The Reelmaster® 5010 Series

The Reelmaster 5010 Series from Toro was designed according to two basic principles: First, consistently deliver exceptional quality of cut and aftercut appearance. With cast aluminum rear cutting frames and EdgeMax™ bedknives standard, turf professionals around the world trust the 5010 Series to make their fields look and play their best. Second, maximize productivity with unmatched ease of set-up and maintenance. Whether it’s the Quick Adjust groomers or butterfly hood design, Toro keeps you out of the shop and on the athletic fields. Don’t miss the Reelmaster 5010 Series at:

www.toro.com
BE A WINNER GOING IN...

...Install The Industry’s Leading Sports Turf!

DELTA BLUEGRASS CO.
GROWING GREEN FOR 30 YEARS

Tifway 419 • Tifway II • Baby Bermuda • Blue Rye

New Additions to Our Sports Turf Varieties:

CELEBRATION • PRINCESS 77

All varieties are offered on peat and sand, available un-netted upon request.

DELTA BLUEGRASS COMPANY
800.637.8873 • 209.469.7979 • www.deltabluegrass.com • C-27 752734

FOR MORE INFORMATION CONTACT:

Steve Abella (866) 825-4200
Contents

MARCH 2011 | VOLUME 27 | NUMBER 3

Features

Field Science
8 Pre-emergence weed control
10 New herbicides for 2011
12 Soil Test: A new high school field

Facilities & Operations
18 Turf managers have increased skin cancer risk
20 Hosting a successful STMA chapter event
22 Want to be an environmental steward? Here’s how
24 Factors to consider before building a new sports field complex
28 Assignment & Daily Worksheet from the Seattle Mariners
34 Design and material selection for newest MLB facility, Salt River Fields at Talking Stick
40 Maintaining men’s lacrosse fields

Tools & Equipment
42 New infield skin products help manage moisture
44 Latest products for turf management
48 Jacobsen celebrates 90th anniversary

Field of the Year
50 2010 Professional Baseball Field of the Year
—Arvest Ballpark, Springdale, AR

Departments

6 From the Sidelines
7 STMA President’s Message
17 John Mascaro’s Photo Quiz
48 Ask a CSFM
53 STMA Chapter Contacts
54 STMA in Action
56 Marketplace
57 Advertisers’ Index
58 Q&A

Look for an “Innovation in Motion” Field Day event near you!

WWW.STECEQUIPMENT.COM
864.225.3666
Averting another tragedy

L

ATE IN JANUARY a 9-year-old boy died in Missouri after a soccer goal fell on him. At least eight other youngsters have perished the same way in the past 10 years, a fact I learned from a Google search—and those were found on just the first page.

Here is an open letter written by Jody Gill, CSFM, CPSI, Grounds Coordinator for Blue Valley Schools in Missouri, being circulated by the STMA:

Many of us are dealing with high school, college and professional athletes who are generally going to use equipment, such as soccer goals, as they are intended to be used. Those of us who are responsible for elementary school facilities and equipment need to be especially aware that elementary age children are unpredictable and have not yet developed common sense that would cause them to stop and think before climbing onto or hanging from a structure such as a portable soccer goal.

Most of us were taught the concept of defensive driving as a way to anticipate the actions of other drivers and hopefully prevent the collision from ever happening. As Professional Sports Turf Managers, especially at the elementary school level, we must adapt the defensive driving concept to our field safety programs. We must anticipate the unpredictable actions of children. They are not always going to follow the rules and we cannot expect them to use common sense. It is our job to anticipate their actions and provide them a safe environment whether at recess on the playground or during football practice after school.

Whether on multi-purpose fields or soccer specific fields, it makes sense to use portable soccer goals so we can move the goals around the field to spread the wear and tear on the grass. Preventing tipping of the goals should be a top priority. There are many tools and methods commercially available to anchor goals. We have addressed this by using four earth anchors per goal to keep the goals secured to the ground. We also use chain and a padlock on each anchor so the goals cannot be removed from the anchors and to prevent goal relocation by anyone other than my staff. Occasionally the anchors can work loose especially after freeze/thaw cycles. As the snow melts, we will be relocating the goals again and re-anchoring them to get ready for early spring use. You should make sure that school staff such as teachers, paraprofessionals, custodians, etc. are aware of the anchoring procedures and encourage them to inspect them daily and report missing or loose anchors.

Additionally, we use only 12-foot wide, all-aluminum goals at all of our elementary fields. These goals are very lightweight so if these goals tipped the chances of a serious injury is greatly reduced. There are many different soccer goal manufacturers who provide very lightweight, high quality goals. Remember though, even the lightest goal must be anchored.

I know that school budgets have been squeezed to the breaking point. There are many other ways to seek funding for safer goals and for field maintenance needs including school PTA/PTO, local businesses, neighborhood associations, neighborhood garage sales, advertising on school fences, etc. The point is we must use our skills, knowledge and every other available resource to make sure accidents like the one the killed little Jonathan never happen again.

Eric Schröder
Editor
eschroder@m2media360.com
717-805-4197

SportsTurf

1030 W. Higgins Road
Suite 230
Park Ridge, IL 60668
Phone 847-720-5600
Fax 847-720-5601

The Official Publication Of The Sports Turf Managers Association

STMA Editorial Communications Committee
Jim Cornelius, Chad Forbis, Dale Getz, CSFM, CSE, Jody Gill, CSFM, Brad Park, Greg Sacco

STMA Office
805 New Hampshire Suite E
Lawrence, KS 66044
Phone 800-323-3875 Fax 800-366-0391
Email STMAinfo@STMA.org
www.STMA.org

EXECUTIVE VICE PRESIDENT: Charles Forman
EDITOR: Eric Schröder
TECHNICAL EDITOR: Dr. James Brosnan
ART DIRECTOR: Brian Snook
PRODUCTION MANAGER: Karen Kalinyak
EDITORIAL DIRECTOR: Richard Brandes

STMAinfo@STMA.org
www.STMA.org

IMMEDIATE PAST PRESIDENT: Troy Smith, CSFM
IMMEDIATE PAST PRESIDENT: Chris Calcaterra, M.Ed., CSFM, CPRP
PRESIDENT-ELECT: James Michael Goatley, Jr., PhD
SECRETARY/TREASURER: Martin Kaufman, CSFM
VICE PRESIDENT-COMMERCIAL: Chad Price, CSFM
PARKS & RECREATION: Dana Johnson, CSFM
HIGHER EDUCATION: Ron Hostick, CSFM
K-12: Mike Tarantino
PARKS & RECREATION: David Pinsonneault, CSFM, CPRP
ACADEMIC: Pamela Sheppard
COMMERCIAL: Rene Asprion
AT LARGE: Jeff Fowler, AT LARGE: Jeff Salmond, CSFM

Copyright 2011, Sports Turf. Material may not be reproduced or photocopied in any form without the written permission of the publisher. BPA Member of BPA Worldwide.
T IS WITH GREAT PLEASURE that I announce those who recently attained certification beginning January 1. They are: Steve Berg, CSFM; Adam Dixon, CSFM; Kevin Hardy, CSFM; Joseph Kovolyan, CSFM; Shaun Lynch, CSFM; Sarah Martin, CSFM; Nick McKenna, CSFM; Matt Rogers, CSFM; Don Scholl, CSFM; Kevin Taylor, CSFM; Rusty Walker, CSFM; and Jason Wigington, CSFM. Our certification program continues to gain momentum and interest from our members and their employers. One very important aspect of this program is employer support. STMA has developed a brochure specifically for employers that points out the value of certification and the importance of absorbing the costs for their sports turf manager to become certified. I believe in certification, and I hope that you will consider the value that it can bring to you personally and professionally.

Committee work is underway. We have very healthy participation from every segment of our membership. This tells me and your Board that you have confidence in the committee system as a way to help advance STMA. That is exactly what our committee system is designed to do. Your ideas and insight really provide perspective to help develop the right programs that are important to the membership. Our Committees work on initiatives that are well defined in our strategic plan, and as our committees tackle these initiatives, the entire association’s strategic plan presses forward. Over the previous 4 years, committees have helped us to achieve nearly all the initiatives in our 5-year plan. Your Board will be developing a new plan during its summer board meeting for 2012 and beyond.

This is the time of year that I know local chapters become hard-pressed for volunteers. We are all so busy with our field management programs in the spring that often very little extra time is available to help our chapters be successful. I encourage all of you to take an active role in your chapter. Be sure to renew your membership in your chapter. Offer to host an event, or provide your arms and legs to help others plan and hold an event. It is only through volunteerism that our profession flourishes. Involvement helps the chapter, but it also provides tremendous rewards back to you. If you are not a member of your local chapter, STMA has a complete list online or you can find contact information at the back of this magazine (p.55).

The 2011 Regional Conference is set: June 15-16 at the University of Tennessee in Knoxville. The steering committee has been meeting and is developing 2 days of excellent, hands-on education. There will be a trade show and a night out at a Tennessee Smokies minor league baseball game. The next three locations have also been set for the regional conferences: 2012 in Ohio at Paul Brown Stadium, 2013 at BYU-Provo in Utah, and 2014 in Baltimore. Exact dates should be coming soon. For more information about this June’s conference in Tennessee, see the article on page 54 in this issue.

Enjoy the season!

Troy Smith,
CSFM
troy.smith@broncos.nfl.net

Always moving forward

www.stma.org
Pre-emergence weed control

Editor’s note: For an overview of pre-emergence weed control, SportsTurf recently interviewed Laurence Mudge, technical services coordinator for Bayer Environmental Science.

Q: What are the benefits of a pre-emergence program versus post-emergence weed control?
A: There are several benefits to a pre-emergent program. First of all, pre-emergents are more cost effective, so you can spend less money on pesticides and labor costs. If you depend on post-emergent products, then you will be out there spraying whenever the weeds pop up. There’s a lot less hassle and a lot more weed control [with pre-emergents].

Q: What recommendations, in general, do you have for turf managers when selecting a pre-emergence herbicide?
A: Check the type of turf that you are treating, and then find out what types of weeds you are trying to control. For example, many treat for Poa Annu and broadleaf weed control in the fall. Before choosing a pre-emergent herbicide, make sure you know if the product is labeled for the turf you are treating.

Q: What advice do you have for turf managers who are faced with budgetary and/or time constraints when it comes to developing a weed control plan or program?
A: Turf managers need to look at the overall costs. Many turf managers think it is cheaper to only use the post-emergent product and they will skip using a pre-emergent. They don’t count in the labor costs, repeat applications and overall hassle of treating weeds post-emergent. You need to plan and look at the overall costs of controlling the weeds.

Q: What factors have the biggest impact on pre-emergence herbicide effectiveness?
A: The turf grass health can play a role. If you have a well-established turf, and it is in good condition, that can assist the pre-emergent herbicides. That is one of the most important things about weed control—the health of the turf. When you have healthy turf, you are asking a whole lot less of your pre-emergent herbicide. Other factors include rainfall, soil texture, soil moisture, and the competitiveness of the turf.

Q: What are your recommendations regarding timing of applications of pre-emergent products?
A: Pre-emergent herbicides need to be applied before weed seed germination. You have to know when your weeds germinate. This depends on where you are in the country, but generally the application should be between February and April. The further south, the earlier the pre-emergent herbicides should be applied.

Q: What problems on turf lead to the most weed problems?
A: Anything that is injuring or damaging the turf: poor drainage, shade, areas where you may have winter kill or disease. Anything that is affecting the turf and opening up the canopy leads to weed growth. Healthy turf is an important factor in weed control. Weeds pop up in areas where the turf isn’t healthy. In wetter years, there is more weed pressure as opposed to dryer years when weeds don’t germinate as much.

Q: What resources do you recommend for developing a weed control program?
A: One of the best places to go when developing a weed control program is to contact your local state university’s turf weed specialist. They will be able to assist you with the weeds that are relevant in your region. If you have questions that are more product specific, reach out to the company and ask for their recommendations.

When you have healthy turf, you are asking a whole lot less of your pre-emergent herbicide.
— Laurence Mudge
The day has arrived when field safety can be achieved without the use of harmful chemicals and scarce water resources. The patent-pending UVC technology designed by GreensGroomer WorldWide successfully eliminates harmful germs inherent in sports turf surfaces.

Germicidal UVC has been used in the eradication of pathogens, viruses, mold, and fungus for over 100 years. Now adapted for mobile use, the GreenZapr uses the strength of UVC in a simple tow-behind unit. With an on-board generator with intelligent power regulator, the GreenZapr efficiently sends and controls power to the light banks. The spring tine rake module lifts material, preparing it for exposure. Total immersion in the UVC is executed with a three-pass technique that results in a 99.9% kill factor.
New herbicides for 2011

As the calendar turns each year, new herbicides are introduced into the marketplace. Many of these herbicides may benefit individuals managing cool- and warm-season athletic fields. Some of the new herbicides that will be available in 2011 are outlined below.

Specticle (active ingredient- indaziflam) is a new preemergence herbicide from Bayer Environmental Science labeled for use on warm-season turf at rates of 2.5 to 5 oz/A. Research at the University of Tennessee has found that Specticle provides effective preemergence control of crabgrass (Digitaria spp.) and annual bluegrass (Poa annua) at lower use rates than other preemergence herbicides. This herbicide is also labeled preemergence control of goosegrass (Eleusine indica).

Individuals should use caution when applying Specticle to athletic field turf. This herbicide has a longer residual than other preemergence herbicides; thus, there are label restrictions pertaining to not only overseeding but establishing new warm-season turfgrass from stolons/sprigs or sod. Depending on application rate, turfgrass managers cannot overseed for 8 to 12 months after treatment with Specticle. Furthermore, the product label currently states that turfgrass managers must delay spiggling or sodding for 2 and 4 months after application, respectively.

Imprelis (active ingredient- aminocyclopyrachlor) is a new postemergence herbicide from DuPont labeled for broadleaf weed control in cool-season turfgrasses, as well as zoysiagrass (Zoysia japonica) and centipede grass (Eremochloa ophiuroides). Application rates for cool-season turfgrass range from 3 to 4.5 oz/A. On warm-season turfgrass, application rates cannot exceed 3 floz/A, mowing heights must be greater than ½ inch, and some temporary turfgrass injury must be tolerated. Similar to Specticle, this herbicide will provide effective weed control at a lower application rate than has been used with similar chemistries (i.e., mixtures of 2,4-D + MCPP + dicamba). Imprelis is labeled for use on golf courses, athletic fields, sod farms, as well as residential and commercial turf.

In research trials conducted at the University of Tennessee, seedling tall fescue and perennial ryegrass have shown tolerance to Imprelis applications for weed control. Applications of Imprelis at labeled rates have not affected perennial ryegrass or tall fescue establishment. Similarly, application of Imprelis at labeled rates has 1 to 2 weeks after seeding has not been injurious either. Many athletic field managers may benefit from these attributes. Other commonly used broadleaf weed control herbicides (e.g., mixtures of 2,4-D + MCPP + dicamba) require individuals to delay seeding for 3 to 4 weeks after application and restrict applications to newly seeded stands until the second or third mowing.

Additionally, research conducted at the University of Tennessee has demonstrated that Imprelis can be tank-mixed with Acclaim Extra (from Bayer—active ingredient is fenoxaprop) to provide cool-season turfgrass managers with an option for postemergence broadleaf weed and smooth crabgrass control.

SquareOne (active ingredients- carfentrazone + quinclorac) is a new postemergence herbicide mixture from FMC labeled for control of certain grassy and broadleaf weeds in warm- and cool-season turfgrasses as soon as 7 to 14 days after seeding. SquareOne is labeled for use on golf courses, athletic fields, sod farms, as well as residential and commercial turf. Application rates of SquareOne range from 8 to 18 oz/A.

Celsius (active ingredients- thienzbazone + iodosulfuron + dicamba) is a new postemergence herbicide mixture from Bayer labeled for use on select warm-season turfgrasses at rates of 2.5 to 4.9 oz/A; however, turfgrass managers cannot exceed 7.4 oz/A in a single year. Celsius is not labeled for use on seashore paspalum (Paspalum vaginatum); thus, turfgrass managers with seashore paspalum athletic fields (or bermudagrass fields heavily infested with seashore paspalum) should select an alternative herbicide for broadleaf weed control.

Celsius is labeled for the control of a wide range of broadleaf and grassy weeds. Preliminary research at the University of Tennessee and the University of Georgia has also observed postemergence activity on dallisgrass (Paspalum dilatatum) following applications of Celsius in mixtures with Revolver (active ingredient foramsulfuron); however, it is not clear at this time whether these treatments will provide effective, long-term control.

Blindside (active ingredients- sulfentrazone + metsulfuron) is a postemergence herbicide mixture FMC labeled for broadleaf weed control on certain cool- and warm-season turfgrasses at rates of 3.25 to 10 oz/A. Avoid applying Blindside to any cool-season turfgrasses under stress, as temporary injury can occur after application.

Blindside is labeled for use on golf courses, athletic fields, sod farms, as well as residential and commercial turf. Research at the University of Tennessee has reported that applications of Blindside can increase the speed of ground ivy (Glechoma hederacea) and Virginia buttonweed (Diodia virginiana) control compared to Manor (active ingredient metsulfuron) alone.

Many of these herbicides will provide athletic field managers with new options for broadleaf and grassy weed control in 2011. Always refer to the product label for specific information on proper use, tank-mixing compatibility and turfgrass tolerance.

Mention of trade names or commercial products in this publication is solely for the purpose of providing specific information and does not imply recommendation or endorsement by the University of Tennessee Institute of Agriculture. For more information on turfgrass weed control, visit the University of Tennessee’s turfgrass weed science web site at www.tennesseeturfgrass-weeds.org.

Dr. Jim Brosnan is assistant professor-turfgrass weed science and Greg Breeden is weed science extension assistant at the University of Tennessee.