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For information on all STA advertising opportunities, contact Lee Huether at 519-763-9431, fax 519-766-1704, info@sportsturfassociation.com.

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wrote Dann Daly, Park Maintenance Supervisor, Parks & Recr. Dept., North Smithfield, RI

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ANDREW GAYDON

Many thanks...

Winter is now at our doorstep. Looking back, fall 2005 has been good to the sports turf industry as well as to farmers and growers of all crops. Turf managers have been able to overseed, topdress and lay sod. The rain has been well timed for the maintenance of sports turf.

Thanks for the Opportunity

As I am writing this message, I can not believe how time has flown by – my two-year term as President is complete this January. When I accepted this privilege, I thought two years would last a long time and the task would be daunting. In contrast, being part of the STA Board has been enjoyable and fulfilling.

The STA has increased membership and has seen increased attendance at each consecutive field day. Industry support for our association is at an all-time high and we again thank all companies who have contributed and benefited from their participation in advertising and the field day (as well as in membership).

Premier Educational Event

The Ontario Turfgrass Symposium (OTS) will be held February 20 & 21, 2006 at the University of Guelph’s Rozanski Hall (see page 4 for more details). We hope you can support and enjoy this highly professional symposium which covers all aspects of turf management and features many new sessions and speakers this year. The STA’s Annual General Meeting is on February 21 at 3:30 pm. Your invitation will follow by mail.

Board News

It is with regret that I inform you that David Smith is stepping down as a board member at the completion of his term. David has been on the board for a number of years and his vast experience in the industry has been of great value to the STA. He will be greatly missed, however, he is continuing to build his consulting business and we wish him continued growth and success.

We do have an open position on the board and if you would like to step forward and be nominated as a board member, please contact Lee Huether. We would very much like to hear from you.

With my term complete, Gord Dol is taking over as President and all of us on the board are looking forward to working with him.

Final Notes

Our website continues to expand and become more and more comprehensive (www.sportsturfassociation.com). We always welcome member feedback and contributions as well as features that you would like to see both on our website and in the Sports Turf Manager.

As this is the last issue of the Sports Turf Manager for the year, I would like to take this opportunity to thank all contributing authors, the editorial committee and especially our advertisers. Special thanks to our Executive Director Lee Huether for ensuring that the directors and the association are all running smoothly in this pro-active organization.

The Board of the STA would like to wish all its members and their family and friends a very enjoyable and relaxing Christmas.
T1. 9:00 – 9:30, Tuesday, February 21
Competitive Turf: Overseeding For Weed Management by Evan Elford, University of Guelph
Research results from the 2005 season on the effects of overseeding athletic field turfgrass to reduce weed pressure will be presented in this session. IPM 0.66

T2. 9:30 – 10:00, Tuesday, February 21
Cultural Practices for Premium Sports Fields: What Works for Us by Tim Ernst, City of Kitchener
Providing safe, durable athletic fields that enhance the game is the objective of the Sports Turf Manager. The seminar will focus on sports turf management programs that provide premier athletic surfaces for elite play. IPM 0.66

T3. 10:30 – 11:00, Tuesday, February 21
If THEY Build it, They Will Come by Bob McFarland, City of Woodstock
At a time when resources do not match demands, the last thing a municipality wants to do is create facilities that will be unappreciated and under-utilized. Partnering with community organizations in the development and operation of new facilities is one way to avoid this problem. The City of Woodstock and the Woodstock Soccer Club have formed a dynamic alliance that is in the process of creating an outdoor/indoor soccer complex. Could a similar strategy work in your community?

T4. 11:00 – 12:00, Tuesday, February 21
Field Closure Policies. Presentations will be made by representatives from three different municipalities, followed by a 15 minute discussion period.

- Tanya Steffler, City of Oshawa
  Deciding when to close a field; what criteria should be used?
- Patty Peebles, Town of Oakville
  Communicating field closures to user groups.
- Bruce Hay, City of Brampton
  The positive and negative political and fiscal implications of field closures.

T22. 1:00 – 1:30, Tuesday, February 21
Turf Infill System: Two Years Under Our Belt by Stefan Szczepanski, Project Manager, Landscape Architecture, City of Mississauga
The presentation will highlight the operational results of the first 2 years of the City of Mississauga’s Artificial Turf Infill System, located within the Parkway Belt lands at Iceland Arena. The presentation will illustrate the research and improvements made to the infrastructure and design of such a facility. In addition, the City’s most recent project will be presented in detail.

T23. 1:30 – 2:00, Tuesday, February 21
It’s a Brand New Field: Maintaining Artificial Turf Surfaces by George Bannerman, Bannerman Ltd.
Artificial turf surfaces are relatively new and information about maintaining them is insufficient. First hand experiences with maintenance techniques that ensure good, safe playing surfaces will be shared with the audience.

T24. 2:00 – 2:30, Tuesday, February 21
Artificial Turf: Maintenance Issues by Frank Erle, University of Western Ontario
A discussion on the maintenance issues surrounding various types of artificial turf including cleaning, ageing and painting will be presented. This should be of particular interest to those already maintaining artificial turf or those considering installing a new field.

T25. 2:30 – 3:00, Tuesday, February 21
The Evolution of Artificial Turf and New Products on the Horizon, Roy Klementti.
Visit www.open.uoguelph.ca/ots for details on additional sessions...

Registration Details...
1. Early Bird Registration Date: December 19, 2005
2. Association Discount. As an STA member in good standing, you qualify for lower association rates.
3. Group Discount. Others from your facility/organization who are not STA members qualify for the lower association rates when registered with a member. Send the registration in the same envelope, fax it at the same time, or make just one phone call to register.
**Coming Events**

**January 4, 5, 9 & 11**
Guelph Turfgrass Institute
Landscape Pesticide Certification Preparation Course
Guelph, ON
Info: (519) 824-4120 x 52501
www.gti.uoguelph.ca (Education)

**January 4-6**
Ontario Golf Superintendents’ Association Golf Course Management Conference & Trade Show
Toronto, ON
Info: (519) 767-3341
www.golfsupers.on.ca

**January 10-12**
Landscape Ontario Horticultural Trades Association Congress 2006
Featuring Fencecraft 2006
Toronto, ON
Info: (800) 265-5656
www.hort-trades.com

**January 18-22**
Sports Turf Managers Association (USA) Annual Conference & Exhibition
Lake Buena Vista, FL
Info: (800) 323-3875
www.sportsturfmanager.org

**January 30 – February 24**
Guelph Turfgrass Institute Turf Managers’ Short Course
Guelph, ON
Info: (519) 767-5000
www.open.uoguelph.ca/turfmanager

**February 13, 14, 15, 16**
Landscape Ontario IPM Symposium
Barrie, London, Toronto, Ottawa, ON
Info: (905) 875-1805
www.horttrades.com

**March 1, 8, 15 & 21**
Guelph Turfgrass Institute Landscape Pesticide Certification Preparation Course, Guelph, ON
Info: see January 4,5,9 & 11 listing

**March 3-7**
Western Canada Turfgrass Association 43rd Annual Conference & Show and 57th Annual Canadian International Turfgrass Conf. & Show
Vancouver, BC
Info: (604) 467-2564,
www.wctaturf.com or (800) 387-1056,
www.golfsupers.com

**March 29-30**
Ontario Parks Association 50th Annual Educational Seminar & Explorations Trade Show
Hamilton, ON
Info: (905) 864-6182
www.opassoc.on.ca

**April 5, 6, 10 & 11**
Guelph Turfgrass Institute Landscape Pesticide Certification Preparation Course (refresher), Guelph, ON
Info: see January 4,5,9 & 11 listing

**GET ON THE LIST!**
Contact the STA if you have an event you’d like to advertise in the STM.

**OTS 2006: FEBRUARY 20 & 21**
Strengthening Our Roots: A Growing Tradition
Rozanski Hall, University of Guelph
Guelph, ON
Info: (519) 767-5000
www.open.uoguelph.ca/ots

February 21 (at the OTS)
Sports Turf Association Social & Annual General Meeting

**WELCOME TO THE STA!**
Jeff Cassels, City of Woodstock, ON
Kevin Clayton, Ty-Crop Manufacturing Ltd., Rosedale, BC

**Odds and Ends**

2006 Turf Managers' Short Course, University of Guelph
Canada’s most successful and valued Turf Managers' Short Course, held at the Guelph Turfgrass Institute, will be offered from January 30 – February 24, 2006. Benefit from the expertise and experience of industry professionals and University of Guelph faculty while enhancing your knowledge of all aspects of turf management and culture. For more detailed information, visit the TMSC website at www.open.uoguelph.ca/turfmanager or contact the Office of Open Learning, University of Guelph at 519-767-5000.

**STA Membership Plaques**
Display membership plaques are available in executive engraved walnut for $50 plus S&H. To order, contact Lee at the STA office.

**Spring 2006 Submissions**
If you have something you’d like to submit for the next issue, please forward it to the STA office by February 10, 2006.

**Editorial Content**
Opinions expressed in articles published in Sports Turf Manager are those of the author and not necessarily those of the STA, unless otherwise indicated.
Newly Released by CCME
Guidelines for Compost Quality 2005
Oct. 12, 2005. A new edition of Guidelines for Compost Quality was released today by the Canadian Council of Ministers of the Environment (CCME). The guidelines serve as the national suggested standard for compost quality regulations for jurisdictions and are focused on environmental health and safety criteria for compost products.

Originally introduced in 1996, the guidelines detail requirements for compost product testing and identify limits on trace element levels and foreign matter as well as requirements for maturity and pathogen testing. CCME undertook a review of the guidelines during the past 18 months, assessing the need for any adjustments to the criteria based on new science and technical findings. The review paralleled the Standards Council of Canada’s initiative to review the voluntary national compost standard, Organics Soil Conditioners – Composts, as managed by the Bureau de normalisation du Québec (BNQ).

Copies of the guidelines may be purchased through CCME by visiting www.ccme.ca/publications/newpublications.html.

"The guidelines are fundamental to ensuring that composting develops across Canada in an orderly manner and with the proper focus on product integrity," said Susan Antler, Executive Director, The Composting Council of Canada. "We are very pleased that CCME has devoted attention to the advancement of composting and compost production through these guidelines. We look forward to working with each of the provinces and territories to support the integration of the guideline updates into the composting regulations of their jurisdiction."

Editor’s Note. It’s worth revisiting the article To Test or Not to Test... by Dr. R.W. Sheard published on page 8 in the Winter 2004 issue. It is strongly recommended that some certificate of analysis be provided by the supplier before a contract to purchase is made.

Keeping the Greens Green: Research Projects Aim to Reduce Pesticide Use on Golf Courses in Quebec and Ontario
Oct. 18, 2005. Minister of Agriculture and Agri-Food Andy Mitchell announced just over $500,000 in funding for two collaborative research projects in partnership with the industry that aim to reduce pesticide use and promote non-chemical al-
ternatives for protecting golf courses in Quebec and Ontario.

The research will be done in partnership with the Canadian Turfgrass Research Foundation and the Coalition for Responsible Golf which will also invest an additional $500,000 in this project. The two organizations have joined forces with Agriculture and Agri-Food Canada (AAFC) to study turfgrass pests, identify means to reduce the use of pesticides, and to develop an integrated pest management (IPM) network strategy to protect golf links from insects and diseases. The information will also benefit the farming community because many of the insects and diseases affecting golf courses are also found in agriculture.

"AAFC is pleased to partner with these organizations and to share scientific expertise that will help golf courses find effective pest control alternatives," said Minister Mitchell. "Reducing pesticide use is in the best interests of all Canadians and the development of new integrated pest management techniques could make an important contribution to keeping both our golfing greens and our crops healthy."

Under one project, researchers will lead a three-year study to increase knowledge of major insect pests and diseases that occur under eastern Canada climatic conditions. The research project, to cost $750,000, will more accurately identify turfgrass pests and predict insect outbreaks in Ontario and Quebec. The data will help golf course superintendents better plan the use of pesticides, thereby reducing applications. The project will also include research on alternative pest control measures. An integrated pest management strategy will be developed to assist the industry.

The second project, a three-year study valued at $277,000, will investigate the characteristics of winter freezing and snow mold diseases on bluegrass and identify more tolerant varieties. This information will help develop seed sources better adapted to winter stresses and contribute to the development of best management practices to improve winter survival and minimize pesticide use.

The turfgrass industry in Canada is estimated to be worth more than $5 billion, including golf courses, sod production, home lawns, commercial turf, sports fields and municipal parks. The information gained from these studies will benefit not only the entire turfgrass industry, but also those growing agricultural crops such as winter cereals and forage grasses which experience similar problems as well as farmers, producers, industry and communities.

For more information, contact Guy Belair, nematologist, Agriculture and Agri-Food Canada, Horticulture Research and Development Centre at 450-346-4494 (ext.239) or Yves Castonguay, physiologist, Agriculture and Agri-Food Canada, Soils and Crops Research and Development Centre, 418-657-7985 (ext. 231).

STRI Makes it Easy to Access Turfgrass Info

Back issues of STRI's magazine International Turfgrass Bulletin are now available on-line for easy access via STRI's website, www.stri.co.uk. Content can be sourced from 1951 to 2004, right back to the original title, the Sports Turf Bulletin, first published in 1951.

This facility has been made possible through a joint venture between STRI and the Turfgrass Information Centre (TIC) based at Michigan State University in the USA. The TIC contains the world's largest publically available collection of turfgrass educational material. They hold over 100,000 records in the database, the Turfgrass Information File (TGIF).

Last year, this joint venture successfully completed an online database to access back issues of STRI's annual journal, The Journal of Turfgrass and Sports Surface Science, dating back to 1929. This is the premier turfgrass research journal in Europe.

Clifford Haka, Director of the Michigan State University Libraries, stress that, "This is a wonderful example of how the research and information gathering process can be simplified. We are delighted to be able to add full-text access to the Bulletin to our Turfgrass Information File."

STRI spokesperson, Anne Wilson, Head of External Affairs, noted that this would provide an enormous benefit to STRI subscribers and a welcome added bonus to their subscription.

For further details, contact Anne Wilson at T: 01274 565131, F: 01274 561891, e-mail: anne.wilson@stri.co.uk.

Katerina Jordan Joins U of Guelph Turfgrass Faculty

The STA welcomes Katerina Jordan to the Department of Plant Agriculture at the University of Guelph. Katerina completed her Ph.D. program at the University of Rhode Island and has a diverse background with a B.S. in microbiology and an M.S. in agronomy, both from the University of Maryland. Her Ph.D. research involved the study of plant-parasitic nematodes and their antagonists in golf putting greens. She will bring a unique perspective to her turf teaching and research duties at Guelph. Katerina and her husband Sean, a Penn State turf diploma grad and golf course superintendent, recently welcomed Baby Vincent to their family. Congratulations Katerina and Sean and welcome to Guelph!

Evan Elford Awarded NSERC Scholarship

The STA congratulates student member Evan Elford, recipient of a National Sciences and Engineering Research Council of Canada (NSERC) Industrial Post-Graduate Scholarship (IPS). Sponsoring support of the turfgrass industry is provided through the Ontario Turfgrass Research Foundation. The IPS provides financial support for highly qualified science and engineering graduates. The support allows them to gain research experience in industry while undertaking advanced studies in Canada. These scholarships are aimed at encouraging scholars to consider research careers in industry where they will be able to contribute to strengthening Canadian innovation.

Editor's Note: Katerina, Sean and Evan will all be speaking at the 2006 Ontario Turfgrass Symposium: Plant Parasitic Nematodes on Golf Greens in the NE United States; Internships: A Win/Win Situation; Competitive Turf: Overseeding For Weed Management, respectively.
... a way to manage pests that have become resistant to pesticides while managing pests in locations where chemical pesticides cannot be used. It also protects the environment and the health of all organisms by reducing the amounts of pesticides used. The budget for the five-year Pest Management Program for the City of Oshawa is over $1,500,000.

**Alternatives**

Alternatives to pesticides include: cultural, physical, mechanical, biological and genetic controls. Cultural control is aimed at producing healthy plants though sanitation, improving soil conditions, correct mowing heights, using a variety of plant species (no monocultures), and proper planting methods, i.e. watering, spacing, pruning and staking. Physical and mechanical controls include removing and or killing pests by hand or machine, i.e. hoeing, line trimmers, heat applicators, traps and barriers. Biological control uses living organisms to reduce pest populations. Predators, pathogens or parasites can be introduced or attracted to the desired area. Genetic control uses genetically modified plant material that is resistant to pests.

**The Pest Management Plan's 8 Elements**

The combined goal of substantial reduction in pesticide use and continued vegetation quality in public lands necessitates a detailed process. The program is comprised of eight elements to identify and organize strategies to work with and include IPM. The elements are outlined as follows:

1. Integrated Pest Management (IPM) procedures – to guide environmentally sound management of City property.
2. IPM quality standards – detail specific criterion to manage landscape pests.
3. Alternative landscape treatment for specific property classifications – reduce the level of maintenance while still providing a quality landscape.
4. Expanded education and outreach programs – educate the public regarding how to reduce the use of pesticides.
5. Development standards – update standards to include PMP objectives.
6. Parks capital upgrades – improve the quality of turf in high profile areas.
7. Parks facility permitting – help balance use and maintenance of sports fields.
8. Provision of a PMP coordinator – to implement the plan.

**Integrated Pest Management Steps**

The PMP incorporates integrated pest management procedures. These procedures include six main steps to address specific pest problems, i.e. planning, identification, monitoring, action decisions, treatments and evaluation.

1. Planning includes proper cultural practices to ensure healthy vigorous plants, but also involves analyzing the effectiveness of the program itself.
2. Identification of both damage and pests is extremely important. Damage on plant material could be caused from the environment, machines or pests. Weeds and diseases are relatively easy to identify, however, insects are more difficult as there are many beneficial insects in lawns and gardens that help keep pest populations under control.
3. Monitoring involves a routine of regular inspections to determine and record pest levels. These records are used to determine the necessity of treatment strategies.
4. Action decisions include the treatment thresholds and a treatment strategy.
5. Treatment should only be necessary where preventative measures have not successfully kept the pest population below the threshold limit.
6. Evaluation of the results is important to determine if the program is working.

**Implementation of the Plan**

The Guelph Turfgrass Institute (GTI) was retained during the first year of the plan to analyze the existing sports fields in order to produce standards for development and maintenance for all sports fields in Oshawa. The PMP was implemented based on the results of the GTI report. A Parks Pest Management Technician was hired to oversee the plan and two skilled labourers were hired as dedicated staff for the PMP.

**Equipment**

As a result of increased maintenance on sports fields, additional equipment has been purchased including: 2 John Deere tractors, Vicon fertilizer spreader, 2 AerWay aerators, Ryan core aerator, 2 transportation vehicles, spray boom, soil compaction meter, compost tea brewer, Rotadator renovator, and a self propelled overseeder.

**Maintenance and Products**

All turf within the City of Oshawa is cut at a height of 3" in order to provide greater quality and help smother weed seeds. Sports fields receive core aeration in the spring and fall, and slit aeration throughout the season. Based on soil tests, specific amounts of fertilizer are applied to each field. A variety of products have been used during the last two years including: gypsum, foliar fertilizers, liquid and granular kelp, profile and corn gluten. Horticultural vinegar trials were conducted for weed control on hard surface areas.

Once sports fields are closed for the season, a heavy overseeding (8-10 lbs/1000 ft²) program begins with our Land Pride overseeder. Special attention is given to the goalmouth areas: overseeded with Land Pride, soil put down, re-seeded by hand, levelled and fenced off. The seed is a mixture of perennial ryegrass and...
fescues. We have had great success this year with the overseeding program.

Development Standards

It was determined that many problems with the existing sports fields are the result of improper construction. Newer fields have severely compacted sub-grades with insufficient quantities of appropriate soil on the surface. The GTI report indicates that all new developments should have a minimum soil depth of 12" and sod should come from a field with the same soil texture as the area of installation.

Scheduling of Play

Our Facility Booking Office is responsible for scheduling play on all the fields for the City of Oshawa. For the 2005 season, just under 18,500 hours were booked on the soccer fields. In order for the PMP to succeed, there must be co-operation and communication between the user groups, the Parks Services Branch and the Facility Booking Office.

Education and Outreach Program

In 2004, a marketing firm was retained to create a plan to help educate the public about the City’s PMP. In the spring of 2005, information packages were mailed to every homeowner within the City. Information brochures and posters were created and placed at all City facilities. Three radio ads were played on 1350 CKDO, Oshawa’s radio station, and six spots were placed on Rogers TV Cable channel 10. Staff participated in two radio shows “Let’s Get Growing” with Marjorie Mason, and a two-page PMP newsletter was sent to the user groups. A website was constructed, www.oshawa.ca/mun_res/pest.asp, that has received approximately 1,900 hits since June 2005. In 2006, three newspaper articles will be printed to provide information to the public and techniques to help reduce the use of pesticides.

Future

Although the pest management team is planning its fourth year, there are still goals that have not yet been achieved. The PMP has increased the amount of maintenance that the fields receive and therefore the amount of time devoted for field resting must also be increased. A policy is being developed that will help balance field use with required maintenance.

PMP has increased the amount of maintenance needed for fields; thus closure times must also increase. Policy is needed to balance both.

Conclusion

Although a pest management program is expensive to establish, the long-term advantages of reducing the use of pesticides while maintaining high quality turf is worth the cost. Please note the pictures included with the article to view the exceptional results that the fields have shown this year.

— Tanya Steffler, Parks Pest Management Technician, City of Oshawa

SEE PP. 14-15 FOR PROFILES OF TANYA STEFFLER AND THE CITY OF OSHAWA

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The Sports Turf Manager isn't your only member resource. Why not visit STA On-Line... at www.sportsturfassociation.com View a listing of all Sports Turf Manager articles from 1987 to the present. Go to the “newsletter” link and click on “cumulative index.”

Contributions Welcome

Contact Lee Huether at the STA office if you are interested in contributing to the Sports Turf Manager. We appreciate feature-length articles, column ideas and newsworthy items. Updates on innovative research or equipment are also welcomed. This is a great way to both support your professional association and enhance your resume!
The Municipal Integrated Pest Management Lawn Demonstration Project began in spring 2003 and continued until fall 2005. This project compared and demonstrated the effectiveness of conventional, Integrated Pest Management (IPM), alternative, and no-pesticide approaches to lawn maintenance.

The conventional approach uses chemicals exclusively for pest control. IPM is a process that uses all the necessary techniques to suppress pests and sustain healthy landscapes. This is achieved by monitoring turfgrass to prevent problems and using thresholds and life cycles to decide how and when to treat pests. The alternative management program uses organic pesticides, corn gluten meal and Nature's Weed & Feed (a beet juice extract), for pest control. Lastly, no pest control is applied under the no-pesticide management program.

This was the third year of having no pesticides applied to these plots. The trial was established in three municipal settings (Guelph, Brantford and London) to show the impact that different lawn maintenance programs have on areas with slightly different microclimates, pest pressures and soil types. Figure 1 shows the overall layout of plots at the GTI in Guelph. This study also provided an opportunity for education and communication with area residents, municipal staff and turf managers regarding the different alternatives of lawn care programs.

Study Description
The study was established in three municipal settings: Guelph, Brantford and London. At Guelph, the plots are located at the Guelph Turfgrass Institute (GTI). There are 32 plots, 9 x 5.5 m each, with a total demonstration area of 1584 m². There are four management programs being applied to this area and they include: conventional, IPM, alternatives and no-pesticides (see the Spring 2005 issue of the Sports Turf Manager for tables of the plot plans for all three sites). At Brantford, the plots are located at the Glenhyrst Art Gallery near the Grand River. There are 24 plots, 7 x 5 m each, with a total demonstration area of 840 m². There are three management programs and they include: conventional, IPM and no-pesticides. Lastly, in London the plots are located at Watson Park near the Thames River. There are only two management programs at this location: IPM and no-pesticides, and the study consists of 16 plots, 10 x 4.5 m each, with a total demonstration area of 720 m².

In all three municipal settings, the demonstration trials were set up on established, predominantly Kentucky bluegrass turf with an existing moderate level of weed infestation. The plots of each demonstration trial were divided into four lawn care