Are you advertising a position? Are you searching for a job? Target your audience or refine your search with Turf Trades, an online resource for all staffing levels and areas of the sports turf industry. Employment Bulletin Board ads run for 60 days with an additional 30 days available at 1/2 the price. Cost is $75 for STA members and $100 for non-members for the initial 60 day period. Payment by cheque (Canada only), MasterCard or Visa must accompany the job description. Jobs will be posted in a standard page format.
another interesting winter is almost gone. We are now getting a few warm days from time to time, teasers of what is yet to come. We had a fairly normal December and a warm and wet January that was followed by a February that brought us quite a bit of snow, especially in those areas traditionally prone to snow squalls. It is now becoming apparent that these weather fluctuations may lead to winter injury due to heavy ice formation on some fields. Check your turf and be prepared!

Over the past couple of months there have been a number of very good and well attended turf shows in Ontario. Most recently was the Ontario Turfgrass Symposium of which the Sports Turf Association is very proud to be a part. By all accounts, we’ve had another great show. Very special thanks should go to the OTS Committee and the University of Guelph’s Office of Open Learning for a job well done. We had a great lineup of speakers and a great venue. The OTS continues to be the premier turf education forum.

During the OTS we held our Annual General Meeting. The 2005 reports from various committees were presented to the membership. Also presented was the proposed budget for 2006 which includes a modest increase to membership fees. We’re always hesitant to increase prices; however, our costs keep going up, so membership fees must follow suit.

During the AGM we also made an amendment to the constitution and by-laws of the association to increase the number of directors from 11 to 15. Our membership has increased over the years. There is a tremendous amount of work that is being done by a small group of people. This change will help the board to better service member needs. On this note, we always welcome and encourage participation from our membership on various committees. If you would like to help, please call Lee Huether at the STA office or send us an email.

Also at the AGM nominations were held for board positions. First of all, I would like to thank Andrew Gaydon – Vanden Bussche Irrigation – now past president, for his leadership over the past two years. Returning board members include Jane Arnett Rivers, Town of Oakville and Paul Turner, G.C. Duke Equipment Ltd. New board...
Above: On behalf of the STA, appreciation is expressed to Director David Smith (right), who is stepping down at the completion of his term, by President Gord Dol.

members include Dave Chapman, City of Toronto; Bob Kennedy, Sport Turf Management Solutions; Grant McKeich, Town of East Gwillimbury; and Gregory Snaith, EnviroIrrigation Engineering.

Board members with one year left in their term include Rick Lane, Haldimand County; Bob Sheard; Brian Adriaans, City of Burlington; Cam Beneteau, Ridley College; Roy Forfar, York Region District School Board; and Paul Gillen, Holland Equipment Ltd. David Smith has stepped down as a board member. Dave, your hard work and dedication to the STA board will be missed. At the AGM, Andrew Gaydon and David Smith were presented with a plaque as a token of our appreciation for all their hard work.

Membership invoices will soon be mailed. Your prompt attention to this is greatly appreciated. For your convenience, we now accept most major credit cards.

Plans for our 19th Annual Field Day are now well under way. It will be held at Ridley College in St. Catherine's on September 21, 2006. Stay tuned for more details as this promises to be another great one. Thank you to Mr. Cam Beneteau and Ridley College for hosting this event.

Finally, I look forward with great enthusiasm to working with this exciting group of individuals for my term as president. I have been on the board since 1995 and have thoroughly enjoyed the experience and meeting so many great people over the years.

Above: Delegates mingle at OTS 2006.

Right: Chris Mark (left), OTS Committee Chair, pays tribute to STA Director Bob Sheard, who served on the OTS organizing committee since its inception until his retirement in 2006. Along with Annette Anderson, Bob was the driving force behind producing this annual premier educational conference. At this year's OTS, Bob stated that education, particularly outside the normal classroom is the secret to advancement.
SECOND EDITION PUBLISHED

STA RE-RELEASES THE POPULAR UNDERSTANDING TURF MANAGEMENT

Within five years of the printing of 1,000 copies of the first edition of *Understanding Turf Management*, the supply has run out. The author, R.W. (Bob) Sheard, kindly agreed to prepare a second edition for the Sports Turf Association which was printed in time to be used by the 2006 class of the University of Guelph’s Turf Managers’ Short Course.

Bob says few changes have been made in the second edition; the principal revisions being the correction of typos and grammatical errors and upgrading prices and application rates to conform to 2005 recommendations.

The quick sale of the first edition and the lack of suggestions for changes or additions to be made in the second edition are strong indications that *Understanding Turf Management* is fulfilling an important niche as an inexpensive, but authoritative text for the novice turf manager as well as a handy reference for the more experienced practitioner. Please visit www.sportsturfassociation.com for ordering details.

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**Coming Events**

**April 5, 6, 10 & 11**
Guelph Turfgrass Institute Landscape Pesticide Certification Preparation Course (refresher), Guelph, ON
Info: (519) 824-4120 x 52501
www.gti.uoguelph.ca (Education)

**April 30 – May 4**
Ontario Recreation Facilities Association 51st Annual Professional Development Program
Guelph, ON
Info: (416) 426-4062
www.orfa.com

**Aug. 11-19, 2006, Aug. 10-18, 2007**
International Softball Congress Schneiders World Fastball Tournament
Peter Hallman Ball Yard
Kitchener, ON
Info: www.kwfastball.com

**GET ON THE LIST!**

Contact the STA if you have an event you’d like to advertise in the STM.

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**SEPTMBER 21, 2006**
Sports Turf Association 19th Annual Field Day
Ridley College
St. Catharines, ON
Info: (519) 763-9431
www.sportsturfassociation.com

**NOVEMBER 1, 2006**
STA Scholarship Application Deadline
Info: (519) 763-9431
www.sportsturfassociation.com

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**WELCOME TO THE STA!**
Brian Hughes
City of Brantford, ON

Francois Hébert
DSSS, Design et solutions pour surfaces sportives enr.
Outremont, QC

Grant McKeich
Town of East Gwillimbury
Sharon, ON

Bob Kennedy
Sport Turf Management Solutions
St. Catharines, ON

Duane Schutten
Jeffrey Lowartz
Heritage Green Landscape Contractors
Ancaster, ON

Stephen Miller
Stephen C. Miller and Associates Ltd.
Malagash, NS

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**Odds and Ends**

**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.

**Summer 2006 Submissions**
If you have something you’d like to submit for the next issue, please forward it to the STA office by April 21, 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.
John Howard Steps Down From OPA

It is with a mixture of happiness and sadness that the Ontario Parks Association announces the resignation of John Howard as Executive Director.

After five and one-half years of dedicated service and hard work, John has accepted a position as Superintendent of Parks with the City of Owen Sound. This is a wonderful opportunity for John to return to his roots in parks maintenance and we couldn’t be happier for him and his family.

John has accomplished a great deal during his time with OPA and the board and membership have all benefited from his contribution. Just like our organization, the City of Owen Sound will prosper immediately from John’s experience, commitment to hard work and contacts throughout the green industry.

Please join us in congratulating John on his new post, which he began on February 13. The OPA Board of Directors has some rather large shoes to fill as a result of John’s departure so we ask for your patience during this period of time.

OPA Welcomes Eric Trogdon

The Board of Directors of the Ontario Parks Association is pleased to announce the appointment of Eric Trogdon as Executive Director of the Association.

Eric lives in Dundas, Ontario and has over 25 years of experience in parks and recreation and has extensive experience in education, law enforcement and working with public and private sector organizations both in Canada and the United States. Eric looks forward to meeting and working with you in the future.

Please join us in welcoming Eric to the Ontario Parks Association. Eric can be reached at 905-864-6182 or by email at opa@opassoc.on.ca.

Editor’s Note: Congratulations to both John and Eric from all of us at the STA!

Generous Donation Made to OTRF

The Ontario Turfgrass Research Foundation wishes to acknowledge the generous contribution of $10,000 made by the Green Horizon Group of Farms and the Schiedel Family. Green Horizon has been producing quality sod for over 30 years. The OTRF has initiated an aggressive fund raising campaign supporting the two new turfgrass faculty members hired by the University of Guelph. Dr. Eric Lyons and Dr. Katerina Jordan join Dr. Tom Hsiang taking the Guelph Turfgrass Research Institute to the forefront of Canadian turfgrass research. We invite all industry representatives to support this cause. For more information, email Research Director c.almack@sympatico.ca.
Introducing Katerina Jordan at U of G

I am a newly appointed faculty member in the Department of Plant Agriculture at the University of Guelph and am writing to introduce myself and give you an idea of what I am hoping to accomplish for the Ontario turfgrass industry. I am originally from the United States and was born in Maryland where I attended both undergraduate and graduate school for my master’s degree. Although I was trained as an agricultural plant pathologist both in school and at the United States Department of Agriculture, I have had an interest in turfgrass and turf management for over a decade. I recently attended the University of Rhode Island, where I completed my doctorate research on plant-parasitic nematodes on golf course greens turf. I am an avid golfer and enjoy sports of all kinds and like the idea of being able to combine my career with my personal interests. Most importantly, I am fascinated with the performance that today’s turfgrass cultivars are able to give turfgrass managers, and am excited about researching management methods of these resilient plants.

One of the major problems I see for turf managers today is maintaining turfgrass at the especially high level necessary to meet the increasing demands of the end users. Without an excessive reliance on chemical inputs, it is often difficult to meet these needs while keeping turf alive. My research focus in Guelph will be to develop and test turfgrass management methods aimed at reducing chemical inputs while maintaining high quality turf. With the proper combination of targeted breeding and a willingness to focus on cultural practices for pest reduction and general maintenance, I believe that it is possible to reduce the total amount of chemical inputs on turf. This would eventually lead to cost reduction for turf maintenance, and would reduce any negative environmental impacts that managing turf may have. My specific plan of action is to look at a variety of organic amendments and potential biological controls to improve overall plant and soil health, and to evaluate different turfgrass species and cultivars than those principally used today. My graduate student, John Watson, will be conducting a study on establishment and management of velvet bentgrass beginning this spring.

My second priority is to continue some of my nematode research on turfgrass in Ontario. The results I obtained in New England lead me to believe that plant-parasitic nematodes may be more problematic on highly maintained turf than might be expected in this area, especially considering the similarity in climate between the two regions. Understanding the potential threats that lie beneath the soil’s surface may allow turfgrass managers to more effectively manage their turf. Specifically, I hope to evaluate potential threats from nematodes through extensive soil surveys throughout the province and to assess various factors that may influence population levels of plant-parasitic nematodes. I am also interested in evaluating various cultural and biological control measures aimed at decreasing both nematode population levels and the symptoms they can cause on highly maintained turfgrasses.

Finally, I will be overseeing the Turfgrass Diagnostic Clinic housed at the Guelph Turfgrass Institute. Working with Erica Gunn, the technician who has been operating the clinic, I hope to continue the excellent service that has been offered to superintendents and other turf managers in the past while making some improvements that will hopefully better serve the industry. We are adding nematode screening to our list of services in the hope that we may be able to answer some questions when fungal diseases are not the cause of visible symptoms. We will have specific instructions for submitting samples for nematode counts on the website this coming spring. We are also going to include management program recommendations for your specific problem at the time of diagnosis, making sure to include a combination of cultural and chemical methods that are available for treatment of your turf. Finally, if we are unable to determine the cause of your problems in the lab, I will do my best to make myself available for on-site visits to evaluate ongoing issues you may have. We hope that these improvements will help us at the GTI better serve your needs as we enter the 2006 season.

Ultimately, my goal in this position is to aid the turfgrass industry in solving whatever problems arise with each season. There is no doubt that being a turfgrass manager is never a boring job, as once you think you have one problem solved, another one is sure to pop up. Weather, wear and the demands of the end users all affect how turf will thrive through a growing season. As each of these parameters is extremely dynamic, it is difficult to predict what problems will be encountered each year. That combined with increased pressure to reduce chemical inputs makes the job of a golf, sports or sod turf manager extremely challenging.

In order to best address the needs of the turfgrass industry in Ontario, it is important to talk to the people who are directly involved. Therefore I plan to try to meet or at least speak with as many of the turfgrass managers in the area as possible before really starting my research program. I hope that those of you reading this article will be willing to share your concerns with me and that together we can work to make your lives just a little bit easier. I have included my contact information below and welcome your calls or visits should you have a problem that needs to be addressed.

Before I close, I would like to thank the department of Plant Agriculture for their commitment to turfgrass research by supporting my position and my technician Alex Porter. I would also like to express my great appreciation to the OGSA (Ontario Golf Superintendents’ Association) and the OTRF (Ontario Turfgrass Research Foundation) for providing me with research funding in the form of start-up monies.

I look forward to meeting with many of you and to continuing to foster the positive relationship that already exists between the University of Guelph turf program and the Ontario turfgrass industry. I can be reached at 519-824-4120 (x 56615) or at kjordan@uoguelph.ca, and have an office on the Guelph campus in 1237 Bovey Building. ♦

— Green is Beautiful, February, 2006

www.sportsturfassociation.com | SPRING 2006 7
Making the Most of Your Diagnostic Dollars

ERICA GUNN, RESEARCH TECHNICIAN, GUELPH TURFGRASS INSTITUTE, GTI TURF DIAGNOSTICS

There are many things to consider when you are sending in a turf sample to be analyzed at GTI Turf Diagnostics. Each sample requires a history and you must supply important background information. When submitting your sample, you need to give us all of the details you can about that sample and the area it comes from. That information will help us with the diagnosis and will help you get the best results.

To begin we need you to start compiling information when symptoms first appear. Symptoms can vary greatly depending on the issue at hand. The very first thing to figure out is what turf species is being affected. This is a key factor. Symptoms may be affecting only one species, as there are some diseases and insects that have specific hosts. An example of that would be necrotic ring spot affecting primarily Kentucky bluegrass. However, if all species in the area are being affected this may indicate a pest with a broad host range or an abiotic (non-living) factor such as drought, nutrient deficiency, fertilizer burn, localized dry spot, etc.

Once you look more closely at the symptoms, take note of the shape at which the symptoms are appearing in the turf area. Spots, rings or general thinning could be a disease or insect pest. Irregular patches could represent some disease spots that are coalescing or insect damage. A more regular or random pattern would be more indicative of mechanical issues such as equipment failing to overlap spray patterns, fertilizer burn or a hydraulic leak. The part of the plant being affected, the leaves or roots, is another important consideration.

Next you need to answer some important questions. What is the environment like in that turf area? Is the area near a sidewalk or driveway? Under the heat of the summer sun a turf area can dry out more quickly in those areas. Is there a lot of wind? Wind can suck a lot of extra moisture from turf plants. Is there a lot of shade? Is there a slope and are the symptoms at the top or bottom of the slope? The top of a slope tends to dry out more quickly and the bottom may be wetter. Are there any drainage issues?

Take a closer look at your symptomatic turf by cutting out a small piece. Do you notice anything unusual about the sample? How is the soil? Does it fall away indicating perhaps a lack of moisture or is it compact and heavy? How is the thatch? Is there a foul odour? Did insects fall out of the sample as you lifted it out of the ground? Do you see any insect frass or tunneling? Does the turf pull away easily, which is indicative of grubs feeding on the roots?

Think about the cultural practices that have taken place recently. What is the mowing height – has the area simply been scalped? What is the mowing frequency? Has the turf been fertilized recently? Certain diseases favour high nitrogen while others favour low amounts of nitrogen. Has the turf been irrigated recently? Some diseases intensify with irrigation or with none. Have there been any pesticides applied recently? Has there been any core-aeration? Some insect pests inhabit aerification holes and some diseases need the turf to be wounded to infect the plant.

Another important thing to consider is of course the weather. Different diseases and insects appear at different times throughout the year. Some diseases require high humidity, excess water, snow cover,
high day time temperatures, or high night time temperatures, etc. Pathogens sometimes spread with moisture and then cause symptoms when the area is dry. Depending on your geographic location, it's very important to let the lab know what your weather has been like as best you can, especially at the time when you first notice the symptoms. Also, take note if the problem is getting worse or improving under certain weather conditions.

When in doubt, send in a sample for analysis. Make sure you get a senior turf manager to look at the sample before you send it in just to be sure they can't solve the problem on their own. By sending in a sample you'll be able to provide the proper treatment, either chemical or cultural, and could save time and money in the long run. Also, by having a diagnostician look at your sample, management issues may be discovered.

Always take your sample before you treat with fungicides as fungicides do their job and destroy the pathogens. Otherwise this really makes diagnosing impossible as we need to see the pathogen that is causing the symptoms.

Samples should be 10-15 cm², cup cutter size is ideal. Include foliage, thatch and at least 5 cm of roots and soil. The sample should show a range of symptoms from healthy, slightly affected to severely affected. A completely dead sample is NOT suitable for diagnosis as fungi found in dead turf may be decomposer fungi and not the real cause.

Take the sample from the outside edge of a ring or patch. If the symptoms are general, take the sample from an area where they are of intermediate severity. Try and submit your sample as soon as possible. If you take a sample, please send it in the same day. If that is not possible you can store it in a cooler or fridge overnight. Wrap the sample in newspaper and then in a plastic bag and place it in a sturdy box. Do not add water and do not allow the sample to dry out or be exposed to excessive heat or cold. Please do not send over a weekend or by mail. Same day courier service or dropping it off at the lab is the best for an accurate timely diagnosis.

Please make sure you fill out the sample submission form as completely as possible. Your sample is just a fraction of the size of the total turf area under your care and it may be difficult for us to diagnose your problem if we can't see the bigger picture. If you provide us with the most information you can, it will help us to diagnose the issue at hand and make the best recommendation for management. All of the questions and considerations mentioned pertain to us as well, so help us help you!

For more information about sending in a sample, submission forms and payment options, please visit GTI Turf Diagnostics: www.uoguelph.ca/GTI/turf_diag. You can also contact Erica Gunn, egunn@uoguelph.ca or Dr. Katerina S. Jordan, kjordan@uoguelph.ca. For information with regards to pest issues and IPM, check out OMAFRA Publications 162 and 816.

QUOTABLE QUOTE
There is nothing like looking, if you want to find something. You certainly usually find something, if you look, but it is not always quite the something you were after.
and detergent (30 ml of each / 5 L solution) and direct harvest of the larvae from cup-cutter soil cores. We then tested the experimental material in the greenhouse on larvae in pots of perennial ryegrass, and in the field on Kentucky bluegrass. We were working with field plots infested with quite high levels of late instar larvae (>800 per m²) (see photo below), but none of the 4 experimental granular treatments we tested had a significant effect on the field populations or on the larvae in the greenhouse. We’ve applied the material (fall 2005) to some early instar larval populations in creeping bentgrass and will examine these populations again this spring.

**NTEP 2005 Kentucky bluegrass cultivar trials**

GTI has joined the most recent Kentucky bluegrass trial from the National Turfgrass Evaluation Program – along with many research cooperator sites in the U.S. In the trial are 110 commercial and experimental varieties, seeded at the GTI in September 2005, which will be evaluated for five years (see front page photo). We already have data from the germination and establishment phase of the trial, and will get spring greenup and winter survival data shortly. We’re “fortunate” that we’ve had a bit of ice cover on the plots this winter, so we may see some interesting differences in survival – especially on the Texas bluegrass entries which are included in the trial.

**Wetting agent trials on creeping bentgrass turf on high sand rootzones**

Two trials, one a new trial and one in its third year, looked at efficacy of wetting agents at reducing localized dry spot on creeping bentgrass on high sand putting greens. These trials provide data which can be used for registration of wetting agents, which is required for such supplements under the Fertilizer Act. Because we did not have a particularly stressful (dry) summer at the GTI (between rainfall and regular irrigation on the green), we did not see much localized dry spot on the trial plots. We were able to detect significant improvements in the rootzones when the wetting agents are used, based on the hydrophobicity or “wettability” of soil cores taken during the season.

**Organic amendments**

We ran four different trials at the GTI in summer 2005 looking at various organic amendments or organic fertilizer programs on turf. These included products that are not NPK fertilizer but may provide some growth benefits (biostimulants) – Greenstreme, a hydrolyzed fish waste material and Hygrozyme, a biostimulant. These materials were applied to creeping bentgrass putting green turf, with and without NPK fertilizer, to determine their effects on turf performance. Another trial looked at palletized alfalfa (Alfalfa Green) applied as an amendment on newly seeded Kentucky bluegrass, compared to an equivalent standard NPK fertilizer. Alfalfa contains a natural growth regulator (triacontanol) which has shown some benefit in other crops during the germination and establishment period. The final trial looked at the performance of liquid organic fertilizer programs on Kentucky bluegrass turf, comparing 6 different materials which combine NPK fertilizers with various combinations of humates, iron and biostimulants, again in comparison to an industry standard NPK treatment.

Many of these products provided performance equivalent to the industry standard materials with which they were compared, though there were no outstanding breakthrough performances from the organics.

Spring ratings of most of these trials will be followed by compilation of the data for the Annual Research Reports. Some of the trials are complete, some are ongoing, and some will lead to further research in new trials. If you’d like to see the trials live and speak to the researchers in person, watch for details of the 2006 GTI Research Field Day where these and similar trials will be on display. ♦