discharge conveyor offloads rolls to the side so there's no need to move the roll before the next pass.



### KWMI

#### RL Series Big Roll Harvester

The RL 30 and RL 42 big roll pull-behind harvesters have a 100 percent self-contained hydraulic system, eliminating the need for tractor remotes. A two-stage 540 PTO pump allows for lower rpm while rear-mounted hydraulics provide the ground operator with controls, including electric depth control. The full floating head has adjustable speed and produces a more even harvest. Its tube rack holds up to 24 tubes with a 6-inch diameter and the tube clamp itself is hydraulic. All models feature a netting applicator. Available in 30- and 42-inch solid cut or 42-inch double cut. Perfect for both large and small farms.

**Option:** Electric counter with horn



### KWMI

#### 3030 Big Roll Sod Harvester

The KWMI 3030 Big Roll Sod Harvester is a user-friendly, three-point hitch machine driven by a 540 PTO pump that features netting attachments and on-the-go depth control. Its unique design creates a tight roll every time. The KWMI 3030 can harvest the toughest sods with no problem while also being capable of rolling the weakest grass with ease regardless of soil condition. It's been field proven for rugged reliability and designed to be the lowest maintenance sod harvester in the industry.



## SOD HARVESTERS

### KWMI

#### ***Slab/Mini-Roll Harvester***

This harvester features a floating head designed to reduce scalping and deliver uniform sod thickness. It is available on the John Deere 5065E as a slab or mini-roll unit in 16- and 18-inch cut options.

The harvester comes standard with a tarp rack, canopy and operating lights. Hydraulic depth control and coulter blades allow for a smoother cut edge.

#### **Options:**

- Hydraulic auto steer
- Cross conveyor for rolling attachment on Mini Roll harvester.
- 54-in. x 48-in. pallet wall cavity



### KWMI

#### ***Quick-Hitch Harvester***

The KWMI Quick Hitch harvester is designed for easy hook-up to any tractor. Its floating cutter head is best for harvesting in any terrain, while coulter blades allow for a smoother cut edge and a bed knife cuts under the sod to ensure precision cuts every time. Known for its performance and reliability, this machine is also versatile in that it can easily convert between harvesting slabs or mini rolls.

Standard features for the Quick-Hitch include hydraulic depth control, variable speed cutter head and conveyor, PTO pump hook-up, tarp rack, pallet rack and a three-wall pallet cavity for neater pallets. Available in 16-, 18- and 20-inch width cut of slabs or rolls.



### Magnum

#### ***Model 420SRA Pull-Behind Big Roll Harvester***

This compact, one-person big roll harvester speeds production while reducing labor. Features include:

- Increased harvesting speed and reduced labor cost
  - Harvest with one person in climate-controlled cab
  - Auto steer for precision guidance, less wasted turf
  - Hydraulic chop-off assembly for accurate, consistent lengths of cut
  - Anti-vibration timing belts reduce cutter head vibration
  - Two cameras to monitor harvesting operations, allowing the operator to view harvesting while looking forward
- For more information, visit [www.magnumenp.com](http://www.magnumenp.com).



### Magnum

#### ***Model 420SR Semi-Automatic Big Roll Harvester***

The Magnum 420SR Big Roll Harvester incorporates features of the Magnum 42 as well as some features from the Magnum 4200AR:

- Hydraulic chop-off assembly for accurate, consistent lengths of cut
- Large removable tube rack for less down time, easy reloading
- Tube injector for quick, easy tube addition
- Self-starting conveyor to eliminate wrapping turf around the tube by hand
- Rear rubber conveyor mat for longer life, less maintenance
- Net injector to introduce net to the big roll at the start or end
- Net splitter for harvesting two 21- or 24-in. rolls
- Upgraded hydraulic components to increase efficiencies and harvest speeds

For more information, visit [www.magnumenp.com](http://www.magnumenp.com).





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## SOD HARVESTERS

### **Magnum**

#### ***Magnum Big Roll Harvester***

The Magnum Big Roll Harvester is a pull-type unit powered by the PTO of a 40- to 60-hp tractor. Dual floating cutter heads produce consistent cuts in 30-, 32-, 36-, 40-, 42- and 48-in. widths. Two variable speed mats produce the tightest roll possible. A patented netting system applies the net to the sod after it is cut and before it is rolled. This allows weak or immature sod to be successfully harvested and installed. For more information, visit [www.magnumenp.com](http://www.magnumenp.com).



### **Redexim North America**

#### ***Turf Cutter 610***

The new Redexim Turf Cutter 610 is a revolutionary implement that cleanly cuts sod for repairs in lawns, fairways, sports fields and nursery applications. The machine can be used to cut a variety of turf types and to precisely shave the last bit of soil at your work site to prep a clean bed and move existing turf to a new location. The Turf Cutter 610 is a PTO driven machine that can be used with a compact tractor or a Redexim Carrier. The low levels of vibration created by the Turf Cutter cause almost no fatigue to the operator, allowing projects to be completed more quickly and efficiently than the competition. The adjustable angle on the Turf Cutter 610 allows use in all types of grass and the belt drive makes it simple to maintain. For more information, visit <http://redexim.com>.



### **Sales Midwest, Inc.**

#### ***New and Used Sod Harvesters***

Sales Midwest offers an assortment of new and used sod harvesters, including Brouwer Kesmac Harvesters. Various models of traditional and automated sod harvesters are available.

Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.

### **Trebro Manufacturing, Inc.**

#### ***TSR Automatic Stacking Roll Turf Harvester***

This revolutionary new machine incorporates proven Trebro technology coupled with many new and innovative features.

Powered by a 160-horsepower Cummins engine with all wheel hydrostatic drive, this rugged machine can handle a wide variety of harvesting conditions. A quiet, comfortable operators cab rotates 90-degrees to place the operator in the best position to see all harvesting and stacking functions. Multiple cutting widths are available including 21-inch, 23-inch and 24-inch. The reliable time-tested Trebro stacking system, along with a new automatic roll flap positioning system, results in neat, stable stacks. A unique, cross-conveyor scrap dump places scrap sod out of the way for the next pass or accumulates and discards scrap sod at the end of the field. The pallet injector holds 20 empty pallets with an on-the-go pallet exchange to increase harvesting efficiency. Optional Telematics with Remote Service Tool is also available. Please visit <http://trebro.com/>.



## SOD HARVESTERS

### **Trebro Manufacturing, Inc.**

#### ***Trebro TSR Peat Model***

Trebro is now offering their TSR automatic stacking turf harvester in a Peat High-Floatation model. This new machine is equipped with 800-45-26.5 Altura tires providing superior floatation and performance in soft peat soil conditions. Powered by a 160-horsepower Cummins engine with all wheel hydrostatic drive, this rugged machine can handle a wide variety of harvesting conditions. A quiet, comfortable operators cab rotates 90-degrees to place the operator in the best position to see all harvesting and stacking functions. The reliable time-tested Trebro stacking system, along with a new automatic roll flap positioning system, results in neat, stable stacks. A unique, cross-conveyor scrap dump places scrap sod out of the way for the next pass or accumulates and discards scrap sod at the end of the field. Optional Telematics with Remote Service Tool is also available. Please visit <http://trebro.com/>.



### **Trebro Manufacturing, Inc.**

#### ***TSS Automatic Stacking Slab Harvester***

The all new Trebro TSS automatic stacking slab harvester incorporates proven Trebro technology, with many new and innovative features. Powered by a 160-horsepower Cummins engine, with all-wheel hydrostatic drive, this rugged machine can handle a wide variety of harvesting conditions. A quiet, comfortable, operators cab rotates 90-degrees, placing the operator in the best position to see all harvesting and stacking functions. A variety of available cutting widths include: 16, 21, 23, or 24-inch. A unique, cross-conveyor scrap dump places scrap sod out of the way for the next pass or accumulates and discards scrap sod at the end of the field. The cross-stacking pattern consistently produces neat, stable stacks of turf. The pallet injector holds 20 empty pallets with an on-the-go pallet exchange. Optional: Telematics with Remote Service Tool. Please visit <http://trebro.com/>.



### **Trebro Manufacturing, Inc.**

#### ***Trebro AutoStack 3***

As the newest, most refined, high-production machine on the market, the Trebro AutoStack 3 is the ultimate in turf harvesting production. Along with Trebro's industry-leading reliability, economy, and time-tested value, it combines tried and true design with many new features that set it apart.



Features Include:

- All-wheel drive and large high flotation tires for easy operation in wet, muddy conditions
- Dual 24-inch cutting heads with dual adjustable down pressure for outstanding quality of cut with minimum waste
- On the go scrap dump
- Centralized control box
- Dual shoeless autosteer for harvesting in both directions
- Telematics with remote service tool
- Plus many more

The state-of-the-art air-conditioned and heated cab uses curved glass on the front and rear for outstanding visibility of all harvesting and stacking functions.

The Trebro AutoStack 3 quickly pays for itself thanks to its one-operator system, maximum productivity and sod quality, with reduced waste and downtime.

Please visit: <http://trebro.com/>.

## SOD HARVESTERS

### **Trebro Manufacturing, Inc.**

#### ***SC 2010 Roll***

The SC2010 Roll turf harvester is powered by a 99-hp Cummins engine. The front axle with 170-degree steering capability provides maneuverability for smaller fields and faster end-of-row turns. All-wheel drive with rear wheel anti-spin control keeps it on track in muddy conditions. The deluxe cab with anti-vibration mounts has heat and air conditioning and improved visibility of the cutting head, conveyor and stacking functions. The new Automatic flap control system places the flaps in position for consistently neat, stable stacks. Now available in a 21-, 23- or 24-in. cut widths with floating cutting head and adjustable down pressure to deliver a smooth, even cut. The new optional pallet squeeze keeps turf rolls within the pallet size dimensions to meet international truckload widths. A rear-mounted automatic pallet injector holds 10 empty pallets. An optional pallet lift can be installed for double-sided pallets. Optional: Telematics with Remote Service Tool. Visit <http://trebro.com/>.



### **Trebro Manufacturing, Inc.**

#### ***SC 2010 SLAB***

The SC 2010 Slab automatic turfgrass harvester offers many features to maximize efficiency and productivity. With all-wheel drive and rear-wheel anti-spin control, the harvester stays on track in wet, muddy conditions. The 170-degree front steering axle with zero turning radius makes it suitable for smaller fields. Full pallets of turf can be quickly backed out of the way when a forklift is unavailable. The harvester's cab has been designed for operator comfort and visibility.

Trebro's exclusive floating cutting head is available in a 21-in. or 24-in. wide cut and has adjustable down pressure, maximizing productivity with minimal waste. Slabs are picked up and stacked by a hydraulically-powered hook system that is gentle on turf and produces tight, stable stacks. The rear-mounted pallet injector holds 10 empty pallets and can be equipped with an optional pallet lifter to use double-sided pallets. Optional: Telematics with Remote Service Tool. Please visit <http://trebro.com/>.



### **Trebro Manufacturing, Inc.**

#### ***Trebro Telematics Solution***

Trebro Telematics Solution is now available on the complete range of Trebro automatic stacking turf harvesters including the AutoStack 3, TSR, TSS, SC 2010 Roll and SC 2010 Slab.

Features:

- Remote Service Tool, allowing Trebro Technicians remote access to key electronic and programming functions on Trebro harvesters anywhere in the world.
  - Diagnostics and solutions are provided to minimize down time.
  - Machine Data, here the user can remotely track total harvest hours, today's seat hours, pallet drop, pallet time in minutes, pallet count etc.
  - Machine Tracking: information on the current location of the machine including tracking of pallets drops etc.
- For more information, visit <http://trebro.com/>.





## SOD HARVESTERS

### Turf Tick Products

#### *Turf Tick Universal Stacker Sod Harvester*

Turf Tick's Universal Stacker™ sod harvester is a single operator automatic sod stacker that is compact, proven, universal, economical and durable. With its reel floating-head-design, the cutting head pivots independently from the conveyor. Standard features include: open design with low-weight center point, hydraulic depth control, extreme long-life roller bearings and bushings in all moving parts. The unique rollup system cooperates with sideways separated conveyor belts. It comes with autosteer, including 2 rear wheels steering. The dump-conveyor disposes of "bad rolls."

It has a daily capacity of approximately 6000-to-7000 sq. meters (64,583-to-75,347 sq. feet). A 4WD tractor with a minimum of 75-hp is required.

Its automatic pallet injector holds up to 7 pallets. It produces 40-cm (16-in.) rolls. It accommodates pallet sizes: 0.80 x 1.20-m (32-in. x 48-in.); 1.00 x 1.20-m (40-in. x 48-in.) and 1.20 x 1.20-m (48-in. x 48-in.) and can stack in any pattern. Optional: electronically-adjustable roll length.





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## SOD HARVESTERS

### Turf Tick Products

#### ***Turf Tick Big Tick Big Roll Sod Harvester***

The Turf Tick Big Tick harvester is the best and most economical solution for high-quality big rolls. The heavy frame weight and solid pressure roller level out the soil while cutting. The machine has a floating mount with the 3-point hitch on the tractor. The big roll has sharp edges due to the adjustable coulter discs on the bottom roller. A middle disc coulter can split the rolls in two parts. The roll is held by a hydraulically-controlled clamp. The Big Tick has a heavy-duty gearbox and top-quality bearings for all rotating parts. The drive system is mechanically powered. Optional is the automatic chop off with a computer-controlled length counter. The depth adjustment is electrical. Working width of the machine is 40-in. (2 x 20-in.) or 48-in. (2 x 24-in.) A 2- or 4-wheel drive, 40-hp tractor is required, Category 11, 3-point hitch. For more information visit [www.turftick.com](http://www.turftick.com) or [www.nannings-turftick.com](http://www.nannings-turftick.com).



### Turf Tick Products

#### ***Turf Tick Big Slab Sod Harvester***

The Turf Tick Big Slab harvester is specially developed to sell sod for medium-sized projects and to install sod with minimal effort. Laying slabs is three times faster than standard rolls, with fewer seams. The installed sod may be used almost immediately. The moving arm folds the sod on a pallet like a paper chain. Sod thickness is automatically measured and adjusted by computerized sensors and actuators. This computer system also controls the length of the slab.

Slabs can be cut on 40-inches or split in half with the middle disc coulter. The forklift lowers the slab-loaded pallet to the ground, and another can be placed. The square stacks increase transport efficiency. Cutting capacity is 1800 sq. m per hour. Installation rate is 60 sq. m in five minutes. The PTO-driven, four-stage-independent pump assembly requires a 2-wheel drive tractor with a minimum of 60-hp and one single acting hydraulic valve.



### Turf Tick Products

#### ***Turf Tick Detachable Sod Harvester***

Turf Tick's detachable sod harvester provides top-quality cut and high speed with extremely-low maintenance costs. With the reel floating-head design, the cutting head pivots independently from the conveyor. The open design provides a low-weight center point. Counter-balanced cutting blade drive provides low noise, low vibration. Delivers sharp edges and equal thickness. Electrical depth control is standard, with long-life roller bearings and bushings in all moving parts. The unique rollup system cooperates with sideways-separated conveyor belts. It fits any regular tractor (70-80 hp); connects and disconnects in minutes. The automatic fine adjustment for cutting depth is push-button controlled from the driver's seat or stacking position. The carrier, with pallet and stacker platform, is mounted in the tractor 3-point hitch and carries the back of the harvester. A weight-sharing system transfers most pallet weight to the tractor. Available for 16-, 18- or 24-inch rolls, capacity up to 1,700 square yards/hour.





# TAMANET

(USA) INC.

## FIELD Netting

- TAMA Reinforced Knitted Net
- 22,000 ft. X 17 ft.
- Steel Core



**NEW**  
**Degradable**  
**Extruded**  
**Netting**



- Extruded Field Net
- Standard & Heavy Duty
- 17 ft., 20 ft. Width
- **Now Available as Degradable Net**

## Big Roll Netting

- TAMA Big Roll
- 13,200 ft. Length
- Red Mark for Roll End
- 30", 40" Width



- Extruded Big Roll
- Standard & Heavy Duty
- 23", 29", 40", 46" Width
- **Now Available as Degradable Net**



## SOD INSTALLERS

### Brouwer Kesmac

#### ***Brouwer RM 2430, RM 2442 & RM 2448 RollMate Big Roll Sod Installer***

- Hydrostatic transmission
- Easy to operate fingertip controls
- Heavy-duty steel frame design
- Excellent for large roll installation on slopes
- Installs 24-in., 30-in., 42-in. and 48-in. rolls
- Pivoting rear wheel steering for minimal turf damage or scuffing, excellent maneuverability
- Electric Start 11 hp Honda engine



### KWMI

#### ***Track Big Roll Sod Installer with Clamp System***

This installer is an all-terrain rubber-tracked unit with 2,500-lb. load capacity and choice of clamp or bar hook-up, allowing for installation of rolls from 30- to 48-inches wide. Switch from clamp to bar as needed. It has a larger pocket for the sod roll and balances with or without a load. Driver experiences outstanding visibility from a standing platform and the easy operation allows for tight seams and wall-to-wall installation. The maneuverability and low ground pressure tracks allow for installation in tight areas and all soil and weather conditions. Model 4230 and Model 4830 are available with a Kohler ECH749 26.5 hp Command Pro Engine with a dual air-filtration system. Model 4226D and Model 4826D come with a Kubota 05 Series 3-Cylinder liquid-cooled engine.

##### *Optional attachments:*

- Pallet forks
- Sod roller
- Mini-harvester—allows for cutting and installation with same machine



### KWMI

#### ***Wheel Big Roll Sod Installer***

The Big Roll Sod Installer is a four-wheel drive all-terrain machine with foam-filled tires to ensure no flat tires on the job. This machine offers top of the line maneuverability with rear wheel steering to allow for a tight turning radius and front and rear hydraulic wheel motors that pull in tandem on a frame with 2,500-lb. load capacity. A single joystick controls forward/reverse movements and roll lifting. Its hydraulic transmission exchanges speed for torque. The 42- and 48-inch installers come standard with a liquid-cooled Kubota 05 Series 3-Cylinder Engine. Choose between a hydraulic roll clamping system or traditional bar system, both of which have the capacity to install rolls from 30- to 48-inches.



## SOD INSTALLERS

### Magnum

#### **Magnum Installer**

The A Series turf- and operator-friendly four-wheel drive installer combines efficiency and dependability into a machine weighing less than 2,000 pounds. The concept for this installer grew out of the need for a lighter weight, quickly moving vehicle for the installation of big rolls—one that could handle the terrain but not damage the turf. Curbs and slopes present no problem for this installer which can be operated at speeds up to 10-mph. The Magnum Installer features hydraulic clamp arms and wide flotation tires. For more information, visit [www.magnumenp.com](http://www.magnumenp.com).



### Sales Midwest, Inc.

#### **New and Used Sod Installers**

Sales Midwest offers an assortment of new and used sod installers. That includes the Brouwer Rollmate Series with various models of walk behind installers, which can install different size sod rolls (24-, 30-, 42-, and 48-in.). Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.

## SOFTWARE

### Sod Solutions

#### **Turf Logistics**

Turf Logistics™ is sod farm management software with connected mobile apps built to meet the needs of sod farms and sod distributors. Turf Logistics includes automatic truck routing, order management, and driver and harvester management via mobile apps. Seamlessly sync order data and invoicing with QuickBooks to simplify accounting. ClickSod™ Connected Ecommerce integrates with Turf Logistics to allow your farm to sell sod online with real-time availability and pricing. A stand-alone TL Routing module provides the advantage of truck routing and dispatch features while managing the necessary data to optionally integrate with ClickSod Connected Ecommerce. Turf Logistics also has a new installation module with a drag and drop calendar view to make everyday installation management a breeze. Learn more at [turflogistics.com](http://turflogistics.com). Call 843-607-8765 or email [jlong@sodsolutions.com](mailto:jlong@sodsolutions.com).

## SPRIGGING EQUIPMENT

### KWMI

#### **Sprigmaster II**

The Sprigmaster II converts solid sod to sprigs and plants all in one pass. It has the ability to process slabs, mini-rolls or big rolls into sprigs. The model SM48 uses a 42-in. big roll to plant a 48-in. wide pass of sprigs. The model SM52 uses a 48-in. big roll to plant a 52-in. wide pass of sprigs. Both models come standard with high-speed carrying wheels, hydraulic overdrive, a rack for slabs or mini rolls, and 2-inch spacing on the 26 spring-loaded and swivel coulters. The Sprigmaster II is a great machine for expanding sod farms or sprigging sports fields and golf courses.

#### **Options:**

- Can be built as a stationary unit to convert sod to sprigs
- Extra blades for a finer cut



## STAPLES/TACS

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### **Sales Midwest, Inc.**

#### ***Staples and Tacs***

Sales Midwest offers an assortment of staples and tacs. Featured are Birch Sod Sticks, one-quarter-in. by six-in., with a sharp point. According to the company, birch sod sticks are great for installing field net.

Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com), or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.

### **Texas Sod Leasing, LLC**

#### ***Staples and Tacs***

Texas Sod offers an assortment of metal sod staples and wooden tacs.

For more information, call Larry @ 1-888-246-4268

Visit: [www.TexasSod.com](http://www.TexasSod.com)

*Hablamos Espanol, preguntar Jesus o Belinda*

## TIRES

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### **Alliance Tire Americas**

#### ***Galaxy Garden Pro MPC***

Purpose built for compact tractors, the Galaxy Garden Pro MPC blends the features and performance found in the most common compact tractor tires into one single tire that performs a wide variety of jobs in all types of terrain. Built with a substantially deeper tread than what's commonly found on R-3 tires and a multipurpose tread pattern with significantly larger solid-to-void ratio than typical R-1s and R-4s, the Galaxy Garden Pro delivers great traction in soft soils and a long lifespan when operated on hard surfaces—all while protecting delicate surfaces.

With its radial construction, the Galaxy Garden Pro MPC has a wider footprint, which distributes the weight of a tractor across a larger surface, causing less damage to turf. It also provides a smoother ride and wears better than bias ply tires when used on hard surfaces, costing less over the life of the tire than other competitors. [www.atgtire.com](http://www.atgtire.com)

### **Pomp's Tire Service, Inc.**

#### ***Flotation Tires***

These flotation tires have a wider cross section, larger air volume, more flexible carcass and operate at lower inflation pressures. This design produces a large footprint in contact with the ground and distributes the load over a large area, resulting in a reduction in ground pressure. For more information, visit [www.pompstire.com](http://www.pompstire.com).

### **R&R Products, Inc.**

#### ***Tires***

R&R Products supplies quality tires in a huge range of sizes for many turf and utility applications. Major manufacturers include Carlisle, Kenda, OTR, Greenball, Titan and more. Call 800-528-3446 or visit [www.rrproducts.com](http://www.rrproducts.com).



### **Texas Sod Leasing, LLC**

#### ***Tires***

Texas Sod supplies quality tires only for the equipment we service. This includes: Progressive Mowers, Kesmac Mowers, Mastercraft Forklifts, and Bucyrus Magnum Equipment.

For more information, call Larry @ 1-888-246-4268

Visit: [www.TexasSod.com](http://www.TexasSod.com)

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“

TPI brings similar people, farms, institutions and industry partners together from very different parts of the world to share ideas and information that lead to **progress** for all. When we all **work together we grow** and when we isolate ourselves we stagnate. TPI has helped Green Acres Turf Farm grow in many ways that likely would not have happened without the relationships made and information obtained through our TPI membership.

Gary Youmans | Green Acres Turf Farm, LLC, South Carolina

”



Contact TPI at [info@TurfGrassSod.org](mailto:info@TurfGrassSod.org) to join now

## TOPDRESSERS/SPREADERS

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### Campey Turf Care Systems

#### **Campey™ SPEEDRESSERS™**

The Campey™ SPEEDRESSERS™ are bulk drop-spreaders designed to handle all top-dressing materials. The four flotation tires on pivoting axle minimize the risk of turf damage and compaction. Ideal for turf farm, golf course and sports fields use, both with private clubs, local authorities and contractors. The SPEEDRESSER requires a tractor of at least 30 hp and is driven hydraulically from the tractor via an agitator and twin rollers. The high work rate enables the spreading of dressings up to depths of 2 mm–75 mm (.079 in. – 2.97 in.) in one pass.

For more information, please visit [www.campeyturfcare.com](http://www.campeyturfcare.com).

### Redexim North America

#### **Easy Spread**

The new hydraulic powered Easy Spread provides all the benefits of its predecessor, including the unique Easy Spread one-man operation. This machine can load itself and can spread up to 80 tons a day without the operator leaving the cab. Without a doubt, the Easy Spread is the perfect, low-cost solution to what was a most back-breaking task, making it an ideal machine for all sports grounds.

For more information, visit <http://redexim.com>.

### Redexim North America

#### **Rink 1520**

The 1520 makes large area spreading easier. This trailed unit holds over two tons of wet or dry top dressing, running on large, low-ground pressure, flotation wheels. Power to move the self-aligning belt is hydraulic, and either the tractor director or optional tank and pump are PTO powered. The spread thickness is controlled by belt speed and gate, and the standard drop spread width of 60 inches (1.4 m), making this the most versatile topdresser. For more information, visit <http://redexim.com>.

### Redexim North America

#### **Rink 2020**

For those requiring the sophistication of the 1520 and needing a model more ideally suited for sports fields, the 2020 PTO direct power model provides an economic alternative. The traditional 2020 with its PTO direct drive system makes it ideal for sports-ground use where less frequent heavy dressings are the order of the day. The mechanically-driven Rink 2020 is ideal to spread coarse material. For more information, visit <http://redexim.com>.

### Redexim North America

#### **Rink DS 800**

The Rink DS 800 is a topdresser with dual spinners with a spread pattern variable up to 33 feet (10 m). The operation of the belt and spinners can be done from the tractor seat, by switching the hydraulic lever. No unnecessary drop of material takes place between stopping and operation, since the material release gate automatically closes when the belt is stopped. The spinner disks have been designed to handle wet material very well. For more information, visit <http://redexim.com>.





## TOPDRESSERS/SPREADERS

### Redexim North America

#### Rink DS 1200

The Rink DS 1200 is a topdresser with dual spinners and a spread pattern variable up to 30 feet, (9.14 m). The operation of the belt and spinners can be done from the tractor seat, by switching the hydraulic lever. No unnecessary drop of material takes place between stopping and operation, since the material release gate automatically closes when the belt is stopped. The spinner disks have been designed to handle wet material very well. For more information, visit <http://redexim.com>.

### Redexim North America

#### Rink DS 2000

The Rink DS 2000 Disc Spreader is a large topdresser with dual spinners and a variable spread pattern of up to 40 feet (12.19 m). Its total capacity is 2.6 cubic yards and it can cover a lot of turf in a short time. The high flotation tires have a lighter footprint than most competitors and the state-of-the-art spinners leave an even spread pattern that is unequaled. For more information, visit <http://redexim.com>.

### Redexim North America

#### Rink DS 3800

The Rink DS 3800 Disc Spreader is a topdresser with dual spinners and a variable spread pattern of up to 49.21 feet (15 m) wide. The operation of the belt and spinners can be done from the tractor seat by switching the hydraulic lever. No unnecessary drop of material takes place between stopping and operation, since the material release gate automatically closes when the belt is stopped. The spinner discs have been designed to handle wet material very well. For more information, visit <http://redexim.com>.



### STEC Equipment

#### GKB Material Handler SP400

Take full advantage of the 4 large balloon tires on the SP400 as you use it to fill this machine, which has the largest capacity on the market for its class. The oversized dual spread discs can be used to spread a variety of materials, both wet and dry, in multiple widths and patterns. The simple hydraulics, no electrical components and belt tracking make this a long lasting, user friendly machine. For more information, please visit [www.stecequipment.com](http://www.stecequipment.com).



### STEC Equipment

#### GKB TOPDROP 330

The GKB Topdrop is a premium brush dresser that can lay down a variety of materials at a variety of depths. The rear brush spreader helps with the exact placement and spread of the materials that you are putting out. The simple hydraulic system and no electronics to fail make this a long-lasting, user friendly machine. The Topdrop comes in sizes from 1.3 to 3.3 square yards but do not worry about the impact on your turf as all of the sizes come on 4 large balloon tires with penduling axles for optimal weight distribution. For more information, please visit [www.stecequipment.com](http://www.stecequipment.com).





## TRACTORS

### Sales Midwest, Inc.

#### Used Tractors

Various used tractors are available from Sales Midwest.

Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.

## TRAILING (HAULING)

### Green Valley Haulit

#### Haulit Trailer

The Haulit trailer is a heavy-duty pallet delivery and utility trailer that can unload without a forklift or hand labor. You are losing time and money if you are making 1-4 pallet deliveries with anything other than a Haulit Trailer. The Haulit was originally designed to deliver 1-4 pallets of sod, but can also deliver bulk goods. The Haulit Trailer comes in 4 models, Deliveryman (2 pallet capacity), Workhorse (3 Pallets), Nurseryman (4 pallets), and Arborman (4 pallets). Haulit Trailers have double or triple axels that can handle 14,000 to 21,000 pounds. The chain driven push off mechanism and tilt bed are operated by remote control, allowing one person to unload pallets or bulk goods without needing a forklift or hand labor. The Haulit is a bumper pull or Gooseneck trailer that doesn't require a CDL to drive in most states. Check out [www.haulit.com](http://www.haulit.com), [info@gvhaulit.com](mailto:info@gvhaulit.com) or call 435-257-4736 for information.

### Northstar Equipment Corp.

#### Flatbed Trailers

We have flatbeds with forklift kits in stock and ready to start working. We have new 38 ft., 42 ft. and 45 ft. x 102 in., Wilson, Wade and Clark trailers in stock with more on order. We have all steel with wood floors, 12 winches, headboards, LED lights, combo forklift kits, **Moffett, Princeton, Navigator and Palfinger**. Steel disc wheels, fixed air rides and spring slides. We also have Wilson 45 ft. and 48 ft. combos, aluminum side rails, aluminum floor, fixed air ride, headboard, universal lift kits. 10,500 lbs. **We can have Donkey kits installed at the factory.** If we do not have what you want—we can have it built in as little as eight weeks. For more information, visit our website:

[www.northstar-trailer.com](http://www.northstar-trailer.com) or contact Bill Israel at 404-324-7191 or email [bill.israel@northstar-trailer.com](mailto:bill.israel@northstar-trailer.com).

### Sales Midwest, Inc.

#### GV Haulit Trailers

Sales Midwest is now a dealer for the GV Haulit trailer line. These heavy-duty utility trailers have a push off system as well as a dump feature. Increase your profitability today for small order deliveries.

Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.



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## TRAILING (HAULING)

### **STEC Equipment Company**

#### ***DT710 Dump Trailer***

The American made DT710 Dump Trailer has become the preferred tool to work in fine turfgrass. With the oversized turf tires and walking beam axles, the DT710 offers low ground pressure and excellent handling on uneven terrain. The removable sides allow for easy loading and unloading, and the auto-latching tailgate provides worry free operation. It is constructed of high-grade steel and the 7-ft. x 10-ft. body provides an industry leading capacity. The DT710 is equipped with a scissor lift system, that shortens the dump time, and it has a capacity in excess of 16,000 pounds. The side catch board that can be placed on either side of the dump trailer is also an industry first. For more information, please visit [www.stecequipment.com](http://www.stecequipment.com).



## TRUCK COVERS

### **E-Cargo Tarps Inc.**

#### ***SOD MASTER 1301***

SOD MASTER 1301 is a professional-grade, dual electric roll-up tarp system for covering flatbed trailers.

- Built with front and back bulkheads
- Center upper ridgepole for increased strength
- Two Independent Operating Mechanisms allow easy and efficient handling
- Access from either side
- Two independent electric motors with optional wireless double remote control
- Fully Automated: Driver never has to remove any parts or get on the deck
- Industry leading operation times mean more loads per day (\$\$)
- Industry leading warranty, service and reliability
- Upper plate supports the rolled tarps in the open position
- Structural levers, pivot upwards
- Anchoring blocks on the lower deck
- Aluminum 3-inch Roll-Pipe
- Webbing every 24 inches for extra strength
- Fits most flatbed trailers
- Weatherproof cargo protection
- 3-year warranty against all manufacturing defects
- 2-year warranty on electric motors
- 21-ounce vinyl tarp and built-in reinforcement at contact point increase life
- Complete color line with Custom Logo Option to increase Visibility/Sales

[www.E-CargoTarps.com](http://www.E-CargoTarps.com)

## TRUCK COVERS

### Poyntz Inc.

#### Covered Wagon™

There is only one Covered Wagon™, the original, soft-sided tarpaulin system, designed strictly with sod growers in mind. Covered Wagon, made in North America, is patented, self-tarping technology. The driver never leaves the ground. With the push of a button, the truly automatic system opens and closes in 20 seconds, providing the ultimate in speed, securement and safety for over ten years. Full digital advertising is "Standard," with UV Protectant. Do It Yourself installs on 96-inch and 102-inch wide trailers. Or company approved install centers are available on the East and West Coasts, if so desired. And 2,200-pound safety straps can be electronically welded inside the vinyl at the customer's request.

Not just a generic name, but a name everyone in the industry uses, so aptly describing the product—Covered Wagon™—that it has its own trademark.

For more information, visit: [http://www.poyntzinc.com/cov\\_wagon.html](http://www.poyntzinc.com/cov_wagon.html).

### Texas Sod Leasing, LLC

#### Truck Tarps

Texas Sod offers custom mesh tarps made to order.

6,000-pound seatbelt reinforced around entire perimeter, high quality mesh, 24-inch grommet spacing, protects grass against scalding during transport. Flat or fitted front, custom lengths and widths.

We can also stencil your company information on the tarp.

Other options include a variety of colors.

For more information, call Larry @ 1-888-246-4268

Visit: [www.TexasSod.com](http://www.TexasSod.com)

*Hablamos Espanol, preguntar Jesus o Belinda*

## TURF (SOD) TUBES

### Texas Sod Leasing, LLC

#### Sod Tubes

Texas Sod keeps an inventory of cardboard sod tubes in lengths of 42-inch and 48-inch, heavy duty cardboard ½-inch thickness.

For more information, call Larry @ 1-888-246-4268

Visit: [www.TexasSod.com](http://www.TexasSod.com)

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## VACUUMS/SWEEPERS

### Advanced Equipment Sales

#### VAC220

The Sweeper VAC220 is available with a rubber finger or brush pick-up head. The machine has been redesigned with four wheels on the deck. The eight-blade steel impeller fan has a 40 percent increase in suction. The VAC220 features rectangular tube steel construction with hydraulic dump and a stainless steel-lined impeller.

Standard features include:

- 10-cu. yd. hopper
  - 84-in. brush or rubber finger pick-up head
  - Two wide flotation tires
  - 35-in. diameter, eight blade, 3/8-in. steel impeller fan
  - Stainless steel-lined impeller housing
  - Eight-inch hose kit available
  - 50–70 hp required
  - Easy fingertip controls to operate deck, hopper and pick-up head
- For more information, visit [www.advancedequipmentsales.info](http://www.advancedequipmentsales.info).







# VULCAN

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## VACUUMS/SWEEPERS

### Advanced Equipment Sales

#### VAC320

The Sweeper VAC320 has a redesigned pick-up head with four wheels on the deck. The unit combines either a rubber finger or a brush pick-up with the eight-blade steel impeller fan for a 40 percent increase in suction. The 13.3-cu. yd. hopper features an automatic opening rear door for simple unloading, fewer moving parts. Standard features

- Four large wide flotation tires
- 10- or 12-ft. rubber fingers or brush pick-up head
- 35-in. diameter, eight blade, 3/8-in. steel impeller fan
- Stainless steel-lined impeller housing
- Pick-up head with removable panels for easy access
- Requires 60-75 hp
- Eight-inch hose kit available
- 13.3 cu. yd. corrosion resistant aluminum-sided hopper
- Easy fingertip controls to operate deck, hopper and pick-up head

For more information, visit [www.advancedequipmentsales.info](http://www.advancedequipmentsales.info).



### Brouwer Kesmac

#### Brouwer BV 85 Turf Vacuum

The Brouwer BV 85 Turf Vacuum includes an upgraded fan design with additional air flow which now makes it the best Vac on the market to pick-up grass, clippings, leaves, etc.

##### Standard Features:

- Easy to operate fingertip controls
- Large flotation tires
- Jack stand
- Lightweight with 12.4 cu. yd. capacity
- Corrosion resistant aluminum sides, door & pick-up head
- Hydraulic driven unloading conveyor
- Available in 7- to 10-foot widths
- Anti-scalp turf rollers on Vac Head
- Aluminum pick-up head



##### Optional 10 ft. Power Brush Pick-Up Head Features:

- New rotating brush design / counter rotating bristle brush
- Hydraulically driven
- Adjustable front flotation rollers and gauge wheels
- Optional Electric Joystick controls

##### Accessories:

- 12 in. diameter hose extension accessory
- Dual wheels and tires

### Redexim North America

#### Turf Tidy 3000

The Turf Tidy 3000 is one of our most versatile machines incorporating de-thatching, flail cutting and sweeping. It is designed with a fully floating, cutting head that follows the grounds' contours ensuring clean and even pick-up and runs on large rear "flotation" tires to minimize compaction. The unique turbo fan makes a clean sweep of cores, leaves, pine needles, paper, and grass clippings. The large hopper means less time emptying and its high lift allows greater clearance when tipping. For more information, visit <http://redexim.com>.





## VACUUMS/SWEEPERS

### Sales Midwest, Inc.

#### ***New and Used Vacuums and Sweepers***

Sales Midwest offers an assortment of new and used vacuums and sweepers. Featured is the Brouwer BV 85 Turf Vacuum. According to Sales Midwest, it is the largest capacity turf vac of its type. It is maneuverable, versatile and suited for fast and economical cleanup of large turf areas and hard surfaces. The 120-in. wide pick-up head is equipped with fingers and a powerful suction fan to remove a variety of debris.

Visit [www.salesmidwest.com](http://www.salesmidwest.com), email [tim@salesmidwest.com](mailto:tim@salesmidwest.com) or [colton@salesmidwest.com](mailto:colton@salesmidwest.com), or call 913-254-9560 for more details.

### STEC Equipment

#### ***STEC TRILO S16***

STEC Equipment is the North American distributor for Trilo vacuum sweepers. Trilo's attention to details, building materials, and wide area vacuum hood options allow STEC to report the S16 is the most efficient and effective machine for clearing clippings from your field.

For more information, please visit [www.stecequipment.com](http://www.stecequipment.com).



### TRILO

#### ***TRILO Vacuum Collector S4***

The TRILO S4 is a versatile, maneuverable vacuum sweeper with a bin capacity of 5.2 cubic yards (4 cubic meters) that allows you to sweep up and collect leaves or grass clippings in one pass. A powerful fan provides enormous suction power and is mounted in a housing fitted with a replaceable lining. The fan is driven by a PTO drive shaft attached to the tractor and requires an output of 45 – 70 HP (33 – 51 kW). Medium-sized vacuum sweepers are fitted with wide radial tires with a low ground pressure. The S4 is equipped with a 'Hi-Tip hopper' with a tipping height of 7 feet (2.10 meters) and is available with working widths of 5 to 7 feet (1.8 to 2.4 meters).

For more information visit: [www.trilo.com](http://www.trilo.com).



### TRILO

#### ***TRILO Grass-Collector S12***

The Trilo S12 grass-collector is light in weight, yet heavy in sophistication. This unique machine, with its wide tires, performs efficiently without leaving a mark on your turf. With a hopper capacity of 16 cubic yards (12 cubic meters), a vacuum brush head with a working width from 12 feet (3 meters), you can collect your grass clippings under all circumstances. The TRILO S12 can be optionally equipped with a 4 wheel in line, full floating, pendling axle to reduce the ground pressure even more. The machine has a hydraulic conveyor floor for easy unloading. For more information visit: [www.trilo.com](http://www.trilo.com).



### TRILO

#### ***TRILO Vacuum Collector S16***

The TRILO S16 is the highest capacity machine in the industry. With a capacity from up to 30 acres an hour (12 Ha) under the most heavy conditions. A hopper capacity of 21 cubic yards (16 cubic meters) and a working width from 26 ft. (8 m). The S16 is standard equipped with 4-wheel in line, full floating, pendling axle to reduce the ground pressure even more. The machine has a hydraulic conveyor floor for easy unloading. For more information visit: [www.trilo.com](http://www.trilo.com).





## SUPPLIER LISTING

### Advanced Equipment Sales P.O. Box 818, 21 Birch St.

Seaforth, ON N0K 1W0  
CANADA  
Contact: John Janmaat  
Tel: 519-527-2929  
Fax: 519-527-2150  
[advancedequipment@tcc.on.ca](mailto:advancedequipment@tcc.on.ca)  
[www.advancedequipmentsales.info](http://www.advancedequipmentsales.info)  
**See Ads Page 29 & 117**

### Alliance Tire Americas, Inc.

201 Edgewater Drive, Suite 285  
Wakefield, MA 01880  
Contact: Nickalas Phillippi  
National Product Manager,  
Turf & Compact Tractor  
Tel: 339-900-8080  
Fax: 339-900-8065  
Direct: 339-900-8119  
[nphillippi@atgtire.com](mailto:nphillippi@atgtire.com)  
[www.atgtire.com](http://www.atgtire.com)

### AQUA-AID Solutions

5484 S Old Carriage Road  
Rocky Mount, NC 27803  
Contact: Sam Green  
Office: 800-394-1551  
Fax: 252-443-0320  
[info@aquaid.com](mailto:info@aquaid.com)  
[www.aquaid.com](http://www.aquaid.com)

### Aqua-Yield

12754 S. 125 E.  
Draper, UT 84020  
Contact: Andrew Adams  
Tel: 801-449-9220  
Mobile: 801-230-6137  
[andrew@aquayield.com](mailto:andrew@aquayield.com)  
[www.aquayield.com](http://www.aquayield.com)  
**See Ad Page 80**

### Brillion Farm Equipment

P.O. Box 8  
Brillion, WI 54110  
Contact: Amy Wallander  
Tel: 855-320-0373  
Fax: 888-761-8568  
[bfsales@landoll.com](mailto:bfsales@landoll.com)  
[www.landoll.com](http://www.landoll.com)

### Brouwer Kesmac

23324 Woodbine Ave.  
Keswick, ON L4P 3E9  
Contact: Eric Brouwer  
Tel: 1-888-341-5113  
Fax: 905-476-6744  
[info@kesmac.com](mailto:info@kesmac.com)  
[www.brouwerkesmac.com](http://www.brouwerkesmac.com)  
**See Ads Pages 3 & 117**

### Cameron Financial, Inc

3200 West End Ave.  
Suite 500  
Nashville, TN 37203  
Contact: Darryl Yochem  
Tel: 800-960-4456  
Mobile: 919-610-9894  
Fax: 800-500-9505  
[dyochem@cameronleasing.com](mailto:dyochem@cameronleasing.com)  
[www.cameronleasing.com](http://www.cameronleasing.com)  
**See Ad Page 117**

### Campey Turf Care Systems

Marton Hall Lane  
Marton, Macclesfield, Cheshire,  
SK11 9HG, UK  
Tel: ++44 1260 224568  
Fax: ++44 1260 224791  
Mobile: ++44 7771 990 471  
[info@campeyturfcare.com](mailto:info@campeyturfcare.com)  
[www.campeyturfcare.com](http://www.campeyturfcare.com)

### E-Cargo Tarps Inc.

6015 Raoul-Lassonde  
Saint-Hyacinthe, Quebec,  
Canada J2R 1E4  
Contact: Laurent Monange  
Tel: 450 253-3560  
Fax: 450 253-3561  
[info@E-CargoTarps.com](mailto:info@E-CargoTarps.com)  
[larry@E-CargoTarps.com](mailto:larry@E-CargoTarps.com)  
[www.E-CargoTarps.com](http://www.E-CargoTarps.com)

### FireFly Automatrix, Inc.

655 North 700 West  
North Salt Lake, UT 84054  
Contacts:  
Dave Collier (Sales)  
John West (Parts)  
Sales Tel: 801-842-1327  
Parts Tel: 801-698-5128  
[sales@fireflyequipment.com](mailto:sales@fireflyequipment.com)  
[parts@fireflyequipment.com](mailto:parts@fireflyequipment.com)  
[fireflyequipment.com](http://fireflyequipment.com)

### First Products, Inc.

164 Oak Ridge Church Road  
Tifton, GA 31794  
Contact: Carey Parrish  
Tel: 800-363-8780  
Fax: 229-382-0506  
[cparrish@1stproducts.com](mailto:cparrish@1stproducts.com)  
[www.1stproducts.com](http://www.1stproducts.com)  
**See Ad Page 54**

### Green Valley Haulit

810 N. Main Street, Ste. 101  
Brigham City, UT 84302  
Contact: Eric Marble  
Tel: 435-257-4736  
Mobile: 435-230-0180  
[info@gvhaulit.com](mailto:info@gvhaulit.com)  
[www.haulit.com](http://www.haulit.com)

### Hol-Mac Corporation

Donkey Products  
PO Box 349  
2730A Hwy 15  
Bay Springs, MS 39422  
Contact: Lon D. Kraft  
Tel: 601-764-4121 Ext. 1230  
Mobile: 720-270-1953  
[Lon.K@DonkeyForklift.com](mailto:Lon.K@DonkeyForklift.com)  
[www.donkeyforklifts.com](http://www.donkeyforklifts.com)

### Hydro Straw/Summit Seed

2110 S. State Rt. 27  
Rockford WA 99030  
Tel: 509-291-6000  
Fax: 815-468-7450  
[info@summitseed.com](mailto:info@summitseed.com)  
[www.summitseed.com](http://www.summitseed.com)  
[www.hydrostraw.com](http://www.hydrostraw.com)

### Kässbohrer All Terrain Vehicles, Inc.

10 Curtis Court S.W.  
Cartersville, GA 30120  
Contact: Evan Huckaby  
Regional Sales/  
Branch Operations Manager  
Tel: 770-386-6984  
Fax: 770-386-6890  
Mobile: 775-848-8258  
[Evan.Huckaby@beach-tech.com](mailto:Evan.Huckaby@beach-tech.com)  
[www.beach-tech.com](http://www.beach-tech.com)  
[www.cherrington.net](http://www.cherrington.net)

### KWMI

26264 US Highway 98  
Elberta, AL 36530  
Contact: Clark Woerner  
Tel: 251-986-7900  
Fax: 251-986-7902  
[sales@KWMIequipment.com](mailto:sales@KWMIequipment.com)  
[www.KWMIequipment.com](http://www.KWMIequipment.com)  
**See Ads Pages 35 & 117**

### Load Lifter Manufacturing Ltd.

3 Anderson Blvd.  
Stouffville, Ontario,  
Canada L4A 7X4  
Contacts:  
Dave Tughan -  
Operations Manager  
Mark Sullivan - Sales  
and Marketing Representative  
1-888-AOK LIFT (265-5438)  
[d.tughan@load-liftermfg.com](mailto:d.tughan@load-liftermfg.com)  
[m.sullivan@load-liftermfg.com](mailto:m.sullivan@load-liftermfg.com)  
<http://load-liftermfg.com/>  
**See Ad Page 5**

### Locus Agricultural Solutions

30600 Aurora Road Suite 180  
Solon, OH 44139  
Contacts:  
David Bradley,  
Turfgrass Specialist  
Tel: 828-606-7186  
Mobile: 828-606-7186  
Darrin Paschal,  
Managed Turfgrass Specialist  
Mobile: 704-495-2128  
[dbradley@locusfs.com](mailto:dbradley@locusfs.com)  
[dpaschal@locusfs.com](mailto:dpaschal@locusfs.com)  
[www.locusag.com](http://www.locusag.com)

### Magnum

510 South 1st Street  
Louisburg, KS 66053  
Contact: Mark Hildreth  
Tel: 913-783-4600  
Fax: 913-783-4606  
[markh@magnumenp.com](mailto:markh@magnumenp.com)  
[www.magnumenp.com](http://www.magnumenp.com)  
**See Ads Pages Inside Front Cover,  
10-11**

### Northstar Equipment Corp.

2171 Bill Wright Rd.  
P.O. Box 525  
Jefferson, GA. 30549  
Contact: Bill Israel  
Tel: 888-999-1830 Ext. 1069  
Mobile: 404-324-7191  
[bill.israel@northstar-trailer.com](mailto:bill.israel@northstar-trailer.com)  
[www.northstar-trailer.com](http://www.northstar-trailer.com)

### Northwest Tillers

P.O. Box 10932  
Yakima, WA 98909  
Contacts:  
Mike Marquis  
Andy Beaman  
Tel: 800-204-3122  
Mobile: 509-728-0675 (Mike)  
Mobile: 509-728-0896 (Andy)  
Fax: 509-248-3818  
[mmarquis@MARQ.NET](mailto:mmarquis@MARQ.NET)  
[abeaman@MARQ.NET](mailto:abeaman@MARQ.NET)  
[www.nwtiller.com](http://www.nwtiller.com)

### Plant Food Company, Inc.

38 Hightstown Cranbury Station Rd.  
Cranbury, NJ 08512-5012  
Contact: Philip String  
Tel: 800-562-1291  
Mobile: 609-377-1062  
[pstring@plantfoodco.com](mailto:pstring@plantfoodco.com)  
[www.plantfoodco.com](http://www.plantfoodco.com)



## SUPPLIER LISTING

### Pomp's Tire Service

1037 West Broadway  
Monticello, IN 47960  
Contact: Randy Richardson  
Tel: 765-742-4000  
Mobile: 317-775-0286  
Fax: 765-742-0035  
[rrichardson@pompstire.com](mailto:rrichardson@pompstire.com)  
[www.pompstire.com](http://www.pompstire.com)

### Poyntz Inc.

Box 519  
Sutton, Ontario L0E 1R0  
CANADA  
Contact: Philip Poyntz  
Mobile: 905-722-4631  
[sales@poyntzinc.com](mailto:sales@poyntzinc.com)  
[www.poyntzinc.com](http://www.poyntzinc.com)

### Progressive Turf Equipment Inc.

137 West William Street, Box 940  
Seaford, ON N0K 1W0  
CANADA  
Contact: Brian Lowe  
Tel: 519-527-1080 x 214  
Fax: 519-527-2275  
[info@progressiveturfequip.com](mailto:info@progressiveturfequip.com)  
[www.progressiveturfequip.com](http://www.progressiveturfequip.com)  
**See Ad page 67**



### R&R Products, Inc.

3334 E Milber St.  
Tucson, AZ 85714  
Contact: Tim Pringle  
Tel: 800-528-3446; 520-889-3593  
Fax: 520-294-1045  
[sales@rrproducts.com](mailto:sales@rrproducts.com)  
[rrproducts.com](http://rrproducts.com)  
**See Ad Page 71**

### Redexim North America

427 W. Outer Road  
Valley Park, MO 63088  
Contact: Paul Hollis  
Tel: 636-825-8300  
Mobile: 314-378-1889  
Fax: 636-825-8302  
[PaulH@RedeximNA.com](mailto:PaulH@RedeximNA.com)  
<http://redexim.com>  
**See Ad Page 111**

### Redox Chemicals, LLC

130 South 100 West  
Burley, ID 83318  
Contact: Brad Caresia  
Tel: 208-678-2610  
Mobile: 208-312-6150  
[brad.caresia@redoxchem.com](mailto:brad.caresia@redoxchem.com)  
[www.redoxchem.com](http://www.redoxchem.com)

### Sales Midwest, Inc.

15560 South Keeler  
Olathe, KS 66062  
Contacts:  
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Colton Wollesen  
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Fax: 913-254-9566  
[tim@salesmidwest.com](mailto:tim@salesmidwest.com)  
[colton@salesmidwest.com](mailto:colton@salesmidwest.com)  
[www.salesmidwest.com](http://www.salesmidwest.com)  
[www.assetbids.com](http://www.assetbids.com)

### Sod Solutions, Inc.

P.O. Box 460  
Mount Pleasant, SC 29465  
Lawnifi  
Contact: Christopher Buechele  
Amp Agronomy  
Contact: Christian Brouqsault  
Turf Logistics  
Contact: Jacob Long  
Tel: 843-849-1288  
Direct: 843-437-2455  
(Christopher Buechele)  
Direct: 843-284-2336  
(Christian Brouqsault)  
Direct: 843-936-6758  
(Jacob Long)  
[cbuechele@sodsolutions.com](mailto:cbuechele@sodsolutions.com)  
[christian@sodsolutions.com](mailto:christian@sodsolutions.com)  
[jlong@sodsolutions.com](mailto:jlong@sodsolutions.com)  
[www.sodsolutions.com](http://www.sodsolutions.com)

### STEC Equipment

405 McGee Road  
Anderson, SC 29625  
Contacts:  
David Taylor  
Cliff Stewart  
Tel: 888-325-2532 or 864-225-3666  
[Sales@stecequipment.com](mailto:Sales@stecequipment.com)  
[www.stecequipment.com](http://www.stecequipment.com)  
**SEE AD Page 47**

### SWM International

2810 Weeks Ave. SE  
Minneapolis, MN 55414  
Contact: Dan Donohoe  
Tel: 909-949-8246  
[ddonohoe@swmintl.com](mailto:ddonohoe@swmintl.com)  
[www.swmintl.com](http://www.swmintl.com)

### TAMANET (USA)

16541 Gothard Street, #112  
Huntington Beach, CA 92647  
Contact: Angel Lopez  
Tel: 800-441-8262  
Mobile: 714-801-6652  
[angel@tamanetusa.com](mailto:angel@tamanetusa.com)  
[www.tamanetusa.com](http://www.tamanetusa.com)  
**See Ad Page 73**

### Texas Sod Leasing, LLC

P.O. Box 87  
Bay City, TX 77404-0087  
Contact: Nathan Lubbers  
Tel: 979-245-4115  
Mobile: 979-479-6361  
Fax: 979-244-5750  
[nathan@texassod.com](mailto:nathan@texassod.com)  
[www.texassod.com](http://www.texassod.com)

### TIMAC AGRO USA, Inc.

2750 S Brookmeadow Dr.  
Garden Plain, KS 67050  
Contacts:  
Porter Phelps  
Mobile: 970-371-9651  
[hpphelps@timacusa.com](mailto:hpphelps@timacusa.com)  
Brian Lewis  
Mobile: 573-380-7378  
[blewis@timacusa.com](mailto:blewis@timacusa.com)  
[www.us.timacagro.com](http://www.us.timacagro.com)

### T-L Irrigation Company

151 E. Hwy 6 & AB Rd.  
P.O. Box 1047  
Hastings, NE 68902-1047  
Contact: T-L Irrigation Co. Sales  
Tel: 402-462-4128  
Fax: 402-462-4617  
[sales@tlirr.com](mailto:sales@tlirr.com)  
[www.tlirr.com](http://www.tlirr.com)

### Trebro Manufacturing, Inc.

P.O. Box 80390  
Billings, MT 59108  
Contact: Gregg Tvetene  
Tel: 406-652-5867 or  
888-395-5867  
[sales@trebro.com](mailto:sales@trebro.com)  
<http://trebro.com/>  
**See Ad Page 88-89**



### TRILO/Vanmac B.V.

Astronaut 40  
3824 MJ Amersfoort  
The Netherlands  
Contact: Peter van Mispelaar  
Tel. USA: 864.332.9776  
Tel: +31 33 456 45 50  
Fax: +31 33 456 44 33  
[info@trilo.com](mailto:info@trilo.com)  
[www.trilo.com](http://www.trilo.com)  
[www.vanmac.nl](http://www.vanmac.nl)  
**See Ad Page 117**

### Trimax Mowing Systems

1145 Uniform Road  
Griffin, GA 30224  
Contact: Ray LeProu  
Tel: 770-412-8402  
Fax: 770-412-8403  
Mobile: 336-202-8031  
[Ray.leprou@trimaxmowers.com](mailto:Ray.leprou@trimaxmowers.com)  
[www.trimaxmowers.com](http://www.trimaxmowers.com)  
**See Ad Page 83**

### TurfTick Products B.V.

Nannings van Vuuren Sales  
Harmelerwaard 21  
3481 LC Harmelen  
HOLLAND  
Contacts:  
Zhanna Rudakova  
Ton Nannings  
Yvonne Nannings  
Tel: +31 (0) 30 666 1348  
Tel: +31 (0) 33 455 2675  
or +31 (0) 6 34 30 55 35  
Fax: +31 (0) 30 666 1340  
[sales@turfstick.com](mailto:sales@turfstick.com) and  
[info@nannings-turfstick.com](mailto:info@nannings-turfstick.com)  
[www.turfstick.com](http://www.turfstick.com) and  
[www.nannings-turfstick.com](http://www.nannings-turfstick.com)  
**See Ad Inside Back Cover**



### Vereens Turf

8862 SC-90  
Longs, SC 29568  
Michael Johnson  
Director Sales and Operations  
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Fax: 843-399-7800  
Mobile: 843-655-3080  
[orders@vereens.com](mailto:orders@vereens.com)  
[info@vereens.com](mailto:info@vereens.com)  
[www.vereens.com](http://www.vereens.com)

### Van de Sluis / Copra sàrl / Vmow sàrl

Aresdorferhof  
21, rue Uerschterhaff  
L-4498 Sanem  
Luxembourg  
Contact: Conny Van de Sluis  
Tel: +352 59 27 95-1  
Mobile: +352 621 22 27 17  
Fax: +352 59 08 88  
[info@vmow.lu](mailto:info@vmow.lu)  
[www.rollrasen.lu](http://www.rollrasen.lu)  
[www.gazon-en-rouleau.lu](http://www.gazon-en-rouleau.lu)  
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## **AutoStack 3™**

*The ultimate, one-man turf harvesting machine*

Trebro is excited to introduce the revolutionary new AutoStack 3 Turf Harvester! This high-production machine combines all of the best features from the previous two AutoStacks and TSR, and then adds a long list of new innovations that help produce higher volumes while being easier to operate and simpler to maintain. The AutoStack 3 truly takes "ultimate" to the next level!

### **Includes proven features our clients love:**

- Autosteer (like the TSR)
- Head pivot (like the AS II) with a bigger bearing
- Cutter head (based on the TSR)
- Drive system (like the TSR)
- Frame and articulation (like the AS I)
- Stacker (like AS II)
- Pallet injector (like the TSR)



### **New innovations for increased performance:**

- Improved depth control (simple 1 pivot point and pitch stays the same)
- Cab is roomier and raised for better visibility
- Accumulator moves front to back for improved "on the fly" scrapping
- Mechanically synchronized vertical movement of forks and injector
- Centralized control box results in less CAN wiring
- Improved weight distribution
- Steer by wire
- Improved power roll-up
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- Telematics is now a standard feature



◀ New powered roll-up system with on-the-go automatic flap positioning



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*Trebro's TSR Roll Harvester showcases our latest industry-leading technology to boost your efficiency and reduce labor costs.*



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*The SC2010 automatic stacking roll harvester greatly improves efficiency at every level*



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Roll

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# TRANSPORTATION OF AGRICULTURAL COMMODITIES—

## TPI UPDATE FOR U.S. SOD HAULERS

By Casey Reynolds, PhD



TPI is working to secure turfgrass sod haulers relief from HOS and ELD requirements as an agricultural commodity, qualifying for exemptions.

As many of you know, recent changes to regulations on hours of service (HOS) and electronic logging devices (ELDs) for commercial vehicle operators have caused much confusion and concern among turfgrass sod haulers in the United States. The Federal Motor Carrier Safety Administration (FMCSA) is an agency within the U.S. Department of Transportation (USDOT) that regulates the U.S. trucking industry. In December of 2015, they published a Final Rule in the Federal Register regarding Electronic Logging Devices (ELDs) and Hours of Service (HOS) Supporting Documents [Federal Register: Docket No. FMCSA-2010-0167]. In short, it states that by December 16, 2019, all commercial motor vehicle operators are required to have electronic logging devices (ELDs) that are self-certified and registered with the FMCSA.

The primary intention of these ELDs is to track and enforce hours of service (HOS) regulations. The HOS rules, set forth in the U.S. Code of Federal Regulations (CFR) §49 CFR 395, limit property-carrying commercial motor vehicle (CMV) drivers to 11 hours of driving time within a 14-hour period after coming on duty following 10 consecutive hours off duty (except that drivers who use sleeper berths may combine a period of 2 hours of off-duty time with a period of 8 consecutive hours in the sleeper berth). Drivers must take at least 30 consecutive minutes off duty if more than 8 hours have passed since their last off-duty period of at least 30 minutes, if they wish to drive or continue driving. Drivers may not drive

after accumulating 60 hours of on-duty time in any 7 consecutive days, or 70 hours in any 8 consecutive days, however, drivers of property-carrying CMVs may restart the 60- or 70-hour clock by taking 34 consecutive hours off duty (or 24 hours off duty for some industries).

This new mandate incorporates the traditional HOS exemptions for hauling agricultural commodities within 150 air-miles of an owner's farm or other source, but it has also raised the question among state and federal regulators and enforcement officers as to what exactly constitutes an agricultural commodity. In the FMCSA's current definition, agricultural commodity refers to any agricultural commodity, non-processed food, feed, fiber, or livestock (including livestock as defined in sec.

602 of the Emergency Livestock Feed Assistance Act of 1988 [7 U.S.C. 1471] and insects). Although the statutory definition of agricultural commodity set forth in §49 CFR 395.2 is quite detailed in some respects, it is also circular and ambiguous. For example, "agricultural commodity" is defined in part as "any agricultural commodity. . ." Furthermore, there are plenty of agricultural commodities other than food, feed, and fiber. Examples include turfgrass sod, Christmas trees, horticultural plants, flowers, grain corn for ethanol, and others. As a result, the current FMCSA definition of agricultural commodities is not all-inclusive and is also susceptible to multiple interpretations, resulting in potentially inconsistent application of the HOS exemptions.

The inconsistent interpretation and application of this definition over the last two years has caused U.S. sod haulers varying levels of trouble, depending on where they are and how their local enforcement policy is implemented. TPI has been working on this issue since Phase 2 of the new ELD mandate took effect in 2017, and we are currently working three separate avenues of relief that could potentially provide a resolution.

The first, and potentially most immediate solution that TPI has completed is an Application for Exemption that we submitted directly to the FMCSA in December of 2018 to grant U.S. Sod Haulers an exemption from the new HOS and ELD mandate. The FMCSA has a formal process

for these types of requests under the provisions in §49 CFR 381 – Waivers, Exemptions, and Pilot Programs, specifically §49 CFR 381.310. In this exemption request, TPI stated the case that sod is in fact an agricultural product and is considered as such by many other federal and state agencies and entities including, but not limited to: the U.S. Department of Agriculture, the U.S. Farm Bill, the Environmental Protection Agency, the Labor department, the Farm Service Agency, the Occupational Safety and Health Act (OSHA), the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the national association of state departments of agriculture, and others. The FMCSA published a 30-day public comment period on this exemption request (FMCSA-2019-0093) at [www.regulations.gov](http://www.regulations.gov) that closed on July 19, 2019. It received 47 comments from sod producers, including a formal comment from TPI on behalf of our members. As of October 2019, we are awaiting their decision and if granted, it could provide up to five years of relief from HOS and ELD requirements under the current agricultural commodity exemptions.

The second avenue that TPI is working is to respond to the FMCSA's request for public comment on FMCSA-2018-0348, which was titled "Hours of Service of Drivers; Definition of an Agricultural Commodity." This public comment period closed on September 27, 2019, and received 144 public comments, including one from TPI. In this public comment period, the FMCSA seeks comments, along with relevant quantitative or qualitative data, addressing how FMCSA could define or interpret the term "agricultural commodity" in §49 CFR 395.2 more clearly, while remaining consistent with Congress's intent to provide a limited HOS exemption for CMV drivers who transport agricultural commodities. FMCSA is specifically interested in knowing what else should be added to the definition of "agricultural commodity."

The purpose of the definition is to determine which agricultural commodities are eligible for the HOS exemption provided in §49 CFR 395.1(k)(1), which is designed to allow additional driving and working hours for drivers transporting these commodities. The exemption gets the agricultural commodities to market with fewer delays "during planting and harvesting periods, as determined by each State." Currently, during harvesting and planting seasons as determined by each State, drivers transporting agricultural commodities, including livestock, are exempt from the HOS requirements from the source of the commodities to a location within a 150-air-mile radius from the source. This advanced notice of proposed rule-making (ANPRM) is prompted by indications that the current definition of these terms may not be understood or enforced consistently when determining whether the HOS exemption applies. The FMCSA has been working with



Like other agricultural commodities, turfgrass sod is sensitive to temperature or climate and at risk of perishing in transit.

the United States Department of Agriculture (USDA) to clarify the agricultural commodity definition and TPI has been in touch with the USDA as well to make sure that sod producers are represented in any future changes to this definition. This process will likely take several months or even more to reach a resolution, and we will keep in close contact with officials at the FMCSA and USDA to stay up to date on its progress.

The third, and most long-term solution that TPI is pursuing is to work with Congress to pass new legislation through the United States House of Representatives and Senate that would amend the Federal Motor Carrier Safety Act of 1999 with respect to the definition of agricultural commodities. On March 11, 2019, Representative Austin Scott (R-GA) along with Rep. Neal Dunn (R-FL) and Rep. Al Lawson (D-FL) introduced bill H.R. 1673 which is titled "The Agricultural Trucking Relief Act of 2019." This bill has been referred to the House Committee on Transportation and Infrastructure as well as the Subcommittee on Highway and Transit and would amend the current definition of agricultural commodities to the following:

**Section 229(e)(7) of the Motor Carrier Safety Improvement Act of 1999 (§49 USC 3116) is amended to read as follows:**

- (7) AGRICULTURAL COMMODITY, the term agricultural commodity includes**
- A. agricultural, aquacultural, horticultural, and floricultural commodities**
  - B. fruits;**
  - C. vegetables;**
  - D. any non-human living animal and the products thereof; and**
  - E. other agricultural products that are**
    - i. sensitive to temperature or climate; and**
    - ii. at risk of perishing in transit**





The lack of clarity around the classification of products as agricultural commodities is affecting U.S. sod haulers. TPI is addressing that issue with multiple outreach efforts.

There has also been a companion bill introduced into the U.S. Senate by Senator David Perdue (R-GA) on behalf of Senators Jeff Merkley (D-OR), Bill Cassidy (R-LA), Cindy Hyde-Smith (R-MS), Johnny Isakson (R-GA), Marco Rubio (R-FL), and James Inhofe (R-OK). As of October 2019, H.R. 1673 has bipartisan support from 29 co-sponsors and S. 2025 has bipartisan support of 9 co-sponsors (Table 1). We will continue to gather support for these bills and welcome any local contacts from TPI members in your home area. If your representative is not listed below and you

would like to help gather support please reach out to us, and we will be happy to work with you. If this bill ever comes up for vote it is important that it has as much support as possible to ensure its passage into law.

In closing, this is an important issue affecting U.S. sod haulers that has the potential to drastically impact daily business operations and costs. It is not an issue that is specific to sod production, nor is it one that we created. The lack of clarity around agricultural commodities impacts other important agricultural crops that don't necessarily fit into "food, feed, fiber, or livestock" and those industries are working with us on this as well. To date, we have colleagues at AmericanHort, the American Farm Bureau Federation, the Florida Fruit and Vegetable Association, and others that are working on behalf of their constituents, just as TPI is for sod producers. We will continue to work diligently on this to make sure that sod producers are at the table and fully represented in discussions and ultimate changes to future agricultural commodity definitions and exemptions. If you have questions as to how this may impact your operation, or would like to help gather support from U.S. House or Senate representatives in your area, please contact me at [creynolds@TurfGrassSod.org](mailto:creynolds@TurfGrassSod.org) or at 847-737-1846.

Table 1.

Current support for Agricultural Trucking Relief bills in the United States House of Representatives and Senate.

H.R 1673 (U.S. Congress)		S. 2025 (U.S. Senate)
Austin Scott (R-GA)*	Steven Pallazzo (R-MS)	David Perdue (R-GA)*
Neal Dunn (R-FL)*	TJ Cox (D-CA)	Jeff Merkley (D-OR)*
Al Lawson (D-FL)*	Eric Crawford (R-AR)	Bill Cassidy (R-LA)*
Kurt Schrader (D-OR)*	Doug LaMalfa (R-CA)	Cindy Hyde-Smith (R-MS)*
Sanford Bishop (D-GA)	Gregory Steube (R-FL)	Johnny Isakson (R-GA)*
Rob Woodall (R-GA)	Trent Kelly (R-MS)	Ron Wyden (D-OR)*
Ralph Lee Abraham (R-LA)	Troy Balderson (R-OH)	Marco Rubio (R-FL)*
Jefferson Van Drew (D-NJ)	Ross Spano (R-FL)	James Inhofe (R-OK)*
Jamie Raskin (D-MD)	David Rouzer (R-NC)	John Boozman (R-AR)
Scott Tipton (R-CO)	Elise Stefanik (R-NY)	James Lankford (R-OK)
Mike Rogers (R-AL)	Bob Gibbs (R-OH)	
Greg Pence (R-IN)	Doug Lamborn (R-CO)	
Bradley Byrne (R-AL)	John Moolenaar (R-MI)	
Ralph Norman (R-SC)	Ben Cline (R-VA)	
Greg Gianforte (R-MT)	Mike Bost (R-IL)	

\*Indicates original co-sponsor

Casey Reynolds, PhD is executive director of Turfgrass Producers International.

All photos courtesy of Casey Reynolds, PhD.



# MARKET RESEARCH EXPLORES CONSIDERATIONS AMONG DECISION-MAKERS IN CHOOSING PLAYING SURFACES

By Casey Reynolds, PhD

*Editor's note: This article was supplied on TPI's behalf to several other industry publications to help spread the word on the importance of natural grass as related to player safety and to further the #KeepItREAL campaign.*

College and professional football seasons are upon us, and sports fans can feel the excitement in the air. As always, preseason polls, national championship predictions, and other team chatter is in the news but also making headlines this year are several recent retirements of prominent football players citing, in part, concerns over their long-term safety and health. The safety and health of athletes is and should be a top priority for leagues, coaches, parents, and others. However, what other factors are considered when installing new athletic fields? Is it maintenance, costs, environment, or other factors? Is it all of the above and if so, which factors play most heavily in these decisions? This was the topic of research targeted in market research conducted in 2018 in the United States and Canada.

Six companies submitted proposals for this market research and FleishmanHillard, a global PR firm and digital marketing agency based in St. Louis, MO, was selected as the winning proposal. FleishmanHillard is an internationally recognized PR firm that was founded in 1946 that represents businesses including Barnes & Noble, Procter & Gamble, General Motors, Energizer, EA Sports, and more. They have over 80 offices in 30 countries and as such are able to reach audiences domestically and internationally.

First, FleishmanHillard analyzed the current state of affairs in print and social media with regard to natural grass and synthetic turf. Natural grass proponents and synthetic turf companies tout many of the same benefits including cost, environmental impact, durability and safety—many of consumers' major concerns. They also analyzed the share of each group's voice in digital media as well as the positive, neutral, and negative perceptions by subject for natural grass and artificial turf. One of the key items that jumped out was that it appears natural grass fields are taken for granted. There are fewer arguments for natural grass, rather than against artificial turf, because natural grass is in the default position. Artificial turf often gets more coverage and has non-neutral articles, in part simply because it is new and debated.



In addition to an analysis of print and digital media, FleishmanHillard surveyed 141 decision-makers (coaches, athletic directors, city employees, etc.) in the United States and Canada to get an idea of what they determined as motivating factors when selecting new playing surfaces for their communities. These respondents were presented with a series of statements revolving around considerations of various playing surfaces and asked for their feedback. Their knowledge and responses to these statements were then compiled for analysis to determine the many factors that go into deciding between natural grass or synthetic turf athletic fields, mulch or rubber playground surfaces, and more.

As you can imagine, the safety and health of users was a top response. There are many factors that contribute to the safety of various types of playing surfaces, including but not limited to, construction and management practices, heat, surface hardness, consistency, others, and even footwear. There are many types of playing surfaces that each have a role in communities everywhere. For example, a playground at a child's daycare center in the southern U.S. may be more concerned about heat loading than a multi-use event complex in the Pacific Northwest. Inversely, a collegiate or professional soccer or football complex may be more concerned about traction/footing than an outdoor concert venue. As you can imagine, each of these types of venues lend themselves to different playing surfaces and management techniques but a common theme throughout each of them is user safety.




Field safety has long been a research topic among the scientific and medical professions and there have been many research papers published in academic journals citing varying differences in surface types.

Many of these studies use some type of injury surveillance reporting system to seek out and analyze trends in injuries in different playing surfaces. For example, the National Collegiate Athletic Association (NCAA) has collected injury data through their Injury Surveillance System (ISS) since 1982 (Kerr et al 2014). The National Football league (NFL) has recorded and reported injuries using a similar system since 1980 (Hershman et al 2012). These types of injury recording systems are capable of capturing data on injury type, weather conditions, playing surface, athlete exposures (AE), and more. These reporting systems allow medical trainers and researchers to access and analyze vast sets of comprehensive data over extended periods of time.

Two papers that have been recently published in the *American Journal of Sports Medicine* focus on injury data analysis from the National Football League (NFL) and the National Collegiate Athletic Association (NCAA). Previous research has revealed that football cleats interact differently on synthetic and natural turf, which may lead to a different risk of injury. Divots—when a cleat creates a hole in the field—signal that the grass has absorbed force from the cleat and released the cleat back again, rather than capturing the cleat and releasing the force through a player's foot, ankle or knee, which could cause injury. Since cleats can easily create divots on natural grass less force is placed on the lower body, which may help prevent injury.

Data for the NFL study came from the analysis of all 1,280 NFL regular season games and 213,935 distinct plays from 2012 through 2016, 555 of which were on synthetic turf and 725 on natural grass. All 32 NFL teams reported injuries through an electronic health record system, and each injury report gives full details of the injury and circumstance, such as the contact, impact, activity, time lost, game-day weather, and surface type and conditions. The researchers then examined all cases of lower body injuries along two outcomes: any time loss, and greater than eight days of time loss. They also examined the rates of contact-related injuries and noncontact-related injuries, since noncontact injuries are more likely to be related to the playing surface.



When examining noncontact knee, ankle and foot injuries, play on synthetic turf had a **56%** higher rate of injuries resulting in any time loss and a **67%** higher rate of injuries resulting in more than eight days of time loss.

The greatest difference in noncontact injury rates between synthetic turf and natural grass were to the ankle/foot: synthetic turf resulted in a **68%** higher rate of injuries resulting in any time loss and a **103%** higher rate of injuries resulting in more than eight days of time loss.

In the NFL study, a total of 4,801 lower body injuries occurred from 2012 to 2016 affecting 2,032 players. Play on synthetic turf had a 16 percent higher rate of lower body injuries than on natural grass. This included contact and noncontact that resulted in any time loss. For noncontact injuries, synthetic turf injury rates were 27 percent higher than injury rates on natural grass. However, when examining noncontact knee, ankle and foot injuries, play on synthetic turf had a 56 percent higher rate of injuries resulting in any time loss and a 67 percent higher rate of injuries resulting in more than eight days of time loss. The greatest difference in noncontact injury rates between synthetic and natural turf were to the ankle: synthetic turf resulted in a 68 percent higher rate of injuries resulting in any time loss and a 103 percent higher rate of injuries resulting in more than eight days of time loss.



If all NFL games played on synthetic turf were played on natural grass during the study period,

**319 fewer**

lower body injuries would be expected.





In the NCAA research, there were a total of 3,009,205 athlete exposures and 2,460 knee ligament and meniscal tears reported by the NCAA Injury Surveillance System throughout the 2004-2005 to 2013-2014 NCAA playing seasons. Injury rates for all knee ligament and meniscal tears examined during this period were higher during competitions than in practices. Analysis of this data indicate a significantly increased rate of posterior cruciate ligament (PCL) and anterior cruciate ligament (ACL) on artificial turf compared to natural grass during competitive events. Although, there were no differences in the rate of medial collateral ligament (MCL), medial meniscal, or lateral meniscal injuries.

Specifically, athletes in Division I competitions experienced PCL tears at 2.99 times the rate on artificial turf (199 percent increase) as they did on natural grass. Division II and III athletes experience ACL tears at 1.63 times the rate of those playing on natural grass and 3.13 times the number of PCL tears as those playing on natural grass. This equates to a 63 percent increase in ACL tears and a 213 percent increase in PCL tears to Division II and III football players on artificial turf. Furthermore, the rate of PCL tears during competition in all divisions on artificial turf was 2.94 times higher (194 percent increase) than on natural grass.

The research and scientific communities will undoubtedly continue to investigate injuries among athletes, causal mechanisms, relationships between cleats and playing surfaces, and more. More information on each of these two studies can be found in the original research manuscripts at the citations to the right. You can also visit [www.TurfGrassSod.org/Resources](http://www.TurfGrassSod.org/Resources).



## Citations:

Hershman E, Anderson R, Bergfeld J, et al. An analysis of specific lower extremity injury rates on grass and FieldTurf playing surfaces in National Football League games. *The American Journal of Sports Medicine*. 2012; 40(10):2200-2205.

Kerr Z, Dompier T, Snook E, et al. National Collegiate Athletic Association Injury Surveillance System: review of methods for 2004-2005 through 2013-2014 data collection. *J Athl Train*. 2014;49(4):552-560.

Loughran, Galvin J., Vulpis, Christian T., Murphy, Jordan P., Weiner, David A., Svoboda, Steven J. Hinton, Richard Y., and Dave P. Milzman. Incidence of Knee Injuries on Artificial Turf Versus Natural Grass in National Collegiate Athletic Association American Football: 2004-2005 Through 2013-2014 Seasons. *The American Journal of Sports Medicine* 2019;47(6):1294-1301.

Mack C, Hershman E, Anderson R, et al. Higher rates of lower extremity injury on synthetic turf compared with natural turf among National Football League athletes: epidemiologic confirmation of a biomechanical hypothesis. *The American Journal of Sports Medicine*. 2019;47(1):189-196.

Casey Reynolds, PhD is executive director of Turfgrass Producers International.

Photos that appear in this article are stock images, used with permission. The graphics that appear in this article were provided by TPI and are part of TPI brochures based on the results of the NFL and NCAA case studies cited in the article. The brochures, "NFL Injury Rates Research" and "NCAA Injury Rates Research" are available on the TPI website: [www.TurfGrassSod.org/Resources](http://www.TurfGrassSod.org/Resources).



# INJURY STUDY DATA SUMMARIZED IN BROCHURES ON THE TPI WEBSITE

Two papers that have been recently published in the *American Journal of Sports Medicine* focus on injury data analysis from the National Football League (NFL) and the National Collegiate Athletic Association (NCAA) which compare player injuries that occurred on synthetic turf to those that occurred on natural grass.

Turfgrass Producers International (TPI) has created two brochures that summarize the results of the NFL and NCAA case studies cited in the article starting on page 93 of this issue of *TurfNews*.

These two brochures, “NFL Injury Rates Research” and “NCAA Injury Rates Research” are available to all—free of charge—on the TPI website. To download one or both of these brochures, visit [www.TurfGrassSod.org/Resources](http://www.TurfGrassSod.org/Resources).



## Incidence of Knee Injuries on Artificial Turf Versus Natural Grass in National Collegiate Athletic Association American Football: 2004-2005 Through 2013-2014 Seasons

*Published in the American Journal of Sports Medicine, 2019*

### Overview

As knee injuries continue to be one of the most common injuries among football players, researchers set out to learn if playing surface makes a difference. From collecting and analyzing National Collegiate Athletic Association (NCAA) Injury Surveillance Systems (ISS) data from 2004 to 2014, researchers found that athletes in all divisions experienced posterior cruciate ligament (PCL) injury rates nearly 3 times higher on synthetic turf than on natural grass. Lower NCAA divisions also showed 63% higher rates of anterior cruciate ligament (ACL) injuries during competitions on synthetic turf than on natural grass. The researchers' findings support that there is a difference between synthetic turf and natural grass in the rate of specific knee ligament injuries, making artificial turf an important risk factor for certain injuries in NCAA football.

### Background and Method

Knee injuries account for more than 30% of all lower-body injuries in NCAA football. Previous research demonstrates that synthetic turf is unable to easily release players' cleats in potential injurious situations; in contrast, natural grass can shear, divot and allow cleats to slide, resulting in reduced force and stress on players' lower bodies, particularly the knee. A 2013 research study found that ACL injuries in NCAA football from 2004 to 2009 were 1.39 times higher on synthetic turf than on natural grass. Data for this

study came from the NCAA Injury Surveillance System Men's Football Injury and Exposure Data Sets for the 2004-2005 through 2013-2014 seasons. Injury rates for anterior cruciate ligament (ACL), posterior cruciate ligament (PCL), medial collateral ligament (MCL), medial meniscus, and lateral meniscal injuries were calculated per 10,000 athlete exposures. Rate ratios (RRs) were calculated for injury rates on artificial turf and natural grass and were analyzed by event type (competition and practice) and NCAA division (I, II and III).

### Findings

A total of **3,009,205** athlete exposures and **2,460** knee injuries were reported from **2004 to 2014**.

Athletes in all NCAA football divisions experienced PCL injury rates **194%** higher on artificial turf than on natural grass.

Athletes in Division I competitions experienced **199% higher** PCL injury rates on artificial turf than on natural grass.

Athletes in Division II and III competitions experienced **213% higher** PCL injury rates on artificial turf than on natural grass.

Athletes in Division II and III competitions experienced **63% higher** ACL injury rates on artificial turf than on natural grass.

### Acknowledgments

The title of this research study is Incidence of Knee Injuries on Artificial Turf Versus Natural Grass in National Collegiate Athletic Association American Football: 2004-2005 Through 2013-2014 Seasons. Investigation performed at Georgetown University School of Medicine, Washington, D.C., USA. The authors are as follows: Galvin J. Loughran, BS, Christian T. Vulpis, BS, Jordan P. Murphy, MS, David A. Weiner, MD, Steven J. Svoboda, MD, Richard Y. Hinton, MD, MPH, PT, and Dave P. Milzman, MD. This study appears in *The American Journal of Sports Medicine*, 2019;47(6): 1294-1301, DOI: 10.1177/0363546519833925.





# Higher Rates of Lower Extremity Injury on Synthetic Turf Compared with Natural Turf Among National Football League Athletes

Published in the American Journal of Sports Medicine, 2019

## Overview

Football is a strenuous sport for athletes. Researchers set out to test the hypothesis that playing on synthetic turf leads to an increased risk of lower body injury. Their hypothesis was informed by previous research showing a difference between synthetic turf and natural grass in releasing a cleat before reaching a potentially injurious overload situation. From collecting and analyzing injury report data from the NFL between 2012 and 2016, researchers deduced that if all NFL games played on synthetic turf were played on natural grass during the study period, 319 fewer lower body injuries would be expected. When examining noncontact knee, ankle and foot injuries, play on synthetic turf had a 56 percent higher rate of injuries resulting in any time loss and a 67 percent higher rate of injuries resulting in more than eight days of time loss. The increased risk of ankle/foot injuries on synthetic turf was greatest among the three types of injuries examined with a 68% increase in ankle/foot injuries resulting in any time loss and a 103% increase in injuries resulting in more than eight days of time loss. These findings support the hypothesis that playing on synthetic turf increases the risk of lower body injury.

## Background and Method

Previous research has revealed that football cleats interact differently on synthetic turf and natural grass, which may lead to a different risk of injury. Divots—when a cleat creates a hole in the field—signal that the grass has absorbed force from the cleat and released the cleat back again, rather than capturing the cleat and releasing the force through a players' foot, ankle or knee, which could cause injury. Since

cleats can easily create divots on natural grass and not on synthetic turf, less force is placed on the lower body, which may help prevent injury.

Data for this study came from the analysis of all 1,280 NFL regular season games played from 2012 through 2016, 555 of which were on synthetic turf and 725 on natural grass.

- **All 32 NFL teams report injuries** through a robust, unbiased electronic health record system. Each injury report gives full details of the injury and circumstance, such as the contact, impact, activity, time lost, game-day weather, and surface type and conditions.
- The researchers also examined the rates of contact-related injuries and noncontact-related injuries, **since noncontact injuries are more likely to be related to the playing surface.**
- **Incidence Rate Ratios (IRR)** were calculated to determine the exact amount of exposure to injury players may have in each game.



A total of  
**4,801**  
lower body injuries occurred  
from 2012 to 2016 affecting  
**2,032**  
players.



If all NFL games played  
on synthetic turf were  
played on natural grass  
during the study period,  
**319 fewer**  
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Play on synthetic turf had a  
**16% higher rate**  
of lower body injuries than on  
natural grass. This included  
contact and non-contact  
injuries that resulted in any  
time loss.

Downloadable Brochures Available to TPI Members and the Public





# RAZORBACKS RETURN TO NATURAL GRASS

By Stacie Zinn Roberts



**“Natural grass is more forgiving on the body. There are more injuries to ankles and lower extremities on synthetic turf.” Pat Berger**

*Editor's note: This article originally appeared in the July 2019 issue of SportsTurf magazine.*

It's not every day that a sod farm gets a call from a football fan asking if he can bring his hog to roll around in their turf fields. But that's just what happened to Bobby Winstead when it was announced that the University of Arkansas' Donald W. Reynolds Razorback Stadium, (the team mascot is a razorback hog), would be converting from synthetic turf back to natural grass. Once word got out that Winstead Turf Farms, located near Memphis, was growing the sod for the stadium's renovation, the phone started to ring. Winstead, president of Winstead Turf Farms, respectfully declined the hog's frolic in the grass.

Apparently, Razorback fans are pretty excited about the change. And they're not alone. Indeed, interest is so high in the Razorback stadium field's renovation to natural grass that the University of Arkansas created a mini-website dedicated to tracking the conversion process. The site features a timeline, and videos to watch the removal of the synthetic surface, as well as a time-lapse camera that allows fans to quite literally watch the Tahoma 31 bermudagrass grow at the sod farm. Visit <https://arkansasrazorbacks.com/naturalgrass/> to check it out for yourself.

## A Brief History

Pat Berger, CGCS, Director of Sports Turf Operations for the past 18 years at Arkansas, says this renovation marks the fourth time the field at Razorbacks stadium has flip-flopped between natural grass and synthetic turf.

- From 1938 to 1968: Razorbacks stadium was built with a natural grass field. It remained that way for 30 years.
- From 1968 to 1994: Berger says the team played on an early form of AstroTurf.
- From 1995 to 2009: In this time period, the Razorbacks played on Tifway 419 bermudagrass. Eventually, Berger changed the field over to a seeded variety, Riviera bermudagrass. Berger says he liked the Riviera for the flexibility of throwing out more seed when needed, but that the Riviera struggled in the stadium's shade and cold, and winter desiccation was an issue.
- For the 2010 season: The then-new head coach preferred synthetic turf, and the field was renovated again, back to an artificial surface.
- 2019: The field returns to natural grass, with a cold tolerant, drought resistant Tahoma 31 bermudagrass as the surface.

## Why Natural Grass

When new Head Coach Chad Morris joined the Razorbacks in December 2017, he wasn't shy about his preference for natural grass over synthetic. A few months later in March 2018, he told the *Arkansas Democrat-Gazette*, "I'm a natural grass type of guy. I love being on a grass field. There's nothing better than that in college football, or football period."

According to Berger, the shelf life of a synthetic field is generally an 8- to 10-year period. With the artificial surface aging out, a decision had to be made regarding a renovation. Berger researched the pros and cons of installing a new synthetic field vs. putting in a new natural grass field. He consulted with Dr. Doug Karcher and Dr. Mike Richardson, turfgrass scientists on staff at the University of Arkansas, to get their feedback on possible natural turf varieties. He created a presentation filled with applicable information to help Athletic Director Hunter Yurachek, Coach Morris and University elite make an informed decision.

Among the information provided were the advantages and disadvantages of natural grass vs. synthetic turf:

### Natural grass advantages and disadvantages

- Perceived Safer
- Cooler Playing Surface
- Environmentally Friendly
- Cultivar with Cold Tolerance needed
- Fertilizer/Pesticides
- Water Usage-Plants
- More Maintenance/Cultivation
- Less adaptive to outside events
- Cold Temp Discoloration - overseeding or painting needed

### Synthetic turf advantages and disadvantages

- Perceived less safe
- Weekly Light Maintenance
- Warmer Surface
- Biochemical Apps
- Water Usage-Stability and Flushing
- Multi-functional Surface
- Care taken in disposal
- Color Resistant to Weather
- Cold Tolerant

Berger expanded on the list, saying several factors played a role in the decision to convert to natural grass. Heat tests Berger conducted on the synthetic field yielded temperatures "up to 165 to 175 degrees" in the heat of the day which "takes the legs out of a player." And, Berger adds, "The coaches get more players who would rather play on natural grass than synthetic." Player safety was a consideration. "Natural grass is more



Pat Berger, CGCS, Director of Sports Turf Operations for the past 18 years at Arkansas.

forgiving on the body," Berger says. "There are more injuries to ankles and lower extremities on synthetic turf."

A study published in January of this year in the *American Journal of Sports Medicine* titled "Higher Rates of Lower Extremity Injury on Synthetic Turf Compared With Natural Turf Among National Football League Athletes: Epidemiologic Confirmation of a

Biomechanical Hypothesis" confirms this: "Biomechanical studies have shown that synthetic turf surfaces do not release cleats as readily as natural turf, and it has been hypothesized that concomitant increased loading on the foot contributes to the incidence of lower body injuries."

Even equipment costs were considered in the decision. Berger says although the stadium had been artificial turf for a decade, the University still owns turfgrass maintenance equipment used for other grass surface sports such as baseball and softball. Therefore, buying new equipment was not an issue.

The Razorbacks' record also tells a story. "We were a better team on natural grass than we are on synthetic," Berger says. "I'm happy we're going back. The AD and the coach and the people of Arkansas are overwhelmingly excited about going back to natural grass."

## Why Tahoma 31

With Coach Morris, the self-proclaimed natural grass guy, the verdict to replace the plastic surface with natural grass came as no surprise to Razorback fans. The selection of Tahoma 31 bermudagrass came, in no small measure, on the enthusiastic recommendations of Drs. Karcher and Richardson, which were based on the results of the National Turfgrass Evaluation Program (NTEP) studies in cold and drought tolerance, as well as the wear-tolerance research conducted by Dr. John Soroachan at the University of Tennessee that showed the variety's exceptional wear tolerance. In fact, Berger included only this one natural grass variety in his presentation to Yurachek and Morris.

Dr. Karcher, a professor of turfgrass science at the University of Arkansas for nearly 20 years, recalls, "I started hearing rumors in late winter or early spring 2018 that our new coach, Chad Morris, was interested in going to natural grass. The artificial turf was coming up on 10



years, was out of warranty, and needed to be replaced anyway. When I heard this, I started communicating with Pat Berger about what some natural grass options would be for Razorback Stadium.”

The University of Arkansas served as one of the test sites in the most recent five-year NTEP study of bermudagrass varieties. Karcher compared all the latest cultivars, side-by-side, right there on the same campus and in the same climate as the stadium.

“I shared our information on how Tahoma 31 performed in our trials. I told Pat it would be a good variety,” Karcher says. “It’s safe to say that Pat was a little hesitant about it because it was so new when we started discussing it, and he couldn’t talk to anybody who had been using it at the time (on a sports field). But Dr. Richardson and I thought the data were so compelling, that it looked so good and was so well adapted to northwest Arkansas, that it should be a slam dunk decision.”

Karcher continues, “We had five years of really strong data on that grass being managed at a mowing height of less than an inch. It just performed really well year after year, not only with regard to cold tolerance but just its density, color and overall quality of a high-end, dense turf and its potential for a golf course fairway or a high-end athletic field.”

Tahoma 31 was developed by turfgrass breeders led by Dr. Yanqi Wu at Oklahoma State University.

“I have to tip my hat to the Oklahoma State breeding program, continuing to develop these excellent cold tolerant bermudagrasses with excellent turf quality. They are doing a really good job over there of developing cold tolerant bermudagrass varieties for a wide range of uses,” Karcher says.

## Finding a Source

The next step was to find a source for the new grass. It’s only 350 miles from Winstead Turf Farms’ location in Arlington, TN, to the Arkansas campus in Fayetteville, roughly a five-hour drive. Berger says the farm’s nearby location was important to save on trucking costs and to get sod in a hurry, should the need for emergency patching arise. “Most sod producers are a good two days out,” Berger says.

If Berger needs more sod, he’ll be able to get it at practically a moment’s notice. The team at Winstead Turf Farms is growing sod earmarked specifically for the University.

“One thing we are doing for insurance,” says Winstead, “is we know we only need 75,000 square feet of Tahoma 31 sod for the job, but we are planting about 175,000 square feet for future applications. If they have a concert or something like that, where they need to do some replacement, we’ll always have replacement grass, maintained just like they do at the stadium.”

Not only is this the first college stadium to plant Tahoma 31, the way it is being grown on the sod farm field is also a first for the United States. Over top of the sand profile, the grass roots grow into and through the mesh of a product called the Evergreen Turf Matrix. It’s a system developed in Australia and used widely in that country for soccer and cricket fields.

“The Evergreen Turf Matrix system is a sand-based profile that includes an interwoven mesh; this, combined with the root system of the turf, gives it maximum strength and stability without compromising drainage or any general turf management practices,” explains Robert Davey, managing director of Evergreen Turf Australia. “It is a ready-play system that allows a quick changeover on a sports field.”

The ready play stabilizing effect of the Evergreen Turf Matrix should assist with the short interval between installation of the grass and when the Razorbacks take to the field for the first time. The grass is slated for delivery sometime in late July or early August, with the intention of giving it at least 2 weeks to acclimate to the stadium before the team’s first game of the season at the end of August.

## Renovation Details

At the last renovation a decade ago, Berger believed that eventually the field would be converted back to natural grass. So, instead of gutting the entire sand profile, he left a little gift for the next sports turf manager to come along. Rather than core out the entire field, he left approximately 3 inches of the USGA rootzone sand mix intact “for the next guy,” never guessing that the next guy would be himself.

To construct the new field, Berger enlisted the expertise of Jeff Salmond, CSFM, former STMA President who worked for the University of Oklahoma for 12 years. Salmond now serves as Vice President of Projects and Corporate Development for United Turf and Track, a sports field construction company based in Arcadia, OK. Berger entrusted Salmond and his crew to strip off the artificial turf surface and ready the field to accept natural grass.



When synthetic was put in 10 years ago, Berger left approximately 3 inches of the USGA rootzone sand mix intact “for the next guy,” never guessing that the next guy would be him.



"Our job at United Turf and Track is to remove the gravel layer down to the base of the original rootzone, install irrigation, and reinstall the new sand rootzone," Salmond says.

How much gravel was there underneath the artificial turf? "A lot," Salmond says, laughing. To remove the eight-inch thick layer of gravel, Salmond and his crew "hailed out about 150 truckloads with 25 tons per truck." The process took seven days.

"It was a very delicate process. We had to protect the gravel from being pushed through the fabric into the rootzone sand," Salmond explains. "This was accomplished with expert operators on excavator machines. You had to use your brain quite a bit with the machine to be able to slow mop off, (I call it mopping because our guys have experience on oil fields of mopping up a site and getting it ready for construction). We had to use a mop, so to speak, with the excavator to mop the gravel off of the fabric. With the gravel removed, we will take the fabric off, then we'll install the irrigation system and create a homogenous rootzone that will be 12 inches thick before the sod gets laid on top."

From there, Winstead Turf Farms will begin the process of harvesting the big roll sod and packing it into refrigerated trucks for the journey to Fayetteville. Harvesting will begin around midnight the night before so that it may be delivered the next morning before the heat of the day. Each big roll consists of 100 square feet of sod. With the rootzone firmly grown into the Evergreen Turf Matrix mesh, each 1.5-inch-thick roll of sod weighs around 1,500 lbs. At 75,000 square feet needed, Winstead will harvest 750 big rolls of sod for the job. Winstead's plan is to have a crew at the farm harvesting, while a second crew at the stadium awaits the delivery, ready to lay the sod as soon as it arrives. As soon as the sod is laid, they'll turn the irrigation system on. It should take no more than three days to install the entire field.

When the Razorbacks take the field against Portland State for the 2019 season opener August 31, the teams will be the first to play on Tahoma 31 and the first US teams to play on the Evergreen Turf Matrix system.



Bobby Winstead (in pink shirt) and Pat Berger (in red shirt) join the Winstead Turf Farms installation crew for a photo on the natural grass.

To Salmond, going back to natural grass just makes sense. After all, Salmond says, "Arkansas is called 'The Natural State,' so they are going back to that for natural grass."



Pregame activities start the action on the new natural grass field.

Stacie Zinn Roberts frequently writes about sportsturf and is the founder of What's Your Avocado? Marketing and PR in Mount Vernon, WA.

Photos pages 98-100 courtesy of *SportsTurf*. Photos page 101 courtesy of Winstead Turf Farms.



## Turf News Follow-up:

### Passing All Tests

Arkansas Razorbacks football fans were more than a bit disappointed at the end of September with back-to-back losses and a 2-3 record. But fans of natural grass were raving! With four home games on the newly converted natural grass field completed, its stats were top notch, playing to perfection.

As Clay Henry reported on *wholehogsports.com* after the season opener, Pat Berger, CGCS, Director of Sports Turf Operations at Arkansas, gave the new field at Reynolds Razorback Stadium a "green thumbs up." He stated, "It did great. This was our first big test: three times in less than 24 hours." Henry noted Berger was referencing practices on Friday by both teams, then the game. And Henry reported—and Berger confirmed—no divots were visible after the game.

Bobby Winstead, president of Winstead Turf Farms, is the sod producer who supplied the natural grass, Tahoma 31 Bermudagrass custom-grown for the conversion on the Evergreen Turf Matrix system. Winstead says, "With all the sports fields using that system in Australia and the performance of Tahoma 31 in research trials, we knew the field would surpass expectations in performance—and it has. It's the lack of divots that's amazing. Even at field level or with eagle-eyes watching replays on TV, we're just not seeing them. And it's playing great!"

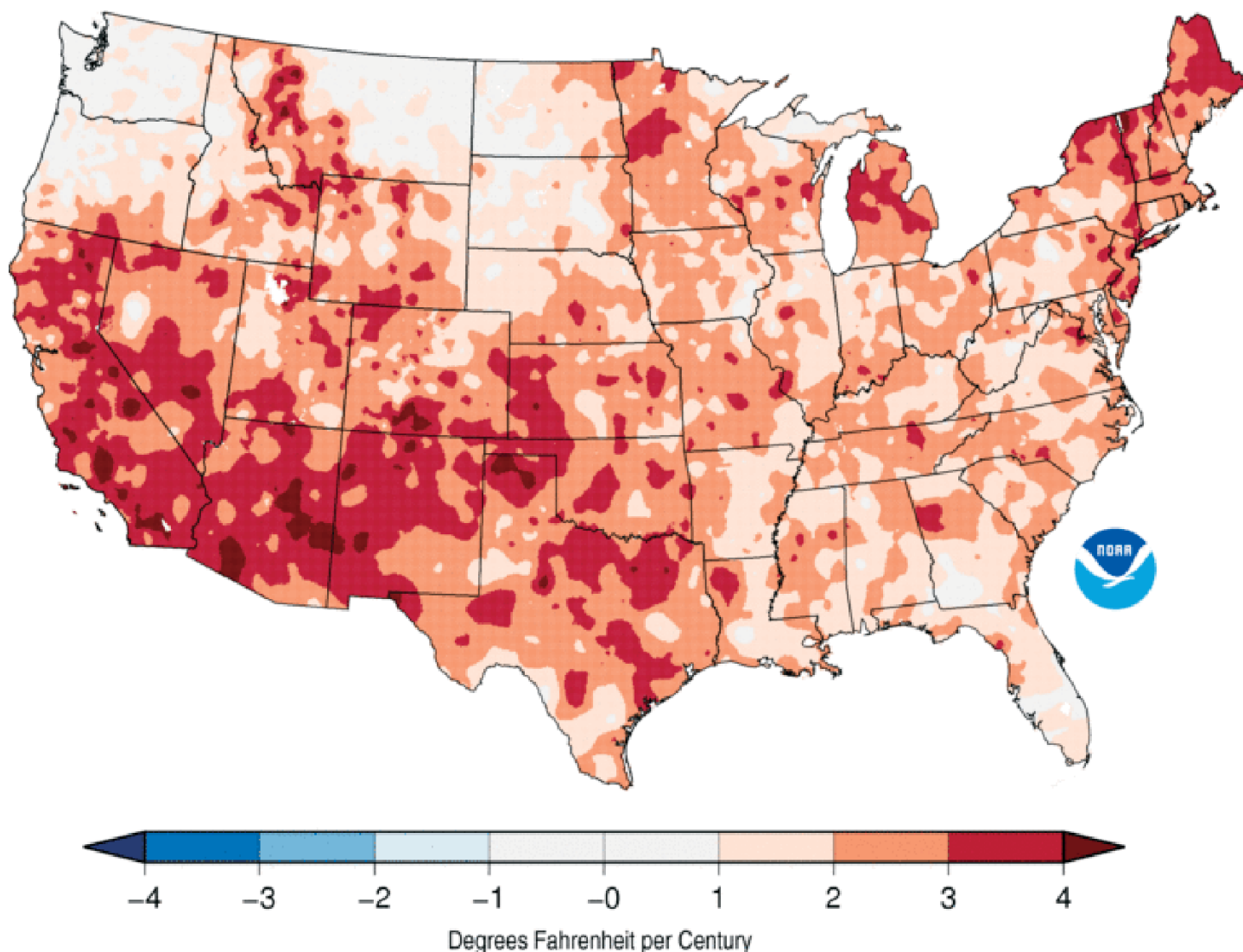
# TEMPERATURE CHANGES—AND TURFGRASS

By Jerry L. Hatfield, laboratory director and supervisory plant physiologist, for the National Laboratory for Agriculture and the Environment

*Editor's note: This is the third in a four-article series on Climate Change and Turfgrass by Jerry L. Hatfield. The first article, which appeared on pages 68-73 of the July/August 2019 issue of Turf News, provided a general overview of climate change. The second article covered precipitation changes and appeared on pages 58-62 of the September/October issue. The fourth article in the series will address the value of turfgrass systems in mitigating microclimates in urban areas.*

What we are experiencing with the climate is often referred to as global warming because the temperatures are increasing. Every month, if you listen to synopsis of the climate in the U.S. and around the world, we set records for this month being the warmest of all previous years for that specific month. What we have to understand is the changes in temperature reflect the dynamics of the atmosphere as we increase greenhouse gases and water vapor. These shifts in our climate have implications for the management of turfgrass.

## Average Temperature Trends Annual 1989–2018 (30 years)



Data Source: 5km Gridded Dataset (nClimGrid)

National Centers for  
Environmental Information

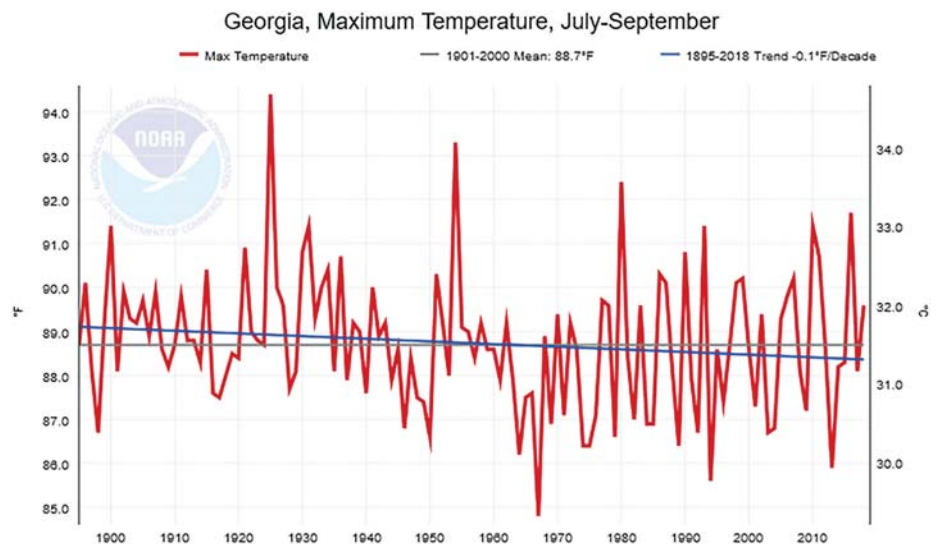
**Figure 1.** Average temperature trends across the contiguous United States in the last 30 years of observations compared to the record since 1895. Graph downloaded from NOAA National Centers for Environmental Information, Climate at a Glance: National Time Series, published September 2019, retrieved on September 17, 2019 from <https://www.ncdc.noaa.gov/cag/>



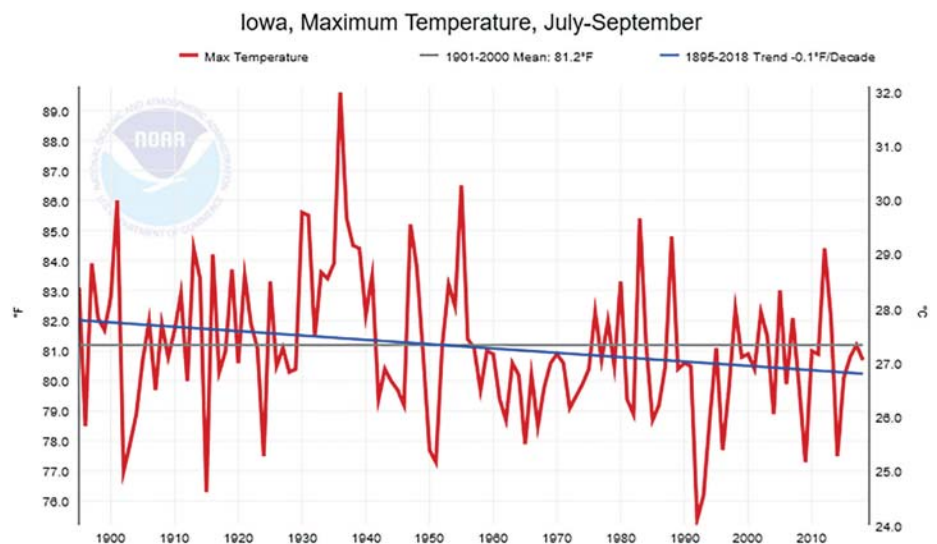
## Temperature Trends in the United States

There are a few basic aspects we need to understand about the dynamics of temperature across North America. First, temperatures are not changing uniformly across North America as shown in Figure 1. We would expect regional differences in temperature and the observed trends in the data show that to be a reality; however, it may be surprising to everyone that in areas of the U.S., the rate is three-to-four degrees Fahrenheit per century and in other areas, e.g., northwest and southeast, the temperature trends are very small. Regional variability is expected and when the data are shown for the U.S., the amount of variation among regions becomes evident.

In an earlier *Turf News* article, the reason for the increase in temperature as the levels of greenhouse gases in the atmosphere increase, showed how the atmosphere is able to trap more energy causing the temperatures to increase. The analogy is how quickly a car gets hot during the summer because the sunshine penetrates the glass, but the warm air that is caused by the sunshine is not able to escape, thus increasing the temperature. In fact, nine of the ten deadliest worldwide heat waves have occurred since 2000, just a fact that shows how much we have changed temperatures around the world and the potential impact on humans and all biological systems.



**Figure 2.** Trends in the maximum temperature for the summer period (July-September) for Georgia. Downloaded from NOAA National Centers for Environmental Information, Climate at a Glance: National Time Series, published September 2019, retrieved on September 17, 2019 from <https://www.ncdc.noaa.gov/cag/>



**Figure 3.** Trends in the maximum temperature for the summer period (July-September) for Iowa. Downloaded from NOAA National Centers for Environmental Information, Climate at a Glance: National Time Series, published September 2019, retrieved on September 17, 2019 from <https://www.ncdc.noaa.gov/cag/>

## Differences between Maximum and Minimum Temperature Trends

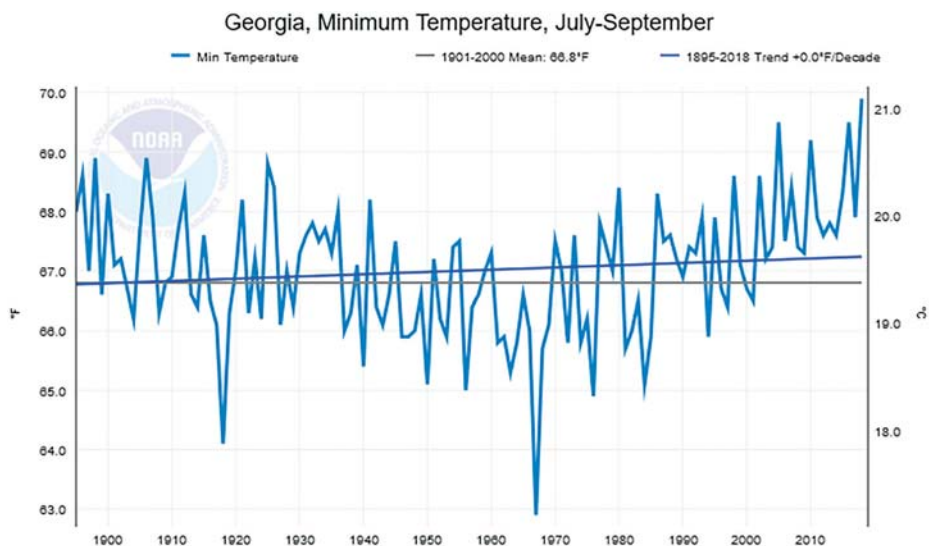
An important part of the changing temperature regime is the unequal pattern in the temperature changes. The expectation when we talk about temperature increases is that both the maximum and minimum temperatures are increasing together. Changing temperatures show a trend in which the minimum temperatures are increasing more rapidly than the maximum temperatures. In reality, our temperatures are increasing because the maximum and minimum temperatures are showing less difference. Data on the average, maximum, and minimum temperatures are available for every state from <https://www.ncdc.noaa.gov/cag/statewide/time-series>. Shown here are examples for Georgia and Iowa (Summer, July-September). This site will allow you to download information for your specific state or county level so that you can examine a particular site of interest. It is recommended you use either Chrome or Firefox for the best results in searching and downloading data. In both Georgia and Iowa, summer maximum temperatures are showing a decline (Figures 2 and 3), i.e. the maximums actually are not as hot.



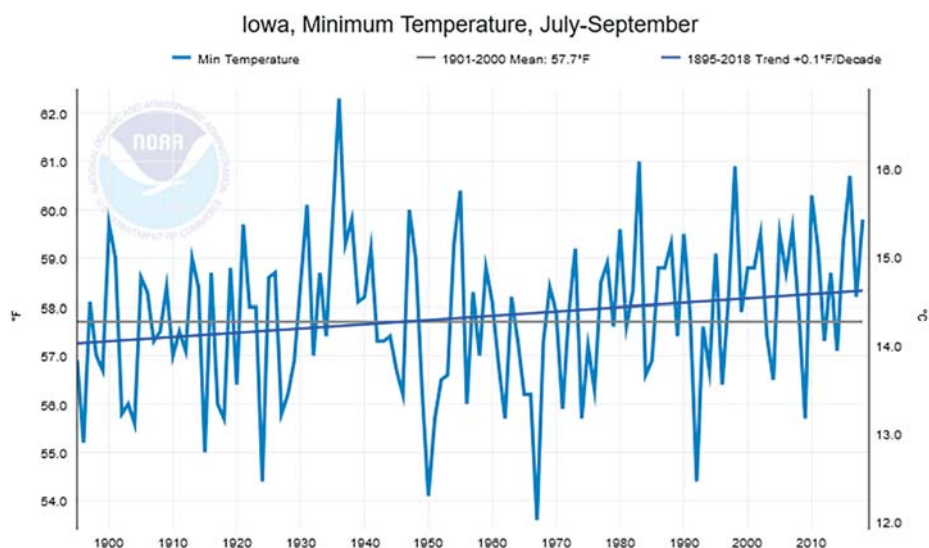
However, Figures 4 and 5 indicate that the minimum temperatures are showing an increase. Furthermore, if we look at the last 20 years alone, the increases in the minimum temperatures show an even larger increase. The data for the winter are not presented in this article but show that both maximum and minimum temperatures also are exhibiting an increase.

## Impacts of Temperature Changes on Turfgrass

Everyone knows about cool-season and warm-season grasses and the areas in which they are adapted. As the temperature increases, there are some potential responses. First, there will be a northward migration of warm-season grasses because of the overall warming trend. If we examine the plant hardiness zone map that was updated a few years ago, it shows a northward progression of the hardiness zones. That may not be the most significant impact because the warming winter temperatures will relieve some of the stress due to exposure to cool temperatures. However, the chances of extreme temperatures both in the cold and hot extremes will continue to expose grasses to conditions outside of their optimum range. Managers need to be prepared to manage around these extremes and the potential impacts on growth. Since a large majority of turfgrass is grown in urban environments, exposure to warmer temperatures is a reality because these environments will be warmer than areas where weather observations are made.



**Figure 4.** Trends in the minimum temperature for the summer period (July-September) for Georgia. Downloaded from NOAA National Centers for Environmental Information, Climate at a Glance: National Time Series, published September 2019, retrieved on September 17, 2019 from <https://www.ncdc.noaa.gov/cag/>



**Figure 5.** Trends in the minimum temperature for the summer period (July-September) for Iowa. Downloaded from NOAA National Centers for Environmental Information, Climate at a Glance: National Time Series, published September 2019, retrieved on September 17, 2019 from <https://www.ncdc.noaa.gov/cag/>

One of the significant impacts on all plants is the increasing minimum temperatures. The higher nighttime temperatures increase the respiration rate and reduce the amount of carbohydrates the plant can store in roots and other structures. Grasses, like us, need cool temperatures to retain physiological function. When the nights are warm or hot, all biological systems experience a level of stress. In grain and fruit crops, exposure to high nighttime temperatures has a negative effect on the quality and quantity of the products. These impacts have yet to be fully understood on turfgrass; however, this knowledge could assist in improving management practices.

## Temperature and Water Use by Turfgrass

The forgotten aspect of climate change is that the humidity or water vapor content of the atmosphere is increasing. As the temperature increases, there is an increase in the amount of water vapor the atmosphere can hold which will increase the rate of transpiration by the grasses. One of the factors that will impact this response is the dynamic that maximum temperatures are not increasing, so during the day, the saturation vapor pressure will not dramatically change for the more humid areas of the U.S.

Water management in arid regions will become even more of a challenge with the increasing temperatures during the daytime because, in these regions, the humidity is not increasing and the atmospheric demand for water will continue to increase. For example, in Arizona, the maximum temperatures during the winter and spring are showing a large increase which will increase water use during these cooler seasons.

In the more humid parts of the U.S., water management will continue to be a challenge because of the reliance on precipitation as the water supply. This will become more variable especially in the summer months in these regions. The temperature changes will affect the water use rate by turfgrass and development of strategies to ensure that grasses have an adequate water supply to promote vigorous growth will still be needed.

## Temperature and Pest Management

As the temperatures increase and the humidity levels rise, there is the potential for conditions that will promote diseases. The warmer temperatures at night (minimum temperatures), coupled with higher humidity levels, create a microclimate favorable for the growth of certain turfgrass diseases. One aspect that will occur with the warmer temperatures is the potential for more dew on the leaves. Since many diseases require the presence of water, a change in the presence or duration of dew on leaves could create additional challenges in disease management.

The warmer temperatures will increase the number of life cycles for many insects. The increasing temperatures during the winter will increase the potential for survival of some pests. This has been shown for the Brown Marmorated Stink Bug by Erica Kistner-Thomas in our laboratory where she found that as the climate changes the range of this insect will expand northward through the U.S. and into Canada throughout the 21st century. The increasing temperatures will expand the range of a number of insects and the number of life cycles during the year. Insect management under a warmer and more

humid climate will be a challenge for turfgrass managers. We have tools that can begin to predict how insect and disease populations will change with a changing climate; however, these need to be more fully developed and made available to managers to assist with their decision process on management options.

## Temperature and Turfgrass

It is often assumed that temperature increases due to climate change will all be negative. One of our challenges will be to determine how changing temperatures impact turfgrass. The impacts will vary by location across the U.S. and provide opportunities and challenges on how turfgrass is managed. The awareness of the changes underway and the changes in the temperature dynamics, e.g., changing maximum and minimum temperatures, and increasing humidity levels, will help turfgrass managers be prepared for change.

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*The forgotten aspect of climate change is that the humidity or water vapor content of the atmosphere is increasing. As the temperature increases, there is an increase in the amount of water vapor the atmosphere can hold which will increase the rate of transpiration by the grasses.*

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Jerry L. Hatfield is laboratory director and supervisory plant physiologist for the National Laboratory for Agriculture and the Environment, which is in Ames, Iowa. He can be reached by email at [jerry.hatfield@usda.gov](mailto:jerry.hatfield@usda.gov).





# ASSOCIATION UPDATE

## ETP FARM TOUR 2019

*Article and photos provided by the European Turfgrass Producers Association (ETP) office*

On September 12-13, 2019, the European Turfgrass Producers Association (ETP) organized its Third ETP Farm Tour, this time held in Oslo, Norway. The previous two Farm Tours were held in the UK (2015) and Italy (2016). Taking advantage of the mild end of summer weather, 96 sod farmers and industry delegates from 20 European (and non-European) countries joined this event, which was a first of its kind for Norway.

The perfect organization of this Farm Tour was the work of Johnny Trandem, a former Board member of ETP, and his family and company, Østfold Gress AS.

In an intense two-day program, the participants saw and learned how turf is grown in Norway. There also was time to interact and network with each other, and to enjoy the atmosphere of stunningly beautiful Norway.

The center of the event was the Hotel Ullevaal Panorama, in Oslo, NO, next to the Ullevaal Stadion, home ground of the Norway national football team, and the site of the Norwegian Cup Final. As participants gathered and registered for the event, they could enjoy a welcome drink and food in the Stadium's meeting room; a first opportunity to catch up and network with friends and colleagues.

The welcome was followed by the ETP General Assembly, where the balance of the 2018 budget and the 2019 budget were approved. This was followed by the seminar session, with presentations from the invited speakers: Martin Bocksch (Deutscher Rollrasen Verband e.V.), Filippo Lulli (Turf Europe Srl), Morten Eirik Engelsjord (Floratine Norge) and John Riiber (Head Greenkeeper of the Oslo Golf Club). Albrecht Knigge, ETP President, also announced the 2020 Turf Expo, which will be held on September 10 – 11, 2020, at Pattensen, Germany.



Attendees next visited the Stadium pitch. Then the participants enjoyed a pleasant dinner and evening all together.





The next day was dedicated to the technical visits of the ETP Farm Tour. The first stop was at the sod farm Bærum Ferdigplen, a company with more than 20 years of experience that supplies sod throughout southern Norway.



The day's second stop was at the Oslo Golf Club, the oldest in Norway, with a kind and complete report presentation by John Riiber, Head Greenkeeper.

Before the last visit, the delegates stopped and had lunch at the Holmenkollen area, the world's biggest ski arena, where they could go on top and look around the whole Oslo area while enjoying the nice September weather.

At the last visit, ETP Sponsors: Barenbrug, Campey, DLF, TPI and Vanmac, each offered a five-minute presentation to the delegates in the Østfold Gress's hangar, elegantly organized to host the participants.

The Farm Tour was closed by an exquisite welcome and a pleasant outdoor visit in the Østfold Gress facilities, after which the participants were left to chill out and relax in Johnny's wonderful farmyard, with drinks and coffee, while caterers were preparing for the evening's barbecue dinner.



ETP wishes to thank everyone who attended the Farm Tour and the local organizers (Johnny Trandem and his family and company, Østfold Gress AS) for making this a most entertaining and informative event.

We hope to see you in September 2020 for ETP's Third Turf Show in Germany!

For more information on the European Turfgrass Producers Association and upcoming events, please visit the website <http://turfgrassproducers.eu>. The European Turfgrass Society has also announced their 2020 Conference, which will be held in Amsterdam (Netherlands) June 29-July 1, 2020. For details on that event, please visit the website: [https://www.turfgrasssociety.eu/ETSC\\_2020/](https://www.turfgrasssociety.eu/ETSC_2020/).



# Discover The Magic



By Suz Trusty and TPI Staff

Join TPI members from around the world for a magical experience at TPI's 2020 International Education Conference & Field Day in Orlando, Florida, February 17-20! Immerse yourself in excellent educational sessions and check out the latest and greatest products, equipment and services from TPI's great suppliers during the Indoor Exhibit sessions and at the Field Day. Help support The Lawn Institute with the optional Rootin' Tootin' Skeet Shootin' event on Monday. Relax and network with your friends and colleagues for the delightful "After Hours" Dessert Reception and help raise funds for The Lawn Institute with a series of raffle drawings and live auction items, including a Donkey Forklift! You'll even have multiple "photo ops" with Disney characters.

Conference Educational Sessions kick off on Tuesday morning with a motivational presentation by legendary NFL player Karl Mecklenburg, "Key Lessons from the Linebacker." These lessons were learned in the crucible of NFL competition and apply to any team or individual looking to accomplish their mission. Teamwork—with leadership being the ultimate expression of teamwork; Courage—the courage to try new things and the courage to be decisive; Dedication—hard work, constant learning, and refusing to quit; Desire—the dream, the passion, the mission; Honesty & Forgiveness—with yourself in self-evaluation and with others; and Goalsetting—the reasonable short term specific steps to success. Universal and unchanging, these key lessons will inspire and motivate your team to accomplish their goals.

Thursday morning begins with an equally inspiring educational session as TPI's Executive Director Casey Reynolds, PhD, addresses "#KeepItREAL: Natural Grass Research and Promotion." This ongoing outreach is taking the message of the benefits of natural grass to decision makers everywhere. TPI is actively and routinely engaged with regulatory agencies that want TO LIMIT TURFGRASS USE. While this often goes unseen, these behind-the-scenes battles have the potential to impact turfgrass producers world-wide.

Attendees in this session will learn about TPI's involvement in defending and promoting natural grass to the many agencies that wish to limit it.

To view the full Conference brochure or to Register Online visit the TPI website at [www.TurfGrassSod.org](http://www.TurfGrassSod.org). Or call 847-649-5555 for registration assistance.

LET THE MAGIC BEGIN!

## THE CONFERENCE PACKAGE INCLUDES:

- Access to All Educational Sessions
- President's Welcome Reception
- Tuesday Kickoff Breakfast
- Tuesday Lunch & Annual Business Meeting
- The Lawn Institute "After Hours" Dessert Reception with Disney Characters
- Field Day Registration & Transportation, including Breakfast and Lunch
- Thursday Inspirational Breakfast—All are Welcome to Join
- Thursday Lunch in the Exhibit Hall

## OPTIONAL TOUR ON MONDAY

- Visit the Florida Everglades for a Wild Adventure!
- Climb aboard a U.S. Coast Guard Certified Airboat
- Stroll through the Gator and Wildlife Park

## DISNEY WORLD TICKETS & VISITS

TPI guests who are registered at the Hilton Orlando Buena Vista Palace can purchase specially-priced Disney Tickets. Visit <https://mydisneygroup.com/tpi2020> to purchase your tickets. Tickets purchased from this site will be valid for use from February 10 – February 27—that's seven days before and seven days after the TPI Conference.

The Hilton Orlando Buena Vista Palace is a Disney-affiliated hotel and all guests who wish to include a theme park visit in their trip will have access to Disney's Extra Magic Hours and FastPass Service and access to dedicated buses serving the Disney theme parks.

Suz Trusty is co-editor of *Turf News*.





# TPI 2020

INTERNATIONAL EDUCATION CONFERENCE & FIELD DAY

Discover the Magic.



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Visit [www.TurfGrassSod.org](http://www.TurfGrassSod.org) for more information



Host Farm





# NEW BROCHURE NOW AVAILABLE ON THE NEW TPI WEBSITE

A new brochure titled *Turfgrass Installation for New Sod* is now available on the NEW TPI website [www.TurfGrassSod.org](http://www.TurfGrassSod.org)!

It can be found in the Online Store for TPI Members Only! By clicking on the Member-Login on the top right of any landing page, TPI members can enter the online store where they can download TPI member-only brochures, register for TPI conferences, purchase TPI gear, and more!

## Not a TPI Member? Join Today!

Take advantage of all the Members-Only brochures in the Online Store and the many other resources TPI offers.



## TURFGRASS INSTALLATION FOR NEW SOD

2019

Proper planting techniques are the first step in ensuring success with any new lawn. A little bit of extra care in soil preparation can produce lawns that are healthier, more deeply-rooted, and more drought tolerant for years to come. This guide contains helpful tips on how to properly install sod so that your new lawn remains healthy and ready to enjoy!



[TheLawnInstitute.org](http://TheLawnInstitute.org)

### TIPS FOR SUCCESSFUL INSTALLATION

- Soil tests are the most accurate and reliable way to determine soil nutrient status and pH when tilling in nutrients or other amendments prior to sodding.
- Soil tests often take several days or weeks to be processed so conduct any necessary sampling and testing far enough ahead of time to receive the results from the lab prior to tillage or other soil preparation.
- Tilling in soil amendments is the most effective way to ensure that sod has adequate rooting depth to maximize drought tolerance and survival during prolonged drought.
- Lay sod in a staggered, brick-like fashion perpendicular to slopes.
- In hot weather, protect unladen pallets of sod by placing them in the shade until planting.
- Water multiple times per day to keep the newly laid sod moist until it is firmly rooted, which usually occurs in 1-2 two weeks. Refer to the TPI manual *Turfgrass Watering & Care for NEW SOD* for more tips on how to properly irrigate newly laid sod.
- Avoid heavy use of the sod until it has firmly rooted and has been mowed 2-3 times.
- Preventative fungicides are extremely valuable when laying Tall fescue, Kentucky bluegrass, or other cool-season species of turfgrass during periods of hot weather.
- Last but not least when laying new sod, be sure to remember Green Side Up!

For more information on how to care for newly laid sod after establishment, please check out The Lawn Institute website at [www.TheLawnInstitute.org](http://www.TheLawnInstitute.org).



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# HAPPENINGS

## Dad and Son Face Off for Football

Laurie Griffen posted the photo below on her Facebook page, along with this note, “Fun way to start Will’s Sr. Year – showing his father a few moves during the annual Sprint Football Alumni game.” Will Griffen is a senior at Cornell University, the alma mater of both Steve and Laurie, co-owners of Saratoga Sod Farm, Inc., Stillwater, NY.



That post prompted a phone call to Laurie for more details. Laurie says, “Sprint football is a varsity sport, with all the standard football regulations, except the players need to weigh in like they do in wrestling. The weigh ins are four days and then two days before the game and players must meet the weight limit of 178 pounds or less. It’s a fun alternative to heavyweight football for those who want to keep playing in college. It’s a faster game because all the players are closer to the same size. Steve played defensive end on the team during his college years in the mid-1980s when the weight limit was 158 pounds.” And Laurie reported another fun fact, Cornell’s current Collegiate Sprint Football League (CSFL) Head Coach, Terry Cullen, was the head coach when Steve played.

Laurie referred me to the Cornell University Big Red website, in their “about the sport” section, (link shown below) for some background. [https://cornellbigred.com/documents/2017/4/24/About\\_the\\_sport.pdf](https://cornellbigred.com/documents/2017/4/24/About_the_sport.pdf).

It reports, “Speed is the focus of the sport, rather than size. Players are fundamentally sound and provide fans with an exciting brand of textbook football. There are currently nine teams playing in the CSFL (Collegiate Sprint Football League). Army, Chestnut Hill College, Cornell University, Franklin Pierce University, Mansfield University, Navy, Pennsylvania University, Post University and Caldwell University play a full schedule of league games during the fall season.”

The website further explains, “Sprint football was created to provide the average-size college age student-athlete the opportunity to play football. Every student on campus is offered a legitimate tryout, regardless of their previous background. The sport attracts excellent student/athletes that would otherwise not have the opportunity to compete on the collegiate level due to size.”

Originally launched as a competition between teams fielded by Harvard and Yale to provide additional entertainment before their varsity game, Penn popularized the sport as “Football for All.” Eight lightweight teams competed in 1931. The early league began in 1934 as the 150-Pound Football League with four teams and a weight limit of 150 pounds. Cornell University joined the league in 1937.



In 1967, the name was changed to the Eastern Lightweight Football League and the weight limit was raised to 158 pounds. In 1998, the name was officially changed to the Collegiate Sprint Football League and the weight limit became 166 pounds. In





# HAPPENINGS

2005, the weight limit rose to 172 pounds, with the 2018 season marking the beginning of the 178-pound limit. Laurie says, “The weight change is good. Looking back, hitting that 158-pound weight limit was probably not one of the healthiest things to do.”



The Alumni Game is an annual event, played at the start of the season, pitting the current team against the returning alumni players. Laurie says, “Steve had never played in that before, but since it is Will’s senior year, he decided he’d suit up and play. Steve played more than he anticipated—and probably more than he wanted to—but he thought it was fun. He did have to admit he was a bit stiff the next week, though. So it fits that the alumni are affectionately called the fossils.”

Laurie adds, “It was a fun game to watch. Steve is a defensive guy; he plays as a defensive lineman. Will is on the offense, playing quarterback and running back, though primarily running back in this game. So, they were on the field at the same time, playing directly against each other. Will had a few moves that faked out Steve a bit, which I do have on video, but won’t share. I did share a scoreboard shot, with the final score 0 to 20—the old guys won!”



## NG Turf Intern Travels 6,000 Miles to Study Sod

*Editor’s note: This article by NG Turf initially appeared as an NG Turf Intern Spotlight in their weekly e-newsletter on September 12, 2019.*

For a second summer, Mert Sahin traveled 6,000 miles from his home in Turkey to work as an intern on the farm at NG Turf at the invitation of NG Turf Founder and President Aaron McWhorter. As an international business major in college, he’s excited about the opportunity to learn first-hand about the sod industry in the U.S. We thought you might enjoy reading about Mert’s experience in his own words.



# HAPPENINGS

## **How did you become interested in the turfgrass industry?**

My father started a sod business in Turkey 13 years ago. He is an agricultural engineer and worked at Dow Chemical in AgroSciences. After he retired from Dow, he started his own sod business. He has a farm background because he grew up in a small village with a big family, and my Grandpa was also a farmer.

## **Did you grow up working on the farm?**

Yes, almost every summer since the company started, I just go to the farm and help my dad, learning different things and trying to do my best in learning the sod business. For the last two years, I worked in the office as well, taking the orders and managing the deliveries.

## **What is your favorite part of the business?**

The production side is my favorite part of the business. I really like to work hard on something—you have to have more effort and more patience, then you get the final product. I really enjoy that you work really hard in all seasons.

## **How did you get involved with NG Turf?**

At Turfgrass Producers International (TPI), during the year there are two events, one in winter and one in summer. Our company is a member of TPI as a producer, so three years ago my dad and I attended TPI Field Day in New Jersey, and we met with Aaron and talked about the sod business. We talked about the differences between Turkey and the U.S.—how do you produce, what kind of turf do you produce. We just like to trade knowledge.

After the Field Day, I just wanted to get some experience, trying to learn the different style of growing, irrigation, and everything. Last year I came for my first visit for a month working here, volunteering just to get experience. This year I came here on June 19, and this week is the last week of my college internship (through August 23). I really appreciate that Aaron let me get experience and get involved with NG Turf.

## **What differences have you noticed in the industry?**

There are lots of differences when we compare Turkey and the U.S. The most significant one is in the U.S. there's lots of types of grass. In Turkey, the turf business is a growing industry, a new industry. Most producers in Turkey grow Fescue. When I came here, I learned a lot about Bermuda grass, Zoysia, different types of grass.

## **Are there differences in production?**

The U.S. has a different production side, different irrigation systems. It's really advanced technology, and more advanced turfgrass knowledge as well. In Turkey we mostly put pipes on the ground with spigots on each pipe. We do irrigation the hardest way because we have to get a crew of five to ten people to switch the pipes and turn the pump all the time. But there is a pivot system that is popular here, and you just need one person to do the irrigation. It's way easier and much cheaper than what we use in Turkey.

In the U.S., because there's lots of different types of turfgrass, they need different chemicals. In Turkey, in our sod farms, we grow mainly Tall Fescue, so we have a few chemicals that we use on our sod.

We have some common fertilizers, but here they use liquid nitrogen, and we use the solid rock nitrogen. The liquid one is much easier to mix with the water and put on the grass, much more beneficial than the type we use in Turkey.

## **Have you enjoyed your experience at NG Turf?**

Definitely! I really thank Aaron for the hospitality. I really enjoyed studying and working here. The first time I worked outside Turkey, I thought it would be really hard because it is a different language, different systems, different country, but when I got here, I really adapted easily. Aaron, Jutt and the crew working here really helped me get involved in the workplace, and I really learned a lot.

## **Had you been to the U.S. before?**

On my first trip to the U.S. when I was in high school, I attended the model United Nations, at Harvard University. We had a group of students, and we represented our school. My family also went to the West Coast, Portland and California.

After we met with Aaron at New Jersey for TPI that first year, we rented a car and almost every state on the East Coast we passed on the way to Georgia. After the internship, I will meet my family in Miami, and we will spend a week and a half on vacation in Miami, Orlando and Destin, and then we will come back for the Dove Shoot.

## **What is your major field of study?**

My department is International Business. In our college, our lessons are all in English—accounting, business, math. I have also second language, Russian. You have to work hard on language, but if you have an interest in learning different languages and enjoy it, it's really easy to achieve.

## **What are your plans after graduation?**

I actually haven't decided yet. I have two more years to finish college. I think my path will continue in the family business or I will go to work in the turf industry, but first my goal is to finish college as soon as possible. Then we'll see.





# TURF INDUSTRY NEWS

## OPEI Announces First Ever ANSI Standard for Robotic Lawn Mowers

The Outdoor Power Equipment Institute (OPEI) recently announced the first-ever standard for robotic, battery-powered, electrical lawn mowers issued by the American National Standards Institute (ANSI). Publication of the robotic lawn mower standard has been highly anticipated by the outdoor power equipment industry and start-ups designing products for the category.

"It is predicted that this market category will grow considerably in the next six years, as the outdoor power equipment industry continues to innovate and improve products in response to consumer needs," said Kris Kiser, president and CEO of OPEI. "Standards play an important role in everyday life and ensure that consumers know what they are getting when they purchase a product like a robotic mower."

The global robotic lawn mower market is expected to grow by nearly 22 percent over the next six years, according to a recent study conducted by Grand View Research, Inc.

## EPA Officially Repeals Obama Era WOTUS Rule

On September 12th, 2019, EPA Administrator Andrew Wheeler and Assistant Secretary of the Army for Civil Works Rickey R.D. James officially repealed the Obama Administration's rule defining the "Waters of the United States" under the Clean Water Act, during a press conference at the headquarters of the National Association of Manufacturers. In his opening statement, Administrator Wheeler announced that as part of President Trump's effort to eliminate extraneous regulations, the EPA and Army Core of Engineers are officially repealing the Obama Administration's rule defining "Waters of the United States" under the Clean Water Act. Administrator Wheeler explained that the 2015 rule had expanded the definition of Navigable Waters that could be regulated under the act to include isolated ponds and channels. In his view, this rule was a large federal overstep, and caused regulatory confusion for anyone trying to comply with the Clean Water Act. The 2015 rule was immediately challenged in court and left the U.S. in what the Administrator described as a "regulatory patchwork." He believes repealing this rule is the first step in correcting this regulatory confusion, the second step will be a new rule to define Navigable Waters which he hopes to have finalized by this winter. Administrator Wheeler promises that the new rule will clearly define federal and state authority over water pollution regulations and limit federal authority over private property. The administrator then signed the official repeal, along with Assistant Secretary James. Additional information is available at: <http://www.epa.gov/wotus-rule>.

## TurfMutt Foundation Launched by OPEI

The Outdoor Power Equipment Institute (OPEI) has announced the official launch of The TurfMutt Foundation, an organization that will further the mission of the TurfMutt environmental education and stewardship program launched ten years ago. The Foundation will continue to encourage outdoor learning experiences, stewardship of our green spaces, and care for all living landscapes for the benefit of all, and will likely expand into new areas in the next few years. The Foundation launch has a bittersweet beginning as its founding "spokesdog," Lucky the TurfMutt, a real-life rescue dog who "pawed it forward" by spending a decade educating children and families on taking care of our green spaces, passed away recently while at work at the TurfMutt Foundation office in Alexandria.

"TurfMutt got started thanks to a little black and white dog from Indianapolis who 13 years ago I rescued from an Indianapolis roadway," said OPEI's President and CEO, Kris Kiser. "He shot in front of my car on a freezing winter morning, cold and hungry, and we've been together ever since." Over the last ten years, environmental education lessons featuring Lucky were distributed to children in grades K-8 through partners Weekly Reader, Discovery Education, and Scholastic, the TurfMutt youth curriculum's current home. Lucky also was animated and "cartoonized" in videos and the program developed a robust online presence with *www.TurfMutt.com* and social media platforms.

Lucky's passing comes as the TurfMutt program marks its 10th anniversary year. The program's educational materials, available at *www.TurfMutt.com*, are free and support Science, Technology, Engineering and Math (STEM) standards. The TurfMutt environmental education program has reached 70 million students, teachers, and families since 2009. TurfMutt educational materials also can be found on the U.S. Green Building Council's Global Learning Lab, a national database offering environmental education curriculum to teachers. TurfMutt's focus on environmental stewardship and best practices for water use and landscape maintenance have been widely accepted, as evidenced by its listing as a resource by the U.S. Department of Education's Green Ribbon Schools, the U.S. Department of Energy, the U.S. Environmental Protection Agency, Green Apple, the Center for Green Schools, the Outdoors Alliance for Kids, the National Energy Education Development (NEED) project, Climate Change Live, Petfinder and the U.S. Fish and Wildlife Service. Lucky's story was featured in a 2018 National Geographic book, *Love Unleashed: Tales of Inspiration and the Life-Changing Power of Dogs*. Photos of Lucky appeared in the annual calendar published by the Wildlife Habitat Council for the last three years.

Here is a link to see a Tribute to Lucky on YouTube:

<https://www.youtube.com/watch?v=yDQpz53NOv0&feature=youtu.be>



# TURF INDUSTRY NEWS

## 2020 Non-Insured Crop Disaster Assistance Program

U.S. seed and sod producers wishing to participate in the Noninsured Crop Disaster Assistance Program (NAP) can check with their State Farm Service Agency (FSA) office for deadlines on applying for non-insured crop disaster assistance. According to the program fact sheet published by the Farm Service Agency (FSA), the Noninsured Crop Disaster Assistance Program (NAP) “provides financial assistance to producers of non-insurable crops to protect against natural disasters that result in lower yields or crop losses, or prevents crop planting.” Of the wide range and variety of crops covered under NAP, value loss crops including but not limited to Christmas trees, ornamental nursery crops, and TURFGRASS, are all crops eligible for coverage. The established coverage period for turfgrass is October 1, 2019—September 30, 2020.

The above was published in TPI's Industry Harvest. The full article can be found here: <https://www.turfgrassod.org/2020-non-insured-crop-disaster-assistance-program-nap/>

## Locus Agricultural Solutions® Receives Special Recognition

Locus Agricultural Solutions® (Locus AG) recently announced that it is a Certified B Corporation® (B Corp™). Administered by the non-profit B Lab, this certification means that Locus AG meets the highest standards of social and environmental performance, public transparency and legal accountability. This is the only certification that measures a company's entire social and environmental performance. The rigorous assessment reviewed how Locus AG's operations and business model impact its workers, community, environment and customers.

Locus AG, located in Solon, OH, joins such diverse companies such as Ben & Jerry's, Kickstarter and New Belgium Brewing in this designation that covers over 150 industries in 64 countries worldwide.

“We are incredibly proud to be a Certified B Corp, and based on our research, we believe we are the only ag input company across North America, Europe and Asia to have this certification,” said Andy Lefkowitz, the company's chairman. “Being a B Corp is a natural fit given that Locus AG is on a mission to help solve two global challenges: reversing climate change and sustainably increasing our food supply.”

## EPA Announces Review on Synergistic Effects of Pesticides in Registration Process

The EPA has announced the availability of, and is soliciting public comment on, an interim process it developed to address risk estimate uncertainties associated with U.S. patent assertions of greater than additive effects (GTA effects) in mixtures of pesticide active ingredients for controlling pests (often referred to as “synergy”). EPA developed a process to document, review and, if necessary, revise ecological risk estimates. The process has come under increased scrutiny and EPA is seeking public input. More information will be reported as it becomes available.

## NALP Names New CEO

The National Association of Landscape Professionals (NALP) announced that its board of directors has named Britt Wood to the position of chief executive officer. Wood brings more than 24 years of experience to the role in which he will oversee an association that represents 1 million landscape, lawn care, irrigation and tree care professionals across the country. He assumed his new role on October 7.

Prior to joining NALP, Wood spent more than two decades in trade association executive leadership roles, most recently as senior vice president of business development and industry relations for the Consumer Healthcare Products Association. Previously, Wood held positions with the International Foodservice Distributors Association, American Society of Civil Engineers, Loss Prevention Foundation and the Retail Industry Leaders Association.

Wood succeeds Carol Keeling, who served as interim CEO of NALP since February, following the departure of Sabeena Hickman, who led the organization for eleven years.

## Newest NTEP data on fine fescue is now online!

The National Turfgrass Evaluation Program (NTEP) announced in late September that the latest (2018) results of the Fineleaf Fescue Test are now available. They can be accessed at:

[https://www.ntep.org/ntep/reports/ff14/ff14\\_19-9/ff14\\_19-9.htm](https://www.ntep.org/ntep/reports/ff14/ff14_19-9/ff14_19-9.htm)

## Project EverGreen and SiteOne Team Up to Renovate Park

Project EverGreen, the national nonprofit devoted to creating a greener, healthier, cooler Earth; SiteOne Landscape Supply; City of Tucson Parks and Recreation Department; community residents and a talented group of dedicated landscape professionals teamed up on September 21 at the City of Tucson's Kennedy Park to give the community park a well-deserved sprucing up.

More than 100 volunteers including lawn and landscape professionals participating in SiteOne's 23rd Annual Women in the Green (WIGI) Conference, industry suppliers and local residents collaborated to deliver much needed repairs to the park's turf playing surfaces, playgrounds and infrastructure to restore it into a vibrant neighborhood hub where amateur athletes can safely compete, children can play on a cool surface and neighbors can gather and relax.

“The goal of the WIGI conference is to help women grow in the green industry, so we were thrilled to partner with Project EverGreen to extend their mission while allowing attendees to learn from one another and better the Tucson community,” says Amber Baker, conference organizer and division marketing manager, west, for SiteOne Landscape Supply.

Kennedy Park, one of more than 128 parks across Tucson, is a source of great pride for neighborhood residents. It serves as a connection point for new and old residents as they bond over community green spaces and other neighborhood activities, while promoting the health and environmental benefits that come with green spaces. Work completed in the park included upgrading the irrigation system, fertilizer application, painting and cleaning up desert and landscape debris.



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**FOR SALE:** Brillion SL-10 Grass Seeder, Excellent Condition, Stored Inside (Covered by Tarp), Battery operated Acre Counter, Precision consistent seed placement, Regular Vacuumed seed boxes after use to allow for free fall onto deflectors. Asking \$11,000

Contact: [richmond.sod@sympatico.ca](mailto:richmond.sod@sympatico.ca)

**FOR SALE:** Poyntz Sod Harvester, Custom built and engineered. Sold around the world. This machine is designed for safe and efficient operation. Based on a New Holland Tractor. 18-inch cut. Stored Indoors. Very good condition. Regular maintenance. Asking \$15,000

Contact: [richmond.sod@sympatico.ca](mailto:richmond.sod@sympatico.ca)

**FOR SALE:** Land Pride Mower, AMP 4016, All Flex Rotary Mower. 16-ft. width. Independent Deck Flotation, Easy to transport. Clean cut on turf grass. Very well maintained. Asking \$5,500

Contact: [richmond.sod@sympatico.ca](mailto:richmond.sod@sympatico.ca)

**FOR SALE:** Kesmac Self Propelled Double Smooth Roller, Heavy Duty Traction Drum gentle on turf, Honda GX 200 5.5 horsepower Motor, Hydraulic powered steering

Trailer Stored. Routine Maintenance. Asking \$8,500

Contact: [richmond.sod@sympatico.ca](mailto:richmond.sod@sympatico.ca)

**FOR SALE:** 1998 Princeton D50 truck mounting forklift, runs well and has 1989 hours, Duetz diesel engine, new hydraulic pump ready for work. Asking \$14,500 OBO

Contact: Matt at [mlee@cloverdalenurseries.com](mailto:mlee@cloverdalenurseries.com)

**FOR SALE:** New GKB Combinator 240H – 96" working width for complete turf removal down to a 2" depth or skin the surface to fraise mow. Switch to a straight blade for digging sprigs or verti-cutting option. 3,400 lbs. Used as demo unit during the summer TPI Field Day outside Minneapolis, MN. Lists for \$38,900 but TPI Special price of \$34,900 plus freight.

Contact Cliff at [cliff@stecequipment.com](mailto:cliff@stecequipment.com) or 864-225-3666

**FOR SALE:** Trilo Series S12 Large Area Sweeper Vacuum for grass collection. 20" folding wing width. Sweep up to 28 acres per/hr. Walking floor for easy unloading. Holds up to 16 cubic yards of material. 95-120 HP recommended. Asking \$86,000

Contact Cliff at [cliff@stecequipment.com](mailto:cliff@stecequipment.com)

**FOR SALE:** 1991 Brouwer Harvester I550 on a Ford 3930 4 k hours; machine is kept in barn and extensive parts inventory included in price. Asking \$9,000.

Contact: Keith at 215-595-5554

**FOR SALE:** 2002 24" Texas Sod Harvester. Everything works as it should, good machine with 2570.6 hours on the harvester. Video of the machine in operation is available for you to view. Asking \$15,000.

Call Todd at 507-383-2410 for more information or if you have any questions.

**FOR SALE:** 2011 John Deere Robomax 16" machine; Great working condition, has been kept in shed most of its life. 6,400 hours; hydraulic upgrades. Also, power roll and Euro-tray upgrades. Asking \$88,000.

Contact John at [jmpillow@cableone.net](mailto:jmpillow@cableone.net) or 662-571-2771

**EQUIPMENT WANTED:** Looking for a Brouwer autosteer assembly (entire assembly). We have a 1570 JD 2-wheel drive in desperate need of autosteer.

Please call 502-639-2526

**FOR SALE:** 2005 Trebro Harvestack: Ready to work; harvested sod this spring; harvests 24" rolls; set up for palletless; 2 additional sets of palletless forks included; located in Ontario: can arrange shipping; Current hours: 9,387; Asking \$41,500 USD.

Please contact Claus at 647-321-2004

or [claus@zandersod.com](mailto:claus@zandersod.com)

**FOR SALE:** Brouwer 1565 24" sod harvester. Mounted on John Deere 5210 2wd tractor. Has auto steer, hydraulic flap control and cross conveyor. Everything works very well, cuts 8 sq. ft. rolls. Has approximately 5950 hours. year of harvester unknown. Machine worked very well, updated to an automatic machine. Asking \$18,000 OBO.

Contact Jay at [jay@greenhorizonft.com](mailto:jay@greenhorizonft.com) or 360-713-4002

**FOR SALE:** Like new! 2018 Wessex STC 180 PTO Driven Vac with nylon brush rotor. 6' wide, located in OK, 74741. Asking \$10,500.

For more information contact Colton or Tim from Sales Midwest at 913-254-9560.

**FOR SALE:** Two (2) Progressive TDR30 Mower; 2016 & 2018 model years; 30' cutting width; Good working condition. Located in OK, 74741. Asking \$39,000/each

For more information contact Colton or Tim from Sales Midwest at 913-254-9560.

**FOR SALE:** Used Brouwer 24" Robomax Automated sod harvester; John Deere 6105M Tractor; Cuts 24" rolls, Hours: 4,065; Located in OK, 74741. Asking \$168,000.

For more information contact Colton or Tim from Sales Midwest at 913-254-9560.

**FOR SALE:** 2008 Trimax Pegasus Roller Mower; 20' cutting width; good condition; Located in TX 75488; Asking \$24,900

For more information contact Colton or Tim from Sales Midwest at 913-254-9560.

**FOR SALE:** 2015 Brouwer 1576 Harvester; cuts 18" mini rolls; auto steer, electric depth control, cross conveyor; in good condition – ready to go to work! Hours: 2,690; Located in OK, 74701. Asking \$44,500.

For more information contact Colton or Tim from Sales Midwest at 913-254-9560.

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# AD INDEX FOR NOVEMBER/DECEMBER **TURF NEWS** MAGAZINE

A-LIST .....	53	R&R Products, Inc. ....	71
Advanced Equipment .....	29, 117	Redexim North America/BLEC .....	111
Aqua Yield .....	80	STEC Equipment, Inc. ....	47
Brouwer Kesmac .....	3, 117	TAMANET (USA) .....	73
Cameron Financial .....	117	The Kershaw Law Group .....	57
First Products .....	54	The Lawn Institute .....	117
Jonathan Green & Sons, Inc. ....	42	Trebro Manufacturing, Inc. ....	88-89
KWMI .....	35, 117	Trilo .....	117
Landmark Turf & Native Seed .....	Back Cover	Trimax .....	83
Load Lifter .....	5	Turf Tick Products BV .....	Inside Back Cover
Magnum .....	Inside Front Cover, 10-11	Turfgrass Information Center .....	117
Progressive Turf Equipment, Inc. ....	67	Turfgrass Producers International .....	21, 77, 109, 117

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# TURF INDUSTRY CALENDAR

## NOVEMBER

### November 5

#### Turfgrass Producers of Texas Golf Classic

Bay City, TX

<https://texasgrass.com/event/tpt-annual-golf-tournament/>

### November 5 - 6

#### Georgia Sod Producers Field Day

Ft. Valley, GA

<https://urbanagcouncil.com/uac-georgia-sod-turf-producers-field-day/>

### November 10-13

#### ASA-CSSA-SSSA International Annual Meeting

San Antonio, TX

<https://www.acsmeetings.org/>

### November 17-20

#### Southeast Regional Sports Turf Conference & Trade Show

Myrtle Beach, SC

<https://www.eventbrite.com/e/southeast-regional-sports-turf-conference-trade-show-tickets-63661919515>

### November 18-20

#### Carolinas GCSA Conference and Show

Myrtle Beach, SC

<http://www.carolinagcsa.org/Education-Conference/Conference-and-Show>

### November 19-20

#### Oklahoma Turfgrass Conference and Trade Show

Owasso, OK

<http://www.otrf.net/events.html>

### November 19-21

#### Penn State Golf Turf Conference

State College, PA

<http://psuturf.com/conferences/gtc/>

### November 20

#### SC Sod Producers Association Annual Meeting

Myrtle Beach, SC

<http://scsod.org>

## DECEMBER

### December 2-5

#### OTF Conference & Show

Columbus, OH

<https://www.ohioturfgrass.org/otfshow>

### December 2-6

#### 2019 Irrigation Show and Education Conference

Las Vegas, NV

<https://www.irrigation.org/2019Show>

### December 4-6

#### Kansas Turfgrass Conference in conjunction with KNLA

Manhattan, KS

<http://www.kansasturfgrassfoundation.com/annual-ktf-conference.html>

### December 5

#### NY State Turfgrass Association Long Island Regional Conference

Hauppauge, NY

<http://www.nysta.org/events/calendar.html>

### December 10-12

#### New Jersey Green Expo and Turf Landscape Conference

Atlantic City, NJ

<https://njta.wildapricot.org/>

### December 10-12

#### Texas Turfgrass Association Winter Conference and Show

Corpus Christi, TX

<https://texasturf.com/>

## JANUARY

### January 6-8

#### Tennessee Turfgrass Conference and Trade Show

Murfreesboro, TN

<http://www.ttaonline.org/event-3398652>

### January 7-9

#### Landscape Ontario Congress

Ontario, Canada

<https://locongress.com/about>

### January 7-9

#### Michigan Turfgrass Conference

East Lansing, MI

<http://www.michiganturfgrass.org/events>

### January 7-9

#### Nebraska Turfgrass Conference and Show

La Vista, NE

<https://nebraskaturfgrass.com/conference>

### January 9-10

#### Arkansas Turfgrass Trade Show and Conference

Hot Springs, AR

<https://10times.com/arkansas-turfgrass-association-annual-conference>

### January 13-16

#### 2020 STMA Conference & Exhibition

West Palm Beach, FL

<https://www.stma.org/news/join-us-in-west-palm-beach/>

### January 20-21

#### TPT Annual Meeting and Trade Show

Bay City, TX

<https://texasgrass.com/event/>

### January 21-23

#### Mid-Atlantic Turfgrass Expo

<https://www.turfconference.org>

### January 25-30

#### Golf Industry Show

Orlando, FL

<https://www.golfindustryshow.com>

### January 27-31

#### Green and Growin' Show

Greensboro, NC

<http://greenandgrowin.com>

### January 29

#### NC Sod Producers Association Winter Meeting

Greensboro, NC

<http://www.ncsod.org>

## FEBRUARY

### February 11-13

#### Western Canada Turfgrass Association Conference

River Rock Resort, Canada

<http://wcta-online.com/conference/wcta-show-conference>

### February 17-20

#### TPI 2020 International Education Conference & Field Day

Hilton Orlando Buena Vista Palace

Field Day Host: H&H Sod Co.

<http://www.TurfGrassSod.org/pages/events/international-conference/>



For additional calendar items, visit [www.TurfGrassSod.org](http://www.TurfGrassSod.org). If you are planning an industry event of interest to our readers please send the information to: [creynolds@TurfGrassSod.org](mailto:creynolds@TurfGrassSod.org) and put "Industry Calendar" in the subject line.



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