array of turf and ornamental species listed on the product label, suggested application rates, and remarks and precautions to adhere to before applying the product (Figure 6). Lastly, this page will contain links to each product's label and material safety data sheet (Figure 7). It is always the herbicide applicator's responsibility, by law, to read and follow all current label directions for the specific herbicide being used.

**HOW TO ACCESS MOBILE WEED MANUAL**

Simply visit www.mobileweedmanual.com using the internet browser on any mobile device. It is recommended that individuals bookmark the site and create a shortcut to it on their home screen (Figure 8). There are directions on the Mobile Weed Manual home page to guide users through this simple process. Creating a shortcut on the home screen will facilitate faster access to Mobile Weed Manual content in the future.

At the current time Mobile Weed Manual is a free resource. Should users find value in the content provided, they can donate funding (in an amount of their choosing) to support continued development of this new weed control resource. Donations can be made by selecting the “Support” button on the Mobile Weed Manual main page (Figure 9).

The University of Tennessee Turf & Ornamental Weed Science Team hopes that Mobile Weed Manual becomes a valuable tool for all green industry professionals managing weeds. The site will be updated continually to expand the database of turf, ornamental, and weed species information, as well as to include information on new herbicides entering the marketplace.

Since debuting online in May 2013, the site has been used by individuals managing turf and ornamentals in all 50 United States and 44 countries worldwide. Our hope is that Mobile Weed Manual will expand even further in the future.

Please send any questions, concerns, or comments on Mobile Weed Manual to info@mobileweedmanual.com. Also be sure to stay in touch with the University of Tennessee Turf & Ornamental Weed Science Team at http://tennesseeturfgrass.weeds.org.

**TOOLS & EQUIPMENT**

**FUTURE TURF MANAGERS EVENT PREPARES STUDENTS FOR SUCCESSFUL FUTURE**

_Last month Jacobsen hosted more than 20 college seniors from top turfgrass programs around the world as part of its annual Future Turf Managers event. The annual event gives students a unique opportunity to experience professional turfgrass management at the highest level. During the 3-day event, students visit with top sports field managers and golf course superintendents, hear leading-edge presentations from top universities and get an insider’s look at Jacobsen’s turf maintenance equipment._

_Attendees must be recommended by directors or professors at turfgrass programs. Students were selected from more than 20 colleges and universities, including Penn State University, Texas A&M University, Mississippi State University, Iowa State University and North Dakota State University. The group also included an international student from Myrscough College in Lancashire, England._

_Jacobsen University hosted several educational sessions, which included a presentation from Abby McNeal, CSFM, Director of Turf Management at Wake Forest University. McNeal gave the group an overview of the Sports Turf Managers Association and shared some advice about ongoing training and player expectations._

_“I’ve always been told not to be afraid to take the ground balls,” said McNeal. “Take basic courses to keep your skills sharp like fertilizer calculation or machine calibration. It’s amazing how much you forget over the years.”_  

_“Joe DiMaggio once said that every game there could be a kid who’s seeing him for the first or last time and he owed it to them to give his best,” McNeal told the group. “It’s the same with our profession: every game you prepare for is the most important of the season, whether its Pop Warner football or an NFL playoff game.”_  

_The group also heard from Dr. Jim Brosnan of the University of Tennessee, who gave a presentation on herbicide resistance. Research has shown that herbicide resistance is being perpetuated by turf managers who use the same modes of action, year after year._

_“Some of the guys I talk to out there are using the same herbicides in the same way for years,” Brosnan told the group. “And they wonder why their grass is resistant to herbicide. The key is rotating your modes of action to avoid resistance.”_  

_One of the highlights of the week included a visit to the University of South Carolina (USC), home of the back-to-back College World Series champions in NCAA Division I men’s baseball. USC Sports Turf Manager Clark Cox gave students an exclusive look behind-the-scenes at the school’s state-of-the-art sports complex. Cox also shared his experiences and challenges of managing turfgrass in the transition zone._

_Reflecting on the event, students said their experiences will better prepare them for their job search and future careers._

_“This event made me more confident about finding a job and better prepared for the work that lies ahead,” said Robert Glenn, graduating senior at Mississippi State University. “Plus, the fact that I have contacts at two upper echelon sports facilities extends my networking reach even further.”_  

_It was also encouraging is how positive the recent graduates are about job opportunities._

_“I’m not really worried about getting a job,” said Derek Christensen, graduating senior at North Dakota State University. “The last 3 years, all the turfgrass graduates from our school found jobs right away. I think this week has put me in a great mindset to begin my job search.”_
**Graco launches new FieldLazer S90 field marking machine**
Graco Inc.’s FieldLazer S90 is the industry’s first battery-powered, high-pressure airless sports field marking machine. It is an affordable, easy-to-use stripping solution with proven Graco FieldLazer spray technology that reduces paint costs by up to 75%. The field marker delivers professional, bright, long-lasting lines for up to 10 soccer fields or one football field on a full charge, powered by a 12V battery. The spray technology coats both sides of the grass blade (and not the ground) in a single pass with undiluted paint. Just pour in paint and press the button to start. The removable, Tilt-N-Pour 6-gallon paint hopper minimizes refills and is easy to fill, remove and clean. The FieldLazer S90 marking system is compact and portable with an adjustable handlebar for comfortable spraying at all heights and for easy transport and storage.

**Pioneer Athletics**
Pioneer Athletics developed the world’s first No-VOC athletic field marking paints for natural grass. Recognized by the United States EPA’s “Design for the Environment” program for using environmentally preferable chemistry, Brite Stripe Ultra-Friendly, Game Day Ultra-Friendly, and StarLine Ultra-Friendly provide turf managers, coaches, and parents three options to mark playing surfaces with white and blue paint without compromising environmental concerns. Pioneer’s Ultra-Friendly paints are also available in No-VOC red, orange, yellow, and black and are pending EPA DIE recognition.

**Temp-Line natural grass paint**
TempLine Natural Grass Paint delivers excellent performance with less environmental damage and waste. TempLine is easy to mix and apply, with superior brightness, opacity, play durability and weather resistance. Each box makes from 5 to 14 gallons of paint. You decide how much paint to make with each box, depending on your line brightness requirements. Besides ease of preparation, application and great marking performance, TempLine formulation and packaging means no Volatile Organic Compounds (VOCs) released into the air, less solid waste to dispose of, less required storage space and lower shipping cost. One pallet of 96 boxes provides from 480 to 1,344 gallons of paint, the equivalent of three pallets of 5-gallon pails.

**Custom field logos**
Give your field a professional look with a custom field logo. World Class field stencils are computer-designed and cut to provide the highest quality field graphics at an economical cost. Because we manufacture both the stencils and field paints, we can supply the entire field graphics package with just one phone call. World Class Field Stencils are perfect for painting letters, team logos and corporate sponsor logos on any turf areas. Last minute? No problem. Most stencils can be delivered within 2 weeks.

**Streamliner Dryline marker**
The Streamliner is simply the best dryline marker in the business. With its variable flow control, Field Testing has proven the Streamliner is the best for the quality of the chalk line while using less chalk than its competition. A heavy-duty steel frame, pneumatic tires, rugged molded plastic hopper, flexible brush agitator, accurate string-line guides, and a one-button retractable handle for easy storage set the Streamliner apart. Available in 2-, 3-, and 4-wheel models. Perform two jobs with one machine when stripping your fields by adding the optional Beacon Double Play Aerosol Attachment to allow you to stripe fields with chalk or paint quickly and with no mess! The Double Play Aerosol attachment grips to the base of the handle and allows for up and down adjustment to ensure proper line width.

**Temp-Stripe athletic field marking paint**
Removable synthetic turf marking paint that applies like normal field paints. Our exclusive formula was designed and developed for temporary use on synthetic turf fields in which numbers, lines, logos and boundaries require a quick change over following an event. Temp-Stripe is available in all team colors. Removal is accomplished with light to moderate water pressure and scrubbing or with help from our Port-A-Scrub paint removal machine. No costly chemical solutions needed. Because the colors are organic in nature and biodegradable, it is environmentally friendly, low VOC and completely safe on turf, uniforms and players. It’s the original Temporary Athletic Field Paint!

**NewRider 1700 HPA**
The NewRider 1700 HPA by Newstripe is the economical ride-on high pressure airless striping machine for marking athletic fields. The NewRider 1700 HPA is designed to quickly spray straighter, brighter looking lines and the 25 gallon paint tank will stripe numerous fields without having to be refilled. Additionally, the fully adjustable spray pump on the NewRider 1700 HPA saves money by spraying ‘just the turf’ and ‘not the dirt’ with any paint. The on-board purge tank eliminates clogging of spray tips and makes clean-up a snap. The NewRider 1700 HPA also features a hydrostatic drive and a 10.5 hp Briggs and Stratton OHC engine with electric start, and removable gun with 25’ hose for stencils.

**World Class Paints**
World Class Field Stencils are computer-designed and cut to provide the highest quality field graphics at an economical cost. Because we manufacture both the stencils and field paints, we can supply the entire field graphics package with just one phone call. World Class Field Stencils are perfect for painting letters, team logos and corporate sponsor logos on any turf areas. Last minute? No problem. Most stencils can be delivered within 2 weeks.

**Eco Chemical**
Eco Chemical Whitlam Paint
It's the original Temporary Athletic Field Paint!
Tru Mark 15 Plus multipurpose sandbag
It is our multipurpose sandbag product line, specifically the 15 Plus Sandbag for canopy ballast and other uses to hold vertical leg structures in place with minimal footprint yet maximum ballast. Features include: 15 Pound Plus durable double sandbag construction for longevity and maintenance free use; no staking with Velcro strap to keep sandbag in vertical position with maximum ballast and minimal footprint; designed for ballast filling by customer with desired material in a separate bag insert—so spillage for indoor use; and 6-inch nylon carrying handle for quick and easy setup and relocation, Velcro closure for securing ballast material.

Tru Mark Athletic Field Marker

Kromer can customize your machine
Use up to 50% less paint and get the job done 30% faster with Kromer. We manufacture a complete line athletic field maintenance equipment allowing you to paint, mark, and groom on natural as well as synthetic fields with ease. Choose the model that’s right for you or let us customize one to meet your needs. Kromer’s Field Commander tractor along with its hydraulically actuated field grooming and painting attachments will make creating a safe, playable and aesthetically pleasing field a manageable task. Get up to $4,000 off your purchase with Kromer’s Saving Bonanza going on now - call or click for more details. You provide the field, we provide the solutions!

Kromer Products

Game Time Stripe-It aerosol paint
Louisville Slugger Game Time Stripe-It aerosol cans have uniform coverage with quick drying results, crisp lines, and are perfect for marking all athletic fields. The paint is water-based, and eco-friendly. It is safe for all turf fields, and can even be used on damp turf. It has a long shelf life. The spray nozzle is uniquely designed to sit out of the way of your finger, resulting in no more paint on your fingertips. The can fits in most competitors’ aerosol machines. The paint is available in white or 11 different colors, and colors are also available in 5 gallon buckets. Made in the USA! Game Time Sports Systems also carries the application equipment.

Game Time Sports Systems

New PUMP-N-GO spray liner
A great new alternative to aerosol painting of athletic field lines, the PUMP-N-GO is a lot quicker to use and delivers a more vivid line. This lightweight paint liner has a 2-gallon tank capacity, so there’s no need to stop and shake cans repeatedly; just PUMP IT UP and you’re ready to paint a few hundred feet. The PUMP-N-GO uses our #4030 EZ paint which is ready-to-use and is offered by the case with four 1-gallon bottles. This economical system is great for schools or parks with a few fields….or can be used for “touching-up” fields at larger multi-field complexes.

Markers, Inc.

Line Racer
With almost two decades of experience manufacturing electric line marking equipment, Fleet’s latest addition to its range is the Line Racer. A compact battery-powered unit that has all the convenience of the aerosol can type machine but delivers big sprayer performance. Line Racer is a stripping system that uses Ultimate Line, a sealed, 1-gallon jug of paint that plugs cleanly into the machine and allows you to paint a complete soccer field with the flick of a switch. With a two jug capacity and enough battery power for several fields, you can produce quality lines in half the time without the need to shake cans or deal with the disposal issues of partially used cans.

Fleet US

Jacobsen launches new AR522 contour rotary mower
Jacobsen has launched the new AR522 contour rotary, a mower with superior climbing and ground-following capabilities. The new mower is an update of the previous Jacobsen AR-522 and is designed to maintain intermediate golf roughs; green and tee surrounds; and sports and recreation fields. The new AR522 five-gang rotary mower is equipped with SureTrac four-wheel drive traction and weight transfer control, allowing it to glide over ground contours and climb hills with ease. The SureTrac system automatically transfers power where needed to provide superior performance on hills. The AR522 also features an advanced weight transfer system that allows for balancing of the machine’s weight between the traction unit and decks for optimal traction and ground following in varying terrains.

Jacobsen

2013 Gator heavy-duty XUV models
John Deere introduces its 2013 Heavy-Duty Crossover Utility Vehicle (XUV) lineup. Featuring the all-new, fastest, most powerful four-seat Gator available, plus updates to current models. Outdoor enthusiasts sharing the trail or work site can now transport friends, family and gear in the all-new, heavy-duty XUV 825i S4. The latest addition to the Gator family provides the durability and versatility owners expect around their property or off-road destination. To allow for extra passengers or needed cargo space, the XUV 825i S4 provides an innovative, convertible rear seat cargo space. Two additional passengers can be transported in the rear seat area that includes a large under-seat storage compartment. And when more cargo room is needed, the rear seat folds down in just seconds providing a flat platform with tie-down points that can hold an additional 400 pounds of payload.

John Deere