

MAY 8 2006

May 2006

Green is Beautiful

The Official Publication of Ontario Golf Superintendents' Association

Every Cloud Has A Silver Lining

**The Use of Parasitic Nematodes Against White Grubs in Turf
Sunny Days & Warm Nights – Summer Patch 2005 Management
Challenges at Links Style Golf Clubs**

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COVER PICTURE

photo by Steve Lawrence Photography

Donalda Club

*OGSA is committed to
serving its members,
advancing their profession,
and
enriching the quality
of golf
and its environment.*

President's message

LOOKING BACK, PLANNING AHEAD

I'm still relatively young enough to remember my first day working on a golf course, twenty-six plus seasons ago, promptly being sent out on a front-end rotary, as I recall. I eagerly watched my mentors back then practice the 'art' of the craft, then I decided to learn the 'science' behind the wisdom. Years later I am fortunate enough to be able to fine-tune my concept of the 'art' component while trying to keep most practices as simple and uncomplicated and unscientific as possible. That progression of a typical career probably holds true for most of us, I suspect. Remembering where we came from as a professional and an individual, and recognizing our future potential remain valuable lessons for today.

Periodically reminding ourselves of those life-lessons is one of my goals as President. As your Board of Directors plans for a busy and fun-filled year ahead, one of their self-imposed mandates is to re-visit our strategic planning document produced two years ago, with an emphasis on continually ensuring that our vision and goals remain fresh and appropriate for the times. We want to focus on a number of diverse membership areas, which only serve to meet the challenges we are facing as an association and profession.

Looking at the 'big-picture' takes some extra time, but is usually well worth the exercise. The board will also consider allocating our accumulated investment resources from a global 'rainy-day-fund' into a series of separately dedicated funds earmarked for specific purposes such as operating budget protection, capital/opportunities projects, research/scholarships, education and environmental advocacy funds. We have retained the proven expertise of investment advisors, and we expect our funds to grow substantially, utilizing fairly liquid investments of moderately low risk. As part of good governance, we also want to finalize the development of operating procedures for many activities/events, board portfolios and internal office procedures. We will also initiate a study of our office space, storage and staffing requirements as we look towards the OGSA's future and our continual desire to remain proactive.

One organization merits special mention here, the OTRF. I want to specifically reiterate our collective and complete support for this foundation which should be the legitimate coordinator of turf research for golf facilities in Ontario. The OGSA continues to support their efforts both in terms of morale and money. We look forward to reviewing their project results, which can be of practical use in the application of our jobs to benefit golfers.

I understand that the Ministry of Labour continues to conduct random workplace inspections, which include many turf workshops. I would encourage you to ensure that you are in compliance with current regulations and that your training procedures and documentation are all in order for any potential inspection. We should all strive to comply with all regulations as part of our everyday activities, not to mention the real need for IPM protocols and ongoing accreditation. It is in our interest to ensure that all applicable laws are met and exceeded.

Our golf event tournament venues look terrific this season, and Trevor Clapperton and Chris Andrejicka are to be commended as joint tournament conveners. The conference planning committee, chaired by Jeff Stauffer, is nearing completion of the education line-up for the Sheraton Centre Toronto event in January. Clearly, we have a lot to plan ahead for, and a lot to be thankful for. Building upon the success of our past is always gratifying, and I know your board intends on having fun as we plan ahead on your behalf.



Robert Burrows, CGCS, MS
Rosedale Golf Club



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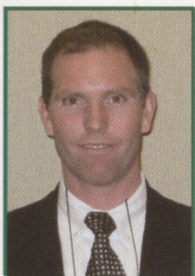
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Editorial message



by Chris Nelson
Co-Editor

I would like to introduce myself to you as the new "rookie" director to the board of the Ontario Golf Superintendents' Association. I was given the privilege as part of my portfolio to work alongside the very skilled Mr. John Bladon as your co-

editor for the 2006 publication year. I will do my very best to support the fantastic magazine that is already in place.

As part of this issue, you will find an update from Pam Charbonneau on water and pesticides legislation, which is a high priority for many of us. The support staff at Engage Agro have provided us with a summary of Summer Patch in 2005 and referred to two case studies explaining

how IPM recording could be the key to controlling this nasty disease. Our feature article for this issue is from Donalda Club depicting how the flood impacted them last August and steps taken to return the property to a golf course, following the devastation. Also we have a technical report provided by Ann-Marie Cooper from Plant Products on an alternative approach for white grub with the use of parasitic nematodes. Finally, Jim Moore, from Puslinch Lakes Golf Club, educates us on how to cultivate an environment for bats and how they help with insect control.

In January of this year, an announcement was put out requesting article submissions from turfgrass students. Ian Boyd, who is a first year student at the University of Guelph and is also employed at Carruther's Creek Golf Club, responded to our request with an article entitled "From the Ground

Up". Along with this submission article, Ian will be the regular contributor to the column "Above the Hole", dedicated to and intern student. We would like to thank the past contributor to this column, Justin Parsons, who has just recently accepted the assistant's position at Trafalgar Golf and Country Club.

Please take the time to enjoy this month's issue and we wish you the very best for the 2006 golfing season.

What's new

ROSTER 2006/2007

The new and improved Roster is now printed and all members should have received a copy with their May 2006 issue of Green is Beautiful. Please advise the office if you did not receive your copy.

OGSA SCHOLARSHIPS 2006

Full information will be outlined in the 2006/2007 Roster. Check in the Roster and on our web site www.golfsupers.on.ca under the heading "Benefits" for full details.

2006 TURFGRASS EDUCATION AWARD

- \$2,500.00 Deadline - Nov. 15th

2006 HERITAGE AWARD

- \$2,500.00 Deadline - Aug. 31st

2006 HUGH KIRKPATRICK BURSARY

- \$2,500.00 Deadline - Oct. 15th

2006 TURFGRASS SHORT COURSE

- \$1,000.00 award based on marks

OGSA has also committed to a yearly \$1,000.00 contribution to the Norman E. McCollum Turfgrass Diploma Entrance Scholarship, sponsored by the University of Guelph OAC Alumni Foundation. This is a \$2500.00 scholarship. If you would like information about this scholarship go to www.oac.uoguelph.ca/learning/learn_turfgrass.asp.

Please spread this scholarship information to anyone you know who might be eligible. If you have any questions feel free to contact the office at (519) 767-3341 or toll free (877) 824-6472 or email: ogsa@gti.uoguelph.ca



Welcome!
O.G.S.A. Welcomes
our newest members

Sandra Bennett	Class D
Oakville Golf Club	
Ian Boyd	Class S
University of Guelph	
Chris Bruining	Class Supt.
Horseshoe Resort	
John Chang	Class C
Emerald Hills Golf Club	
David Gabric	Class S
University of Guelph	
James Gammage	Class C
Ridgetown Golf & CC	
Kenneth Green	Class D
Amberwood Village Golf & CC	
Katerina Jordan	Class D
University of Guelph	
Brad Malton	Class C
Links of Niagara	
Joseph Pesek	Class D
Lakeview House Golf Course	
David Schmitz	Class A
Conestoga Golf Club	
Ken Tilt	Class F
Deer Ridge Golf Club	
Jason Winter	Class Supt.
The Rock Golf Club	
C.F. Crozier & Associates Inc.	
Christopher Crozier	Class E
Cherry Golf Construction	
Doug Cherry	Class E
Future Green Inc.	Class E
Ken Wray	
Kuyan Distributors Ltd.	Class E
Brian J. Kuypers	
Pumps Plus	Class E
Steve Wilkinson	
Rothsay	Class E
Chris Broad	

OGSA SPRING CURLING CLASSIC 2006

The OGSA Spring Curling Classic took place March 23rd, at Dundas Valley Golf & Curling Club, hosted by Randy Booker. We were able to squeeze the finale of the winter season in just as Mother Nature had begun her push for another golf season. The talk of opening dates, removal of covers and "poa" survival were among the topics of the day. When it was finally time to get serious about the day many new curlers were introduced to the game for the first time, as 6 teams battled for supremacy. The winning Trainor rink, with skip Rhod Trainor, David Kuypers and rookie Mark Scenna, came away with an unblemished 2 - 0 record on its way to the 2006 title. Well done!

A great time was had by all as the veterans showed the newcomers just how social this game is with good food and plenty of drink. A heartfelt thanks goes out to all the participants and suppliers for their contributions and support of the 2006 OGSA Curling Classic. Fun was had by all as we enjoyed the last relaxing moment before the onslaught of another golf season, just around the corner.



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What Do You Do In The Winter?

by John Taylor

Superintendent, Hunters Pointe GC

How many times has that question been asked to someone in the turf industry? For many guys the answer is simple, we play a little hockey. For many guys in the turf business, the answer has been the same for the past 12 years. January of 1995 was the date of the inaugural Golf Course Hockey Challenge. It's hard to believe that 12 years have passed and how the tournament has grown since that first year.

Four teams representing Toronto, Kitchener, Niagara and New York took to the ice that first year in a one day shoot-out that tested not only hockey skill, but endurance. The concept was dreamed up after a round of golf one hot summer day in July by Scott Dodson, Superintendent at the Park Country Club in Buffalo N.Y. and yours truly, John Taylor, superintendent at Hunters Pointe Golf Course in Welland, Ont. The day of the tournament back in 1995 was one of the worst winter storms we had all year with snow mixed with freezing rain, but to our amazement everyone showed up. When team New York rolled in that morning with about 40 players and spectators on a highway bus, we knew we were on to something.

Since that first year things have changed but some things have stayed the same. We have moved sites from a single rink in Jordan, Ontario to a twin pad at Niagara University in Niagara Falls, N.Y., to a twin pad with a hotel complex at Fort Erie, Ontario. The number of teams has changed from 4 to 6 to 8 to its present format of 12. Many of the original players have hung up the skates but every team still has some original players. The competition has improved but we have added divisions to try and keep things competitive. Most of all the tournament has remained, as many players have told me, the one event that everyone looks forward to each year in the turf industry.

One thing that has remained constant through the years has been our industry sponsorship of the tournament. Right from day 1, Turf Care Products covered the cost of the ice time and have done every year since. Club Car came on board early and continues to sponsor an "attitude adjustment" party every year. Companies like Duke Equipment and Podolinsky Equipment continue as sponsors every year and Vanden Bussche Irrigation hands out refreshments after games. As well, many other companies have stepped forward to sponsor things such as sweaters, practice ice time, lunches, and travel and lodging costs for individual teams.

One would think that a lot of time and effort goes into the organization of an event like this, but once the ground work

is laid out, the event really runs itself. Individual team reps put together each team and Duncan Brewer from Turf Care handles the scheduling of the officials. The people at the arena help us with catering for our party and make sure the onsite restaurants are available for our use. I'm sure the local economy doesn't mind the approx. 170 hockey players that descend on its local businesses on a Monday and Tuesday in January.

As for this year's tournament, 12 teams got together on January 24th and 25th in Fort Erie, Ontario to compete in a 3 division round-robin format tournament over 2 days. The top 2 teams from each division then played in a final while the bottom 2 teams in each division were sent home to think about next year. At the end of the day the "A" championship went to Northern Ontario who defeated last year's champion team, Toronto # 2, by a score of 3 to 1, in a hard fought game.

The "B" championship was captured by a surprising London team which beat up on the entry from Ottawa 11 to 5 in the final. The downside to London's victory is they will now have to compete in the "A" division in next year's tournament.

Finally, the "C" championship was captured by one of the originals as team Niagara taught team Kitchener # 1 a lesson and romped a 7 to 2 victory. It should be noted that it was team Niagara's first championship of any kind in the 12 year history of this tournament, which earned them a place in the "B" division next year.

Thanks, as always, go to all the players, coaches, spectators, referee's, timekeepers and especially the sponsors who all come together to make this a very enjoyable event for all who participate. If you would like more information on this event please email johntaylor@hunterpointe.ca.





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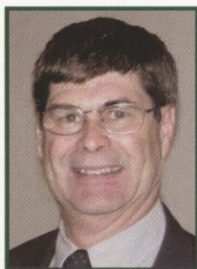




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Health & safety



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Spill Response

Welcome to summer!! The weather is warming nicely and the anticipation of summer is growing!!

Along with these thoughts it is important to think about the ecology of your lands. Active spill response is a very important aspect of operating an ecologically sound golf club.

If you experience a chemical spill on your golf property there are very specific protocols that you must follow.

Last September I wrote about ensuring that you had a functioning emergency plan. The emergency plan should also include the emergency response for chemical spills on your club lands.

It is important that you have a spill response kit that is complete for the type of spills that you can foresee. Your spill kit contents should be designed to ensure that all types of chemical spills are dealt with in an efficient and timely manner. There are different products for absorbing different chemicals and the containers come in many sizes so it is important to ensure that you have completed a reasonable hazard assessment long before a spill occurs to determine the types and sizes of spills you might expect. It is also important to ensure that your staff is trained to respond quickly and efficiently to any spill that occurs. You should have a clearly designed set of procedures in the event that a spill should occur. Your procedures should include information on those to contact, what must be done in the event that a spill occurs and how you should dispose of any material or product that has been cleaned up.

Most organizations have their spill response kits in

closed sealed containers that have a list of the contents and a description on how to use the various components. These kits must be inspected regularly to ensure that they are in good order.

Don't make the assumption that every worker will know how to respond to a spill emergency. Most workers have never had the exposure to a spill that needed to be cleaned up, so it is imperative that there be very carefully established procedures in the sealed kit identifying who is responsible for each aspect of the clean-up.

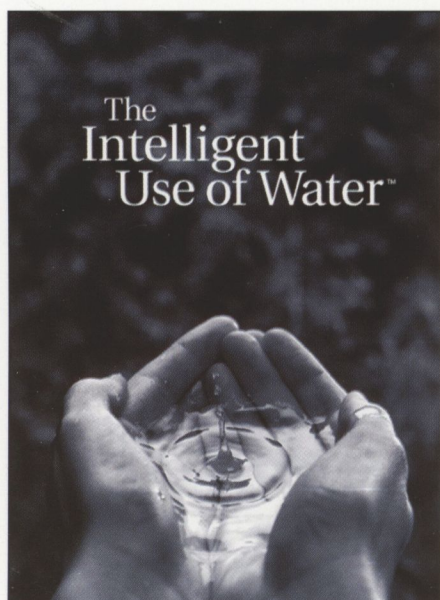
Some of the things that you might consider putting into a spill clean-up kit are, absorbent pads, absorbent socks, neoprene drain covers, chemical gloves, chemical goggles, disposable coveralls, granular sorbent such as "kitty litter", heavy plastic recovery bags, a sturdy shovel and a pail to put all the collected material in after the spill clean-up.

If a spill does occur it is also necessary to inform the Ministry of Environment. A large spill will mean that the Ministry will get involved. It is better to have them involved, with their expertise, at the beginning of the spill remediation than after, as they are able to advise you on your clean-up process and doing it right will mitigate some of the potential loss and damage.

Have a safe Summer!

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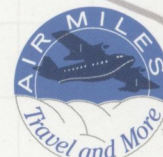


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From roots to shoots



by Pam Charbonneau
OMAF Turfgrass Specialist

In this edition of "Roots to shoots", I have attempted to give you an update on some new legislation, new pesticide uses or registrations and to make you aware of some other information that might be of use to you this spring.

Legislation Update

Changes to the Permit To Take Water

Ontario's water taking is governed by the Ontario Water Resources Act (OWRA) and the Water Taking and Transfer Regulation 387/04. The water taking rules have been overhauled to protect the provinces water supplies. The purpose of these changes is to ensure a standard review process from region to region, to insure that conservation measures are implemented and that high use watersheds are protected. There is now a requirement of annual monitoring and reporting of water taking. For golf courses this will begin in January, 2007. The review of permits to take water (PTTW) applications now have greater emphasis on environmental considerations. In addition, any permits for increased takings from high use water sheds will be refused. Maps of high use watersheds are available on line at www.ene.gov.on.ca

For new permits and renewals, applicants are required to classify their proposed water taking according to one of three permit categories.

Category 1.

A Category 1 is usually designated for a permit that is likely to have a low risk of causing adverse environmental impact. Permit renewals of existing takings are a Category 1. Also, new takings from ponds of less than 1 million litres/day from one of the Great Lakes or its connecting channels will be a Category 1.

Category 2 and 3.

Category 2 and 3 apply to water takings with a greater potential for adverse environmental impacts. Category 2 applies to new and increased water takings that do not meet the Category 1 criteria. A permit that is a category 2 requires a scientific evaluation completed by a qualified person. If the permit does not meet Category 1 or 2 it is classified as a category 3. A Category 3 permit has the additional requirement of a hydrogeological or hydroecological study by a qualified person.

Water conservation requirements

All permit applications must document the conservation practices that they have undertaken throughout the life of the permit. This is done through a water conservation schedule. This includes:

- A checklist of water conservation best management

practices that have been or will be implemented such as making sure there are no irrigation leaks and that all irrigation equipment is performing well.

- A description of water conservation best management practices and how and when they were or will be applied such as water budgets and irrigation audits.
- A list of certification for water conservation such as Audubon Cooperative Sanctuary Program.

Permit fees and application form

There is a \$750 fee for Category 1 and 2 permits to take water. The fee for a Category 3 taking is \$3000. The application to take water form is on-line at the web site listed below.

Additional information

Information on the changes to the PTTW is available on-line at www.ene.gov.on.ca. General information is also available through the MOE Public information Centre at 1-800-565-4923.

Pesticide Update

URMULE for Demand Successful

Landscape Ontario was successful in obtaining a Canadian registration for control of ants on turf for the Syngenta product cyhalothrin lambda (Demand). This submission went through the user requested minor use label expansion program (URMULE). There were also some new uses for some existing turf pesticide labels introduced in 2005/2006. They can be found in Table 1 (see product labels for details on rates and timing). It is worth noting that we now have three products registered for use on summer patch which was so devastating to many turf areas last year namely; propiconazole, myclobutanil and azoxystrobin. Refer to the labels for instructions on use.

Table 1. New uses for currently registered pesticides

Trade Name/Chemical Name	Submitter	Crop	Pest
Terraclor Flowable Fungicide/quintozene	Engage Agro	Turf	brown patch/ gray and pink snow mould
Senator 70 WP Fungicide/thiophanate methyl	Engage Agro	Turf	brown patch/ dollar spot/ powdery mildew/ pink and gray snow mould
Heritage Fungicide/Azoxystrobin	Engage Agro	Turf	summer patch
Chipco Aliette T&O Fungicide/fosetyl-al	Bayer	Turfgrass in golf courses, sod farms and turf areas	foliar and basal anthracnose rot
Entrust/spinosad (organic formulation)	Dow Agrosiences	Turf	sod webworm

National Minor Use Meetings

A three day meeting was held in Ottawa on March 27, 28 and 29th to prioritize the pesticide (herbicide, insecticide and fungicide) needs for all of the crops grown in Canada. All of the registrants who are interested in obtaining pesticide registrations in Canada were in attendance. Each of the company representatives had a chance to share information on new actives that they are interested in bringing to market in Canada. What was quite overwhelming was the number of different products that will become available for the turf market in Canada in the near future. There were approximately 6-7 new actives that have been targeted toward the Canadian turf market. In addition, British Columbia and Ontario have agreed to coordinate their efforts to pursue minor use label expansions for cyhalothrin lambda for leatherjacket control and also either azoxystrobin or propiconazole for control of take-all patch under the URMULE program.

CTRF Turfgrass and Environment Research Report

CTRF has a report available that summarizes the thirteen turf research projects that they have funded in Canada between 1993 and 2004. This report is available on-line at the following location www.rcga.org/english/GreenSection/turfgrass_research_summary.asp. Hard copies of the report can be obtained from the Ontario Turfgrass Research Foundation by emailing otr@gti.uoguelph.ca.

OTRF News

Cindi Charters, who has been the Ontario Turfgrass Research Foundation's Executive Administrator for the past 15 years, has retired as of March 31, 2006. Cindi has been instrumental in coordinating the research and fundraising activities of the association. Most of you will know Cindi for untiring dedication to organizing the highly successful annual OTRF Fundraising Golf Tournament. The turf industry would like

to thank Cindi for all her efforts and wish her well in her new ventures. OTRF has hired a new Executive Administrator who began work on April 1, 2006 named Debbie Conrad. Debbie is keen to get to know the turf industry in Ontario and can be reached at (519) 824-4120 x 56149 and by email at otr@gti.uoguelph.ca.

OTRF would also like to announce funding for Dr. Katerina Jordan for her project titled "Thatch management and management of velvet bentgrass (*Agrostis stolonifera*) turf for use in reduced input golf course putting greens". This project will be funded for a total of \$11,000 over the next two years.

Turf Agriphone started up April 7, 2006

This is a reminder that the weekly updates on turf sponsored by the Ministry of Agriculture, Food and Rural Affairs began on Friday, April 7, 2006. These weekly updates which contain timely information on current pest activity can be accessed by telephone at 1-888-290-4441 or they can be found on the OMAFRA web site at <http://apps.omafra.gov.on.ca/scripts/english/crops/agriphone/index.asp#Turfgrass>

GTI Turf Diagnostics

The early spring has meant an early flood of samples to the GTI Turf Diagnostics. This service delivers an expert diagnosis for turf diseases with a quick turn around time. Information on the service and pricing can be found at www.uoguelph.ca/GTI/turf_diag. Also at that address, you can find forms that need to accompany the turf samples, as well as information on how to take a sample to insure a proper diagnosis and payment options.



Unhealthy turf?

Why not send a sample to GTI Turf Diagnostics for analysis?

The Diagnosticians will respond to your concern within one business day.

For submission form, sampling tips & payment options visit

www.uoguelph.ca/GTI/turf_diag



Dr. Katerina S. Jordan, Assistant Professor and Erica Gunn, Research Technician

Guelph Turfgrass Institute • University of Guelph • 328 Victoria Rd. South, R.R. #2, Guelph, Ontario, Canada N1H 6H8

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Email: Dr. Jordan - kjordan@uoguelph.ca • Erica Gunn - egunn@uoguelph.ca

Canadian Golf Superintendents Association news



Many of you attended the recent conference in Vancouver, and by all reports, the conference is regarded as a great success! The educational lineup was outstanding, the venue was terrific, and the local support was evident accompanied by record attendance. The Ontario contingent was very visible Vancouver is truly an awesome city with lots to do and see! I would like to thank the various event sponsors and especially the conference chairman, Tim Kubash and his committee for contributing to the success of this event. Congratulations also to Neil Blayney of Alberta, upon his election to the position of president of the CGSA! Thanks also to immediate past president, Ian Martinusen and to Jim Nix, outgoing past president for all of their years of dedicated service to the CGSA. We all look forward to the Montreal conference next March.

Syngenta is to be commended for taking an active and substantial long-term sponsorship position with CGSA and our educational initiatives by agreeing to renew a three-year funding arrangement. They announced their renewed commitment in Vancouver, and we thank them for their visible support of our industry.

At our pre-conference board meetings in Vancouver, approval was given to the development and implementation of seminars aligned with our NOS, with the finalization of two exams for accredited and master candidates. The ongoing cost of holding a trade show with education and social components has risen over the years, with the CGSA attempting to hold registration dollar numbers at 1998 levels. The Board has decided to incrementally increase the conference registration over the next few years in order to recover rising costs of holding this national event. Don't forget about the newly instituted educational requirements to retain current membership beginning July 7th. There is a grandfathering provision, but after five years you will be required to

accumulate the needed "continuing education credits" (CEC's). You will have the option of moving from a "Superintendent Member" to accredited, then to "Master Superintendent" upon completion of an exam and accumulation of CEC's. I would encourage you to invest in your career and plan ahead for compliance and professional development.

The registration brochure for the September 18th Fall Field Day at Le Diable Golf Course, Mont Tremblant Quebec (1.5 hours drive north of Montreal), is now available. This venue will continue with the theme of our recent sites such as Whistler and Jasper. We are planning to offer a free half-day seminar prior to the Fall Field Day on the morning of Sunday, September 17, 2006. This seminar will be open even to those who do not plan to attend the Fall Field Day. The provincial association will also be hosting a welcome reception on the Saturday evening, with details to follow. Plan to register soon, as this event will fill up quickly and you may be left out.

The "Score" awards dinner in May will see our friend Rhod Trainor, of Hamilton Golf & Country Club, being recognized for his achievements and commitment to excellence as "Superintendent of the Year".

I also need to announce that the OGSA will be required to nominate one CGSA member for Ontario Director in the fall, as I have moved up to the position of secretary-treasurer of CGSA, at the Vancouver AGM. A replacement CGSA Ontario director will be selected at the Montreal AGM, March 2007. The OGSA board will receive candidates' submitted and forward only one name to the CGSA nominating Committee for the AGM appointment. Consider getting involved; I know that there are a lot of outstanding members to choose from in Ontario for this position.

All the best for a successful season for both you and your club!



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Sunny Days & Warm Nights - Summer Patch in 2005

by Dr. Brenda Nailor

and

Tim Steen

R&D, Registration Manager, Engage Agro

Sales Representative, Engage Agro

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In 2005, southern Ontario experienced a heat wave most of the summer. The sunny days and warm nights were perfect for cold drinks on a patio, but reeked havoc on our local golf courses. As a new sales representative for Engage Agro, Tim Steen had the grim yet rewarding task of visiting golf courses with unusual disease pressure under the extreme weather conditions. Two cases in particular were worth writing about.

Case 1

Monday, July 18, saw us experiencing prolonged heat (mean temperature 26 - 30°C) and humidity. On a southern Ontario golf course, the superintendent had planned to spray in the morning, but the forecasted rain delayed the application of 2 oz propiconazole plus 12 g azoxystrobin until the following day. The application was to protect against a number of diseases, particularly for summer patch, which was diagnosed the previous month.

By Wednesday, the assistant and superintendent noticed severe wilting but no patch symptoms were visible, so they began to syringe in the morning. After all, they believed they were protected from turf diseases with the application made the previous day. The disease progressed until the next Monday. On July 26 they sent samples to diagnostic laboratory in New York. The samples were evaluated on a scale of 1 to 5 for summer patch disease pressure and the course's samples were "positive, 4" for all the greens sampled. The recommendation from the laboratory was to spray (off label) with thiophanate methyl. The following Monday, August 1st, subsequent samples were rated a "1"; therefore, the turf was improving. The superintendent managed to get the disease under control with post-infection, efficacious applications of thiophanate methyl and a break in the weather. Preventative applications of thiophanate methyl were continued on August 8th and 31st.



Case 2

On another course in southern Ontario, during the same time, a superintendent with a lot of experience with Pythium foliar blight noticed what he thought was Pythium on the collars of the greens. The turf managers thought the greens were "burning out" when they saw the symptoms. He sent samples to the New York laboratory. The course had undergone a very late-fall aeration and the holes did not have ample time to heal before the pathogen became active in the early spring. As well, this course normally is treated in early-spring with a preventative application for basal rot anthracnose, but the application was not made in 2005. The spring was dry with above normal temperatures followed by two heavy rainfalls. Subsequent management practices were standard, which included simple cultural controls, monitoring moisture levels, and syringing when needed. The diagnosis from the laboratory was again summer patch.



Back to Basics

On Saturday, August 6th, a group of superintendents, mainly from the London area, met with invited guest Dr. Joe Vargas. Vargas advised the superintendents on the summer patch problems they were experiencing, and suggested they go back to the basics of growing grass by keeping the turf (new and old) as cool as possible with frequent, light irrigation (with absolutely no heavy watering), using a high nitrogen program to promote growth of the plants and reducing plant growth regulator applications until the plants were healthy again.

Continued on page 12.

Hind sight is 20/20

After doing the post-mortem on the series of events, one can likely point out the management strategies that would have made a difference in the outcome. If fungicides are being used, they must be used preventatively to manage summer patch, because the pathogen is active long before symptoms are apparent. There are two variables, however, that make preventative applications of fungicides difficult: 1) we cannot predict long term weather patterns with a high success rate, and 2) we cannot predict the presence of the pathogen if we do not have a history of the disease. Depending on the superintendent's turf disease tolerance threshold, they will have to make the personal choice to spray preventatively or to hope that the weather will not be conducive to anthracnose again this summer.



IPM Records Are Key

To know where to spray the pesticide, and when to spray, consulting last year's IPM records is the key. The superintendent should have a record of the weather conditions and cultural practices that may have exacerbated the disease, the day the symptoms first appeared, and a map of where the disease appeared. The record should be a stand alone document that requires no interpretation or consultation because the information may be required years from now by other personnel at the golf course. By looking at the records, the superintendent can estimate when and where the pathogen will cause damage. By monitoring the local temperatures, the superintendent can know the general time when the pathogen will start to grow in the spring and won't need to wait for symptoms to appear. Recommendations are that applications of a registered fungicide be applied in April or May when the soil temperature is greater than 16°C at a 5cm depth for 4 consecutive days. Through good records, the spray program can be evaluated at the end of the season and altered according to manage this season from year to year.



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Management Challenges at Links Style Golf Clubs

by Doug Davidson, Superintendent
Glencairn Golf Club

Recently, the golf industry has witnessed resurgence in the number of links style golf courses brought to the marketplace. Internationally, there has been the development of such high profile courses as Brandon Dunes, Whistling Straits, the site of the 2004 PGA Championship, and perhaps most fittingly, Doonbeg Golf Club, Ireland. In lieu of a trip to Ireland, a visit to Doonbeg's website is highly recommended at www.doonbeggolfclub.com. Closer to home, and to name a few, we have seen the successful introduction of Eagles Nest Golf Club, The Club at Bond Head and Glencairn Golf Club, where I am currently the golf course superintendent. In this article, I will elaborate on the design elements of links style golf courses and examine how these elements affect the management of the golf course.

I use the term "links style" to distinguish Glencairn and other inland golf courses from the true links courses found in Scotland or Ireland. Many golf courses make the claim to be links golf courses and although many golf courses do have links elements, they are not true "links". Links is a term that refers to a very specific geographic land form found in Scotland. Such tracts of low-lying seaside land are characteristically sandy, treeless and undulating and often with lines of dunes or dune ridges. Considered poor land for farming, from the Middle Ages these tracts of links land were common ground for sports, including archery, bowls and golf. The "golf courses" were found there by those playing golf, which consisted of hitting a ball from one area to a target, and were routed through the dunes. The golf courses that evolved in these locations are the type most of us would recognize as links courses. These courses contain the following design elements:

Bunkering:

Free flowing, jagged edged dunes style bunkering. This style evolved naturally as a result of golfer traffic, the activity of foraging animals, and the prevailing winds. Areas of turf removed through iron play would evolve and change with the prevailing winds. Historic golf articles document golfers remarking that the bunkers changed on a daily basis.

Stacked sod wall bunkers. Initially railroad timbers were employed in an effort to stop the progress of erosion, shore up the sides of bunkers and retain the shape of the bunker. Railroad timbers were eventually replaced by sod, an inexpensive and available construction material that was cut in bricks and stacked. Of note, this evolution is little different from the sod walled houses of the prairie settlers. These bunkers have evolved into the pristine sod walls we now see at St. Andrews and other courses that host the British Open. This style of bunker is often hidden and has perimeters that roll into the bunker and are extremely penal.

Fescue/Gorse:

In the absence of trees, links golf courses have an abundance of long grasses and clumps of low growing shrubs. Expanses of "unmaintained" areas frame playing surfaces and contain mounds, rolls, concave berms and dunes. In some cases they are completely unshaped by human hands although generally speaking there has been some modification to the natural terrain of the golf course.

Firm and Fast Playing Conditions:

As links golf courses are located on coarser, sandier soils, they are generally well drained and, as a result, typically firm and fast. Golf balls tend to run further once on the ground allowing for a variety of shots to be played into greens. This is a must when ocean winds make ball flight difficult to predict. I have heard British commentators remark that the golf course should be "biscuit brown" for the Open. Alas, even the Open has succumbed to the demands of television and looks increasingly green every year.

Large Fairways; small primary fescue rough areas:

When we think of links golf courses most of us would think of St. Andrews. The Old Course is actually quite wide open with plenty of short grass that allows golfers to play any given hole a variety of ways. However, once you are off the maintained playing surfaces the long grass, gorse and heather are extremely penal. There are many exceptions including Carnoustie, which has rather small fairways in comparison. In actual fact, the links courses that are exceptions to this rule may number as many as those that adhere to the rule. Regardless, most links golf courses share the idea that you are either 'in play' or 'out of play'. In play, the golfer has fair opportunity to advance his/her ball. Out of play, good luck! Links courses rarely have penal primary roughs like we are accustomed to seeing at PGA events like the U.S. Open. Additionally, the fairways will yield uneven lies as a result of being shaped by the forces of nature rather than a bulldozer.

Absence of Trees:

True links golf courses have few, if any trees. Trees play neither a strategic or aesthetic role on links golf courses. They are not employed to force golfers to shape shots or frame landing areas or green sites. In fact, seeing St. Andrews for the first time is rather anticlimactic as it is very difficult to discern individual holes. However, you can see large portions of the golf course from various locations and these wide vistas are part of the links experience. During the Open Championship, the crowds and grandstands perform a similar role to that of trees by framing holes. Without the presence of crowds and grandstands, links courses are wide open.

Each of these design characteristics presents unique management challenges and these tests are not strictly confined to maintenance. It is apparent that links style courses challenge other items such as; the management of the tee sheet, the health and safety of both the golfer and staff member and to the operating and capital budget of the club.



Bunkering:

Perhaps the single biggest management challenge has been bunker maintenance. Glencairn Golf Club has 181 sod walled bunkers with faces as deep as 8 feet. Unlike the stacked sod walled bunkers in Europe we have made a conscious effort here to keep the bunker faces alive and actively growing. When they are actively growing they require weekly mowing, at a minimum. All mowing is done with string trimmers as the severity of the slope prohibits use of any other technique.

Unfortunately, with the heat and drought we have experienced in the last two years, it has been a real struggle to keep the faces actively

growing. It is difficult to water a wall! Irrigation water does not move horizontally into the wall even with judicious hand watering. Additionally, grass is geotropic. This means the roots naturally grow down and so forcing growth on a wall defies the plant's natural instincts. Droughty or dormant faces are not particularly stable and are, as such, subject to erosion. Not uncommon, are faces that accumulate large amounts of sand because of concentrated play on one small area. These are more likely to "check out" in droughty conditions. Collapsed or deteriorated faces are also becoming more prevalent as the course ages. We will discover the true cost to repair these degraded faces as we tackle the more severe cases this year. Faces can also degrade due to foot traffic. The average golfer can find it difficult to enter and exit some of the bunkers with deep faces the entire way around and less fit or older golfers have greater accessibility problems. As a result, we have noticed degradation of the entry and exit points. Another concern is golf cart traffic. The bunkers are very difficult to see if traveling backward through the course and so for safety reasons, golfers unfamiliar with the property, like corporate event participants, are encouraged to follow cart paths in returning to the clubhouse following their round. The positioning of the bunkers also makes it difficult to spray pest protection products. Spray patterns must be well thought out to avoid either burying a sprayer in a bunker or from missing or overlapping with an application. Lastly, the sod walls have been a haven for the field mice, voles and wasps on the property. All of these pests exploit any fissures in the faces to nest.



Fescue – "Not Maintained":

It would be terribly inaccurate to call fescue unmaintained. Fescue is, in my experience, very slow to establish. It should be noted that fescue does not particularly like clay-based soils and it is commonly found on those sandy links courses for a reason. Combine slow establishment with a clumping habit and you have a stand of turf that is riddled with weeds. During our first year we worked hard to alternatively mow with a rotary at 6" and spray the long grass. For the most part, we have the weeds under control. Apart from aesthetics it is very important to keep the fescue weed free and 'thinned' to improve the pace of play. We believe the golfer must be able to find his/her ball and have the reasonable opportunity to advance it. The large stands of fescue also tend to concentrate traffic. Where parkland style courses have large expanses of short clipped bluegrass, Glencairn is a 280-acre site with very little primary rough. We try to discourage golfers from driving in the fescue (another challenge) but this necessitates increased traffic on the short grass. Also, the islands of fescue that frame most holes force golfers to exit and enter play areas through tiny little corridors of short cut fescue. These areas require a concerted effort with roping to control traffic flow. Final challenges are employee movement and irrigation obsolescence and locates. We have paths throughout the fescue for employee traffic flow. These paths need to be periodically changed or the grass is lost forever. Also lost are quick coupling valves or other valves that are not marked with stakes. Irrigation was specifically installed to grow in the fescue and once

established, the irrigation became obsolete. In spite of this, these locations need to be marked and maintained as they require a visit during the irrigation blowout.



Firm and Fast Playing Conditions:

In my experience, most golfers do not enjoy firm fast playing conditions. Most enjoy the extra carry when they drive the ball to a firm fairway but do not enjoy hitting into firm greens. This holds particularly true for older golfers who have a difficult time hitting the ball in the air. "Holding" shots to firm greens is clearly more difficult. Not everyone has embraced the bump and run aspect of the design at Glencairn. Trying to maintain firm & fast conditions has resulted in some less than positive customer comments.

Large Fairways, Uneven Lies & Small Fescue Primary Rough Areas:

Again, traffic management is very challenging on this style of golf course. It should be noted that golf carts are rarely used on the true links courses in the old country. Having said that, carts are an integral part of the revenue stream at North American clubs and begrudgingly, we accept them on the golf course. Additionally, fescue does not handle traffic as well as bluegrass. Spray costs rise with the increased size of the fairways. This is most evident with weed control and snow mold protection.

Absence of trees:

Prior to commenting on the challenges of managing a golf course with few trees, I should acknowledge that it makes for great growing conditions. Glencairn has two greens that have shade problems, #3 on the Leithfield 9 and #8 on the Speyside 9. I know most people would envy us for that reason. We take it for granted that trees perform a safety role by screening on the golf course. Imagine your golf course without any trees. There are bound to be some tighter areas that would warrant safety considerations. Additionally, in the absence of trees golfers use their ingenuity to find the quickest route from tee to green. On some doglegs this can present a problem. It is not uncommon to find a creative golfer making his way cross-country from tee to green. These cross-country navigations can be hazardous to players and staff members alike. Trees also serve to provide privacy, shade, relief from the sun and wind, and reductions of noise. Glencairn can be a hot, relentlessly windy location to golf and we often find golfers undertaking dubious activities to find relief from the sun and wind. In terms of noise, celebratory cheers seem that much louder in the middle of an open expanse of ground.

In closing, no golf course is without its management challenges. The lessons at Glencairn have reinforced that each course, links style or parkland, presents its own set of challenges. The links style course offers an alternative to the parkland courses that saturate the market. Success, in a competitive marketplace, depends on owners/operators finding their niche. It has been said that we are in the "experience" business. Links style courses like Glencairn Golf Club offer the golfer a unique experience and serve a niche in the marketplace. For those reasons, the management challenges are well worth it.

Member profile

Interview with Scott Bowman

by Doug Davidson, Superintendent
Glencairn Golf Club

Born and raised on a dairy farm in Listowel, Ontario, Scott Bowman has risen to the position of superintendent at one of the province's finest golf courses. Anyone who played in the Western Ontario Golf Superintendents Association Taylor Barnes Tournament, last October, will know the treachery of the greens at Greystone. Don't make the mistake of thinking the greens were "tricked" up for the event. Sure, a little extra preparation went into the presentation of the golf course but the greens are typically that fast for member events. I sat down recently with Scott to discuss how he arrived at Greystone.

Scott started his relationship with golf early, as a member of Listowel Golf Course, at the age of 10. He played golf on the high school team and it was at this point that he first considered a career in golf. In 1992 he joined the Listowel greens crew, through a high school co-op position. He managed to convince then, Listowel's superintendent, Bob Greer to hire him for the summer. Scott continued to work at Listowel for the next two summers while attending high school. A high school guidance counselor alerted Scott to the Golf Course Technician's Program, at Seneca College and in 1994 he enrolled at Seneca. His summer co-op term for 1995 was spent at Maitland Golf Club working for Paul Lynch, Superintendent. The following summer and after graduation he worked at Elmira Golf Club as the irrigation technician with Paul Romahn, Superintendent. Scott returned to school in 1996 to pursue his Associate Diploma in Agriculture from the University of Guelph. He continued playing golf at Guelph and was successful in making the varsity team, the Gryphons. Upon graduation Scott accepted a position with Greystone Golf Club. He was hired at Greystone by Jeff Allen, who is now the superintendent at The Lake Joseph Club. Scott was convinced that joining a growing company like ClubLink would provide excellent career opportunities. ClubLink could also provide the instant association of peers and the camaraderie that could facilitate the networking that would serve to nurture and develop his own skills. His convictions proved correct and Scott was promoted to assistant superintendent in 2000 and, ultimately, superintendent in 2004.



Scott has been a member of the OGSA since 1998 and is also a member of the WOGSA, the CGSA and the GCSAA, and comments,

"It's important to be a member of the OGSA.... there is no better way to network. The Association affords you the opportunity to call guys up regarding current issues, and provides the camaraderie that helps ease the stress on days when you love it to hate it."

Having grown up the son of dairy farmer Scott is no stranger to hard work. He cites his parents as having the biggest influence on his career. Scott's parents never discouraged him from leaving the farm and are quite proud of what he has accomplished in his career. Incidentally, his parents extricated themselves from dairy farming in 1997. Scott remarks,

"Hard work, patience and a little luck, by being in the right place at the right time, are what lead me to my career standing now."

Scott still plays golf regularly and competitively though the glory days of a single digit handicap have come and gone. Most recently he was part of the WOGSA team that was bettered in the cross border challenge by the Western New York Golf Superintendents Association. Scott was partnered with Bob Egerton, Superintendent, Fox Run Golf Club. Together they managed to win 3 of a possible 4 points in their match. "Bowsy" is also an avid hockey player having won an International Silver Stick, an All Ontario Championship and most recently, a Senior AA Championship, representing the Palmerston 81's in the Western Ontario Hockey League. It should be noted he is currently considering retirement from hockey to spend more time with his wife, Kristen, of two years and his dog, appropriately named, Cooper. He may even find some time to fish, hunt and visit his in-laws at Pike Lake, a favourite summer retreat.

"In the Hot Seat"

- | | |
|--|---|
| • Favorite Major? | U.S. Open |
| • Favorite Architect? | Pete Dye |
| • Ultimate Foursome...you and what three? | John Daly, Wayne Gretzky, Jack Nicklaus |
| • Lowest round ever and where? | 71 at Maitland Golf Course |
| • Favorite course outside Canada? | Carnoustie |
| • Best piece of turf equipment? | Salsco roller |
| • What is in the CD player? | Mixed Country |
| • Favorite meal? | Anything Thai |
| • Favorite movie? | Slapshot |
| • Stanley Cup pick? | Ottawa |
| • Rate your home lawn (1 worst, 10 best) | 10 - New Home, New Sod |
| • What would you be doing if you weren't working in the turf business? | Farming, specifically milking cows |

Golf course highlight

Glencairn Golf Club

9923 Regional Road 25, Halton Hills ON L9T 2X7

Website: www.clublink.ca

Golf Course Superintendent: **Doug Davidson**

Email: ddavidson@clublink.ca



Photo by Doug Davidson

COURSE PROFILE

What county is your club located in?
Halton

Is your club private, semi private, public, resort or municipal?
Private with 680 members

Typical number of rounds
45,000 rounds per year

Typical opening and closing date
Mid April - Late November

How long have you been a superintendent?
6 years

How long have you been an O.G.S.A. member?
6 years

How many staff?
Up to 5 year round and 45 seasonal staff

Who are your assistants and mechanics?
Assistant: David Boehmer
Mechanic: John Leether
Asst Mechanic: Jordan Cockerill

How many gardening staff?
2

COURSE STATISTICS

How many holes?
27

What is the yardage from back and forward tees?
6,922 yards from the back tees (max) and
5,285 yards from the front tees (max)

What is the size of driving range and tee range?
1.5 acres bent teeing surface
42 individual artificial turf teeing stations
Fairway is 300 yd by 270 yd.

How many bunkers?
181

How many times does water come into play?
40 million gallon reservoir (not in play), man-made rock walled 'burn' (dedicated pump for circulation) comes into play 3 times. Six forced carries over Conservation Authority mandated buffer zones that protect tributary.

Who was the original architect?
Thomas McBroom

What was the year of original construction?
Opened June 2004

What major tournaments have been held?
Ultimate Nassau 2005

What is the size of your maintenance shop?
Admin/Lunch room - 1,800 ft²
Cold Storage - 7,200 ft²
Mechanic Bay, Grinding room - 2,500 ft²

What type of irrigation system?
Toro, OSMAC

What is the size of greens, tees & fairways?
4.5 acres of greens
4.5 acres of tees
45 acres of fairways

What is your predominant grass?
Bent, Greens SR 1119
Tees and Fairways Dominant Extreme

How many USGA and loam greens?
29 modified USGA

What is the predominant soil type?
Clay

What equipment do you have in inventory?

9 - GM 1000
4 - GM 1600
6 - GM 3000 Series
Triplex Mount Verticut, Spiker Heads
1 - Jacobsen Tri King
3 - Toro 5100 D
1 - John Deere 3235
1 - Toro Groundskeeper 3500 D
1 - Ransomes AR 250
1 - Sand Pro 2000
6 - Club Car Golf Carts
5 - EZ GO Golf Carts
2 - Yamaha Golf Carts
14 - Toro Workman 2100
1 - Workman 3300
1 - Workman 3200
1 - Kubota 4310 Tractor
1 - Kubota 6800 Tractor
1 - Kubota 3830 Tractor
2 - Super Tilt
1 - John Deere 8875 Loader
1 - Toro MP 110 Sprayer
1 - Toro 5200 Sprayer
1 - Bergal B40 Blower
1 - Toro Rake O Vac
1 - Propass 180
1 - Procore 880
1 - Procore 660
1 - Salsco Greens Roller
1 - Express Dual 2000
1 - Anglemaster 2000
1 - Ryan Sodcutter
4 - Stihl Handheld Blower
4 - Stihl BR 420 Backpack Blower
5 - Lawnboy 6.5 Hp
2 - Little Wonder 13 Hp Blower
9 - Stihl 85 R Trimmers
Various Spreaders, Tractor Implements and Hand Tools

COURSE PROJECTS

What projects have you recently completed?
1st of 3 year curbing

Rebuild gold and blue tee complex 7
scotch block to address safety concerns
Remediation of construction 'dump site'
Driving range net installation
Rockwall construction

LONG RANGE PLANS

What long range plans for renovation do you have in the next five years?

- Re-vegetation as mandated by Conservation Authority
- Viewing platform 4 SS
- Tree planting and fairway expansion and realignment 4 Leithfield
- Additional tree planting for screening and safety
- Sod wall bunker renovations
- Clubhouse surrounds improvements
- Rockwall construction
- Irrigation upgrades

CHALLENGES

Are there any particular challenges you face with your property?

- Size of site - 280 acres
- Exposed site - drought, irrigation effectiveness and water supply
- Screening and Safety - absence of trees and close proximity of holes due to 'pinching' caused by railway crossing and environmentally protected areas
- Railway Crossing - noise, mowing routes
- Sod walled bunkers - maintenance and construction
- Growing fescue primary and secondary roughs

SUCCESS STORIES

Do you have any success stories?

Bringing to completion the construction of the course (completed by Superintendent David Wyllie). Was considered a very successful launch in terms of membership sales and public relations.
Working with a tremendous management team to meet the expectations of our members and their guests and to create a unique golf experience.

Please list any innovative cultural practices you may perform.

Close cooperation with the golf department to rotate the starting nines on a weekly basis to provide an opportunity to perform extensive work (aerifying tees, spraying fairways, cutting fescue, etc.) on any given nine every three weeks. We have a new 'back nine' every week.

Every Cloud Has A Silver Lining

by Paul Grotier, Assistant Superintendent
Donalda Club

On Friday, August 19th, a series of severe thunderstorms tracked eastward across southern Ontario ranging from Kitchener to Oshawa, effecting the northern half of Toronto. At its worst, the system spawned two F2 tornadoes with winds gusting between 180 and 250 km/h. The severity of the storm was such that according to the Insurance Board of Canada, the resulting damage represented the highest insured loss in the provinces history, exceeding \$500 million, more than Ontario's losses during the infamous ice storm of 1998.

The Donalda Club, located at Don Mills Road and York Mills, lies just south of where the eye of the storm struck, which passed through Don Mills Road and Finch Avenue spilling approximately 150mm of rain. The East Don River Valley which runs through the Donalda Club is a collection point for urban runoff. The river rose more than three meters in over one hour resulting in many holes being under three feet of water. The only unaffected holes were #10 through #14. At its highest point, water levels reached the door handle of the pump house and completely submersed the maintenance building's basement. Thankfully, Scott White, Course Superintendent and Warren Wybenga, Equipment Manager, who both live on the property, shut of the power to our maintenance building, equipment barns and the pump house before they became completely inaccessible.



By the following morning, most of the river water had receded making the course accessible for damage evaluation. Silt, sand and gravel had been deposited all over the course being most significant on the rough and fairways. A few greens and tees had a

thin layer of silt but damage was not as considerable seeing as they are perched above the eventual high water mark of the storm. The bunkers within the river valley were completely washed away including the sand, drainage and in some cases, shape. Additional to the storm, so heavy were the previous day's rains that they severely washed-out and contaminated bunkers clear of the Don River's flood waters. Also, the north end of the course had sustained significant river erosion as most of the river lined flood and erosion control systems had failed.



The damage was not just limited to the turf and bunkers since with the exception of one bridge next to the maintenance building, every bridge on the property sustained damage. In most cases, access ramps, including structural trusses, had been either washed away or heaved out of place. While most bridge frames suffered no damage, the walking bridge on the sixth hole had been completely washed away leaving only the footings. The majority of bridge damage was to conduit carrying satellite wires, irrigation lines and potable water lines had also been damaged. Carpaths were no exception and in some instances, entire sections measuring about 10 feet long were washed up and deposited in various locations on the course.

As the extent of the damage became apparent, the most important part of the renovation initiative was set in motion: a plan which would prioritize areas of immediate concern. The focus of the grounds staff that day was saving the areas of our greens under silt. First, power needed to be restored to our pump house. With no visible damage to power supply lines, we were able to fire up the pumphouse in order to pressurize our irrigation lines to start

hosing off the greens. We used high pressure irrigation water and plastic snow shovels to clear off the silt as soon as possible. This method worked well and by the end of the day, all the silt had been removed. While crews were hard at work, Paul Scenna, former superintendent, was busy securing contractors to help assist in the course renovation, preparing a summary presentation for the membership and finalizing a detailed restoration and improvement plan. On Sunday, focus then turned to saving our tees. The previous day's method was used and by the end of the day most tees were clear of silt.



The restoration project was too big for our crew to handle alone necessitating outside help. Bill Searle of North Gate Farms was called in to be the major contractor to renovate the course. Due to the immense scale of the job, Chris Baynham of North Gate Farms, who had previously worked on the construction of the Georgian Bay Club, was brought in as the project manager to help coordinate the restoration. Furthermore, we were still responsible for the day-to-day maintenance of the unaffected parts of the golf course.

With a work crew now totaling over 70, including Donalda's grounds crew of 25, crews could be divided to tackle different tasks. From this point, focus turned to fairways, rough and bunkers. We hosed off as many fairways as possible, and in some cases, once the silt dried, we were able to use a power-sweeper to sweep off silt and debris. However, some large areas including rough and fairways, approximately 18 acres worth, were covered in very thick silt that ranged from 6 inches to 3 feet deep. So for these areas, skid-steers and large excavators picked up the debris and put them into wagons to be hauled to a dump site. Concurrently, bunkers had to be cleaned, re-drained and reshaped. Seizing this as an opportunity to improve the bunkers, the Club decided to switch from Ohio Best 535 sand to Sidley Pro/Angle. A total of 1500 tons of new sand had to be trucked in. Also, a bunker liner was installed on all steep slopes to minimize future washouts.



Bridges were promptly repaired to acquire complete vehicular access of the course, and the missing walking bridge on the sixth hole was replaced. Damaged satellite components which were

corroded after being submerged in water had to be refurbished and the lower putting green satellite was relocated to higher ground. The satellite was upgraded to a ToroVp from a Toro Network 8000, which would allow us to obtain single head control for the lower putting green, the first fairway and its tees.



Recommendations were needed to address the restoration and improvement of erosion sites inflicted during the flood along the Don River. It was decided that a long range master plan detailing various ways to stabilize the river would be drawn-up in order to provide a blueprint prioritizing areas needing immediate attention. One such technique is bio-engineering. This method incorporates rounded armour stone and plantings of native vegetation which will be implemented on the most susceptible areas of the river. This will help stabilize the banks and help reduce damage from increasing water speed as it flows downstream.



Despite the size of the project, the course was re-opened for play on October 8th, a mere 50 days after the devastating flood. Once all was said and done, an astounding 18 acres worth of sod was used, including Creeping Bentgrass, Fescue and Kentucky Bluegrass. It must be noted that there was a silver lining to the adversity faced by our club. With the damage the golf course sustained, we seized the opportunity to improve our course during the renovation project. Tee size was increased on some holes, bunkers were rebuilt and improved including new fescue sod around the backside of some bunkers and the course closure provided seven weeks of rest for our greens. The result of the storm - a golf course better than ever.

The summer of 2005 was indeed a unique season. While it was a grueling one, I can honestly say it was a positive experience. Our grounds crew rallied together and worked closely as a team. Despite the long hours and the heat of the summer, crew morale was at a high. Many thanks to A.K Electric, Fredericks Mcguire Ltd, Lakeside Contracting, Mark Schollen and the people at North Gate Farms for the incredible job accomplished. Last but not least, a sincere thanks to the clubhouse management for their support and to the club membership for their patience and understanding.



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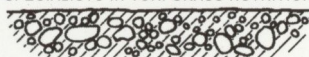
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And Trade Show

VENUE

Weston Golf & CC
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Club At Bond Head
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DATE

Monday, May 29th
Thursday, June 15th
Monday, July 24th
Thursday, September 21st
Monday, October 2nd
January 17, 18, 19th, 2007

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Same Bat Time, Same Bat Channel...

by Jim Moore, Superintendent
Puslinch Lake Golf Course

Let me start by saying that I am not an expert on bats. Now however, I believe I have enough experience to farm them when I retire, should I decide to. My familiarity with bats began about ten years ago, ironically, when I started cleaning up after them. One day, while washing the lounge area windows, our clubhouse manager engaged me in a discussion. She asked if we had a problem with mice because of all the droppings she had seen outside on the window ledges and her concern was that they would enter the building. I decided to call Abell Pest Control and have them set bait stations for voles. A month passed, and again, the clubhouse manager was washing the windows with noticeably larger amounts of droppings present. I called Abell again and had them do a closer inspection of the problem area. The resulting diagnosis was bats. Upon hearing this, immediately, the general manager wanted the bats eliminated. At the time, IPM awareness was growing and I was aware that bats could be beneficial from an insect control standpoint. Although the club was concerned with rabies and the odor that comes from the "guano", I agreed to clean the droppings regularly and monitor the situation. I decided to climb into the attic above the clubhouse in order to study things a little bit more closely. Surprisingly, there was little or no odor and I concluded that the bats must be defecating before entering the building. The next step was determining their entry and exit point in case we made the decision to exterminate them. After two nights of observation, this entry and exit point remained elusive. In the summer months, I usually arrive at the club before light so I was certain I might see a few stragglers returning to the building just before sunrise but, no such luck. This was when my research

began. After reading up on bats, I understood that they prefer very warm nights and mornings. On one particular morning, it was 28°C and they were flying over the ponds by our maintenance building. There was just enough light to see them and so I sprinted to the clubhouse...there they were! One or two at time, they were entering below the eaves trough and in between the soffit and the stone building. In spite of the remarkably small hole, I was able to count 10 bats entering in the same spot!



Myotis lucifugus – little brown myotis, roosting in house. Photo provided by Merlin D. Tuttle, Bat Conservation International



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Last winter I took a trip to Jamaica and had a tour of the local caves. An ideal home for bats, I was reminded of my entry to our clubhouse attic and again, fully expected the strong odor of guano to greet me at the mouth of the cave. Once again, the odor was minimal and it did not smell any worse than a compost pile that has just been turned over. The enthusiastic tour guide told us that if he had more money he would start a bat farm. He claimed bat guano is the best fertilizer in the world and told us about a substance called Draculin. Although not yet synthetically produced, Draculin comes from the saliva of the vampire bat and is used as an anti-coagulant for heart patients. He also told us that having bats present is also a strong indication of an environmentally safe area as bats tend to avoid spaces that contain chemicals like cleaning solutions. I was reminded that our clubhouse staff uses vinegar and water to clean the windows as opposed to ammonia based products.



Back to Puslinch. At one point this past summer, the general manager was leaving at night and ended up stopping to count the bats falling out of the house. That's right, falling. He was amazed to see them dropping out of the tiny hole prior to flying away and stopped counting after 30 bats. I wanted to find out if pest companies live-trap bats and if it was even a good idea. After all, they could have free room and board at our clubhouse! I contacted Leslie Sturges, Director of Bat World, to inquire if bats ought to be trapped and transferred.

"Trapping is inhumane and shouldn't be done. Bats can be excluded from a dwelling without losing the colony so they can take up residence in a more suitable habitat nearby. Bats have a very strong homing instinct, and trapping and relocating them will only result in exhausted and starving bats. The best course of action to take is to install a bat house near the entry point on the building during the winter months. When the bats return for the spring and find the entrance blocked, their alternative is right there. Let the bats live there one full season and then move the boxes to a close but different area, don't forget they love the heat!"

So, if you are thinking of cultivating an environment for bats to help with insect control, or need to move a small colony, consider building bat houses. The blueprints can be downloaded off the web or you can purchase pre-fabricated houses at your local farm supply store. Be advised, they do require some monthly maintenance to ensure they do not become infested by unwanted creatures such as hornets.

Check our clubs web page <http://www.puslinchlakegolf.ca/> for a photo of our clubhouse and follow the chimney to where our bats call home. For more information on bats, check out the following websites: <http://www.batcon.org/joinBCI/index.asp> www.batworld.org.

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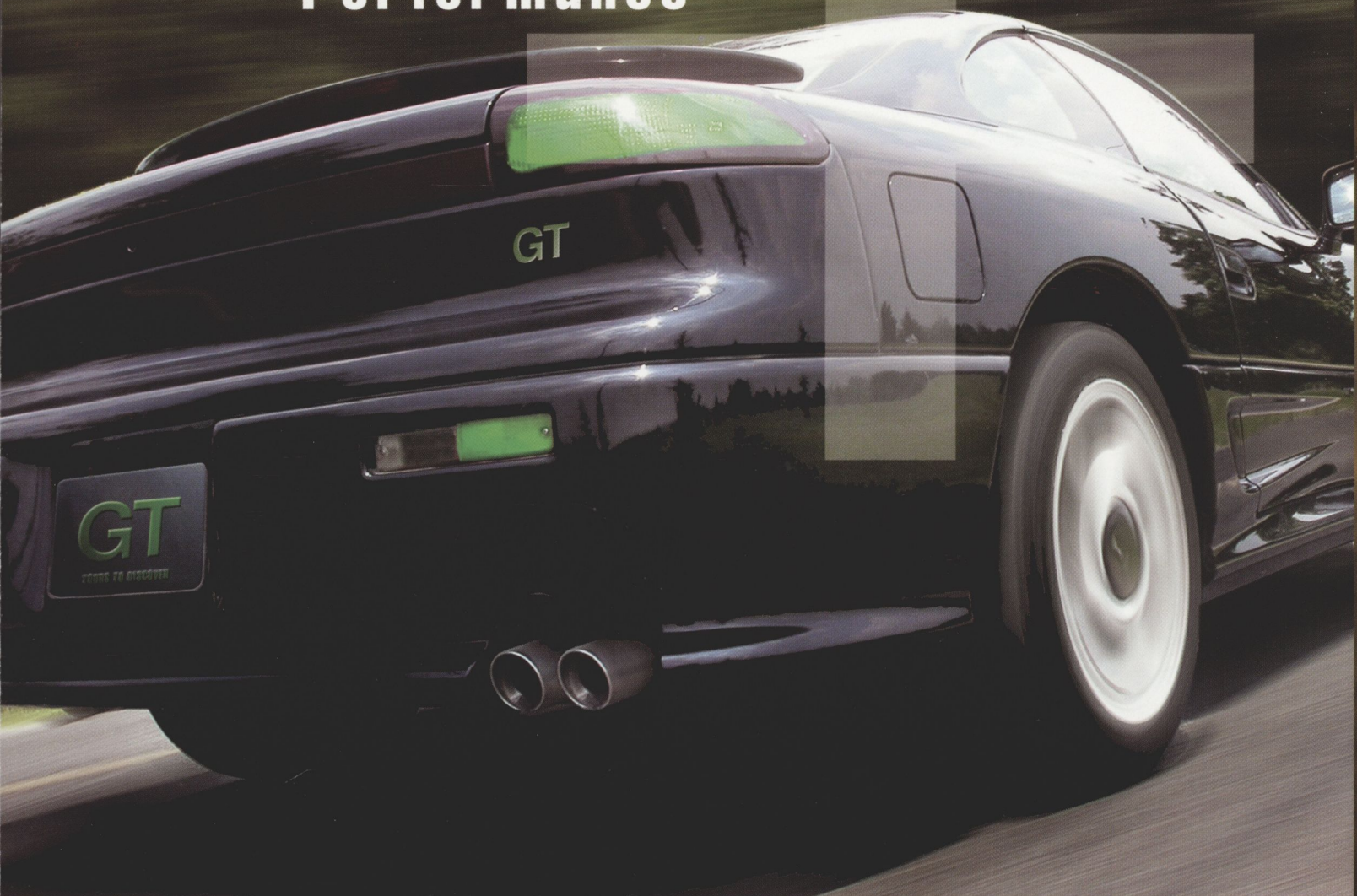
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University of Guelph update

by Eric Lyons, Assistant Professor

Department of Plant Agriculture, University of Guelph

Here we go again!!!

As I write this I am watching the annual April snowfall that brings us back to reality with regards to the start of the season. Just as you are preparing your courses for the upcoming season, we are preparing the GTI research plots for another season of research. I am very encouraged by the ongoing support we receive, for turfgrass research, from the OGSA and the turfgrass industry.

As this season is beginning we are also preparing our annual report from last year's research season. The annual report is an information filled overview of the projects that have taken place at the GTI and by University of Guelph researchers involved in turfgrass research over the corresponding year. For example, we are currently working on Volume 19 of the annual report which corresponds to the 2005 field season.

I encourage you to look at these research reports when you get the chance. It will give you an idea of the scope of the research going on at the GTI each season. In the 2004 Annual Report (Volume 18) there are eleven research reports regarding turfgrass management; twelve focusing on disease management, two cultivar evaluations and two extension reports. In addition, the annual report of the best performers from the Guelph trial gardens may help you with selections of annuals for coming seasons. The

reports are very concise and information rich and we are currently pursuing ways to make the reports more accessible. Currently the reports can be found online at the GTI website under the research tab: http://www.uoguelph.ca/GTI/research_index.html. In future *Green is Beautiful* columns, our goal is to summarize many of projects that are on going in a more easily readable format.

As many of you may have heard, Darragh McGowan, a graduate student working on moss invasion on golf greens, passed away last December. Darragh was a very bright young man who was doing very inventive research on addressing a prevalent problem facing golf course superintendents. It is one of our major goals for the coming year to continue with his research and allow his hard work to produce new knowledge about the biology and ecology of moss. We are currently conducting some research in the greenhouse that Darragh had designed as part of his project. In addition, we will be continuing with on-site evaluations throughout this growing season. Meanwhile, the on-line survey at http://www.uoguelph.ca/GTI/moss_survey_front.html is still up and running and we need many more responses to make this research as helpful to you as possible.

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On the REEL side of things

by Mike Slack
Slack Reel Service



First Contact

I'm sure by the time that you read this, the golf course will be open and your equipment maintenance will have been completed. Now, all you have to do is sit back, relax and listen to the hum of machines roll out the door and into the abyss known as the golf course. If only this were a perfect world!

Our attention now turns to keeping cutting units working and mowing at peak performance for the balance of the season. A topic that seems to be debated is: When do we adjust our cutting units and should there be contact between the reel and bedknife? I'm glad you asked...great questions! I'll set aside some of my own opinions for the moment.

Firstly, let's discuss the difference between the two, your current practices and whether you are happy with the results you are achieving.

i) If you are a spin-grinding advocate, "the book" calls for a .002" gap between your reel and bedknife. When our cutting units are in "just sharpened" condition this is an acceptable way to achieve set-up but, as your reel or knife begins to lose its edge, what do we generally tend to do? Yes, tighten! As the components get closer, we lose the optimum gap called for by the manufacturer. By over tightening, we also create excessive wear as the full "flat" portion of the reel now drags on our bedknife. At this stage, our options are; A, re-grind or B, "face" the bedknife. This will square up the bedknife but has no effect on the reel.

ii) If you are a relief grinding advocate, which is strongly recommended, we understand through experience that the reel and bedknife should maintain contact with each other at all times. Now, and let me be clear here, we are not talking the type of contact where you can hear a maintenance team member cutting on the 6th hole from the shop! We ought to look to achieve the slightest contact possible and still be able to cut paper while working off the bench. By having minimal contact, our bedknife face and reel edge will not round off so quickly. Should we end up with a gap, the grass blade is collected by the reel but is dragged over the lip of the knife causing a wear issue at the top of the knife face. Yes, I know a grass blade is not that coarse but what about leaves or sand particulate from traps or topdressing? Again, we are not talking about a grass blade but actually millions of grass blades...how many are there in 18 plus greens?

There are a number of theories on reel to bedknife set-up. Open a new thread on "Turf Talk" and maybe we can all receive some other ideas on the subject. Until next time, I hope your reels quietly keep spinning!



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Above the hole

by Ian Boyd, Student & Intern
Carruther's Creek Golf & Country Club

From the Ground Up

What did you do to become a successful, talented, and dedicated turf manager? How did you get to where you are today? How can I get there too? These are all questions from an aspiring greenkeeper to an experienced superintendent. My first job at a golf course was at a small 9 hole, par 3 course working in the proshop. After a season of being stuck behind a counter and dealing with irate golfers, I decided to make a change to maintenance department. It goes without saying that at this point, I was in no way thinking of golf as a career. The next summer turned out to be a great experience. Even though I was only raking bunkers, mowing and syringing greens, I loved every minute of it! I didn't properly realize it at the time, but I was indeed hooked. The following fall, I went to school for a completely unrelated subject and after two years, threw in the towel. I had come to the realization that it wasn't the right choice and so I began the process of thinking long and hard about what path I might take. I was still only 20 years old, but it felt like "decision time". That's when it hit me. Golf! Now wait, I can't play well enough to be a touring pro...I'm still up the creek. So what does many a golfer wanting to stay involved in the industry do? The choices were golf professional or golf superintendent. From my initial experiences the latter was clearly a better option.

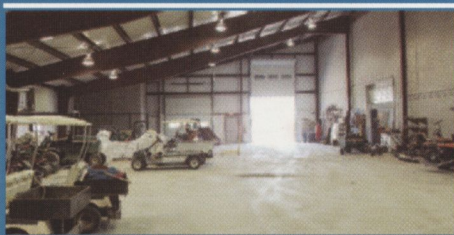
So it came to pass and from that day forward, my goal was to be a golf course superintendent. I started applying to local golf courses, looking for a position and ended up finding it at

Carruther's Creek. Little did I know that this would be the perfect place to learn my newly decided profession. It's a nice track with two completely different golf courses, one a par 3 nine and the other a championship nine. My first summer there, I learned a great deal and went from cutting greens at the beginning of the year to holding a land class pesticide license and involvement in most of the operation by year end. Through determination and a good work ethic I had begun the climb to my goal! Still, I craved more. In the off-season, I took another small step and applied to the University of Guelph's diploma course in Turfgrass Management with an acceptance for the fall of 2005. I stepped onto the University of Guelph campus for the first time that September, ready to prove that I belonged.

To date, it has been a great learning experience from both academic and personal perspectives. I found that a majority of the people in the program were as dedicated and motivated as I was. We were a diverse group and because no two were alike, it was enlightening to be able to share, hear and learn from one another's experiences.

For now, this is where I leave you. I am coming up to the completion of my first year of schooling and will be continuing with my employment at Carruther's. What the future may hold for my career in golf course management is still unclear but one thing is certain. I will continue to relay the passion and respect I hold for the game and pursue my new chosen profession with zest.

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The Use of Parasitic Nematodes Against White Grubs in Turf

by Ann-Marie Cooper, Biocontrol Specialist
Plant Products Co. Ltd.

Parasitic nematodes are microscopic creatures that invade insects and release destructive bacteria that kill their host. There are a variety of species and strains of parasitic nematodes found in nature that attack many species of insects. *Heterorhabditis bacteriophora* has been found to be the most effective of the nematode species that attack white grubs such as European Chafer (*Rhizotrogus majalis*) and Japanese Beetle (*Popillia japonica*). This naturally occurring, soil-dwelling parasitic nematode is widely distributed in North and South America, Europe and Australia.

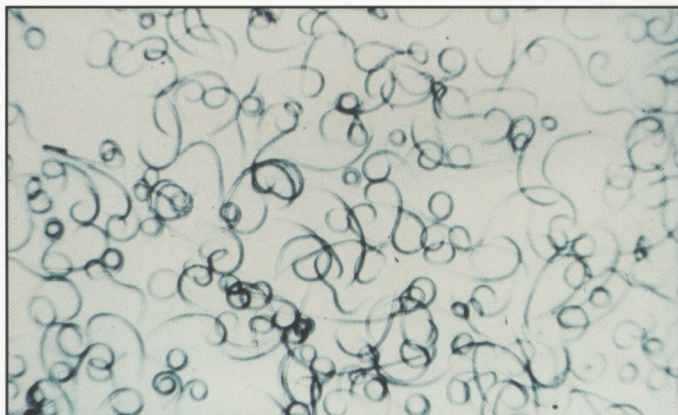


Figure 1. *Heterorhabditis bacteriophora* nematodes (courtesy of Becker Underwood)

European Chafer larvae feed on roots of many plants, but prefer the fibrous roots of turf grasses. The lifecycle is completed in one year with eggs hatching in mid July. There are three larval stages with the youngest stages being most susceptible to nematode attack. This information is key as nematodes are effective against only two stages of white grubs, namely the first two larval stages.

It is important to target the nematode application to the suitable stage of host. The younger the grub larvae, the more effective the nematode. The first larval stage (L1) of European Chafer tends to occur from late July through August and the second larval stage (L2) develops in mid August to September. Of course, the warmer the summer, the more quickly the larvae develop. Studies have shown that *H. bacteriophora* kills more L1 grubs than L2 and studies have also shown that effectiveness on L3 grubs has been limited. Nematode application is therefore not recommended in spring when L3 and pupae are most prevalent.

There are 5 developmental stages of nematodes namely Egg, Juvenile 1, 2, 3 and 4. Juvenile stage 1, 2 and 4 occur inside the host. The Juvenile 3 (J3) nematodes are the only stage that is "free living". This is the only stage which attacks and infects the host. This type of nematode is referred to as a "cruiser": it aggressively searches for white grubs in the soil.

Parasitic nematodes kill their hosts through the cooperation of symbiotic bacteria. This bacteria cannot survive in soil or water and so the nematode provides protection while outside the host. The nematode transports these bacteria into the host. The nematode on the other hand is not capable of killing the grub on its own and can not reproduce without the nutrients from the bacteria. The nematode enters the host through natural openings. Once inside, it releases the bacteria. The bacteria multiply and kill the host within 24-48 hours. The bacteria digest the inner contents of the grub and essential liquefy it. The nematodes then consume the liquefied contents of the dying host, in this case white grubs. Once fed, the nematodes multiply and exit from their host. White grubs killed by *H. bacteriophora* turn reddish brown.



Figure 2: Photo of Healthy European Chafer Larvae (courtesy of Becker Underwood)



Figure 3: Photo of European Chafer Larvae after infestation by *H. bacteriophora* (courtesy of Becker Underwood)

Soil temperature is the most important factor limiting the success of the nematode. Temperature affects development, survival, dispersal, host-finding capabilities and level of infection. Optimum soil temperature is 12.5C-30C (55-86F). Insects will not be killed by *H. bacteriophora* if soil temperature is below 10C (50F). Soil texture and moisture affects dispersal and rate of infection. The rate of movement decreases as percent silt and clay increase.

The recommended method of application is as follows:

1. Moisten soil before application
2. Do not apply in bright sunlight (early morning or evening applications are the best)
3. The application rate is 1 Billion nematodes/acre. Use 100-250 gallons of water/acre
4. Empty the entire package contents into water
5. Mix thoroughly
6. Keep the nematodes in suspension by mixing regularly
7. Soil temperature should not drop below 12C, 4 weeks following application
8. Use conventional spray equipment. The spray pressure must not exceed 300psi
9. Remove screens smaller than 50 mesh
10. Do not allow the temperature in the spray tank to exceed 30C
11. Irrigate following treatment with 1/2" water to rinse the nematodes from foliage to soil.

Nematodes are sensitive to certain insecticides, wetting agents, surfactants and of course, nematicides. Check with the nematode supplier prior to insecticide treatment.

Off the fairway ...



by Daisy Moore

A garden is not just a collection of plants but a community of living and non-living things that work together and appeal to you. Plants in such a garden are fascinating subjects both collectively and individually. The trick is to put the right ones together to suit the conditions of the site (as they are or as you change them) and at the same time, satisfy the aesthetic requirements. There is a knack to

putting things together in an attractive and sustainable way and nature has perfected it. Somehow the way nature puts plants together looks and feels right. How do we mimic that feeling in the cultivated garden?

A lot has happened in the garden already and what we are seeing now was born in the fall. Biennials such as Hollyhock, Foxglove, Mullein and Rose Campion set their seed last season and are ready to grow early. You can decide to relocate these if they happen to have landed where you don't want them, like a weed. Dandelions are biennial weeds that can pose an early problem in garden beds because they tend to congregate in the nutrient rich centre of perennial plants and compete for space. Cool season grasses such as KBG and Poa can be a weed problem in garden beds too because they tolerate cool soils and get a jump start on the season. Spot weeding now will prevent a larger problem in future.

For the garden to be colourful in the early spring we turn our attention to bulbs. These are planted in the fall with their flower buds already packed inside and ready to show off as soon as spring arrives. Groups of crocus go a long way to livening up the garden early. Even when they have finished flowering they offer a nice leafy fringe to the lawn or garden. Snowdrops, anemone, species tulips and bluebells are other early flowering bulbs that will be showy and give perennial plants time to grow.

In the work that I do, I often come across situations where there is an established garden bed but there is nothing particularly exciting going on. But the existing plants tell a story of the site conditions and knowing and seeing that, I can build on it. The existing plants have shown resilience so I try to preserve them, within reason, and build a garden around them. There are some excellent plant choices in the horticultural industry that

we can use to enrich the garden. One of my recent discoveries for the shade garden is *Brunnera macrophylla* or Siberian Bugloss. It is a perennial from Siberia that grows to a medium height, 12-18 inches. It has heart-shaped leaves with a frosty silver hue about them and it presents forget-me-knot-like flowers in the spring. The growth habit is a lot like a hosta except that it is showy both earlier and later than the hosta. Japanese Painted Fern is another silver-foliaged shade plant that adds a lot to the garden over the entire season. It stays low to the ground and will form a matt. Woodland sedges, *Tiarella* and wild Ginger are some native examples that will give the look of a woodland ground cover.

For gardens in general, deciduous flowering shrubs are often underutilized as specimens in the early garden. Manchu cherry, Pussy willows, Hazelnut or Dogwoods will give you something to look at, at eye level. These can also be the building blocks to a larger garden.

In the sunny garden, shrub roses are one of my favourite plants to add. Whether the space is large or confined there is a shrub rose to suit and for the most part they are carefree. Bonica, Theresa Bugnot, Morden pink and rosa rugosa 'alba' are some of my favourites. I like to grow shrub roses with other plants rather than isolate them into a rose bed as you would with hybrid tea roses. Flax, sweet William, blue fescue, chamomile and clematis are all easy to grow plants that combine well with roses. There will be something in flower for most of the season.

The new trend in gardening is to plant vegetables and herbs in the show garden, like a potager idea. Swiss chard, ornamental peppers, parsley, cherry tomatoes and even eggplant have a lot of aesthetic appeal. As long as you have sun, you can do this. The important thing is that you enrich your gardening experience and the garden by using a diversity of plants. There are plants for every occasion and it is just a question of defining the occasion.

Daisy Moore P.Ag. works as a horticulturist. She operates a garden design and consulting business and builds gardens throughout Southern Ontario. She specializes in plant selection and has a particular zest for the re-introduction of native plants into gardens.

If you have any questions or would like more tips on gardening you can visit her website www.daisymoore.com and listen to The Gardening Show on 570news (www.570news.com) Saturday mornings 7-8

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Looking back

40 YEARS AGO TO-DAY

by Barry Endicott, Project Manager
Gordon Wendover Construction

In 1966, the OGSA board of directors were: **Keith Nisbet** (pres.), **Bob Moote** (vice.), **Dave Gourlay** (sec.), **Whitey Jones** (treas.), **George Darou** (past pres.), **Dave Moote**, **Larry Smithson**, **Carl Sellers**, **Ian Williamson** and **Gordon Witteveen**. The Greensmaster was the official publication of the OGSA and the editors were **Gordon Witteveen**, **Bill Hynd** and **Norm McKenna**.

A monthly meeting was held at the 3 year old Brampton Golf Club. The host superintendent was **Roy Cornfield**. Roy had been the assistant for seven years to **Harry McBride**, at the old Brampton Country Club. **Mr. Leo Cleary**, from the W.A. Cleary chemical firm, was the guest speaker.

Larry Smithson, who was the superintendent at the Municipal courses in Metro Toronto, was recently promoted to parks superintendent.

The Credit Valley Club, near Toronto, had just completed one of the most modern, expensive and fool proof elevators in the area. Now there was talk that the course will be sold for subdividing.

Tom Styles died in mid-October in St. Catharines where he was superintendent at the St. Catharines CC for more than 40 years.

The Alex McClumpha Memorial Tournament was held at Glen Eagles GC, hosted by **Bill Calhoun**. **Dale Butler**, from Malton GC, won it with a 74 and **Whitey Jones** was low net.

Superintendent **Bill Bowen**, from the Peterborough

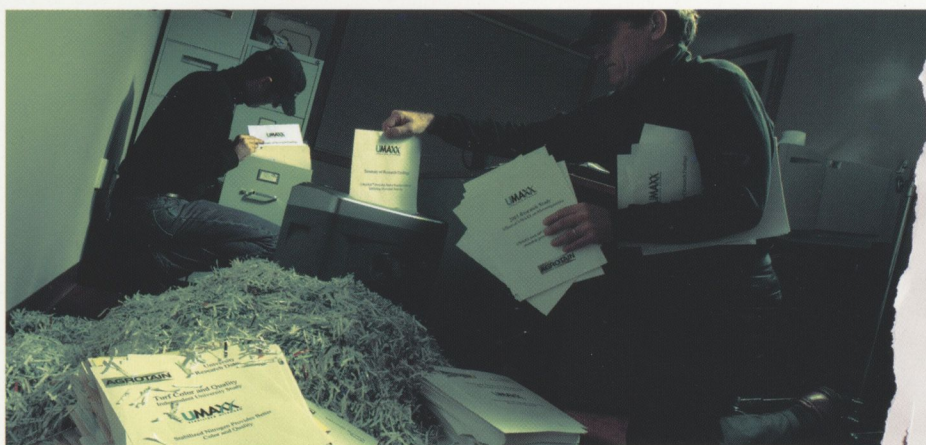
C.C., won the Willie Park Trophy at the Weston GC, with a 71.

A meeting and golf day was held on September 13th at the Upper Canada GC hosted by **Tom Unsworth**. At that meeting, it was decided that **Keith Nisbet** would run for director of the GCSAA in the coming national elections, in Washington. **Gord Witteveen** was appointed voting delegate.

On May 12, **John Arends** hosted a meeting at Hawthorn Valley. John received his early training as assistant to **Ralph Tucker** when Ralph was building the Beverly G&CC. **Whitey Jones** was low net and **Keith Nisbet** was low gross. At this meeting, a change in the by-laws to have a separate membership class for assistants was turned down. A motion to accept pro superintendents and manager superintendents, who were not members of the PGA and the Managers Association, was carried.

The Dominion GC was the site for an April meeting hosted by **Danny Uzelac** and his wife **Dorothy**.

On March 8th, **Joe Roberts**, of the Oshawa GC, hosted over 50 members. The guest speakers were **Mr. James Lent** and **Mr. Art Drysdale**. Some of the members at this meeting were: **George Darou**, Richmond Hill, **Joe Peters**, Strathroy (both Darou and Peters were one time superintendents at Oshawa), **Tom Unsworth**, Upper Canada, **Ted Charman**, Toronto Ladies, **Ernie Allen**, Toronto Hunt Club and **Norm McKenna**, Summit GC.



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The way we where... answers from page 29. Dave Gourlay and Whitey Jones

Turf or consequences

by Doug Breen, Superintendent
Golf North Properties

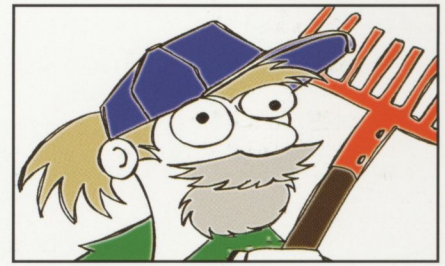
The Tree

Let me begin by saying that this story never actually happened. It is what folks in the literary world call an amalgam. A bunch of bits of stories all mashed together as if they all happened at the same time. Parts of it are also what the literary world calls fiction. My son calls this lying. He's too young to realize that if you tell a story verbally where you make up half the details that you're a filthy liar; whereas if you write the same story down, you're an artist and eligible for a Federal Arts Grant and a segment on Bravo. Wait until you see what I write in my memoirs. This is a mostly fictional amalgam about a tree.

In the early hours before dawn one Monday morning, a 100 year old tree in the parking lot of the East Beetle Spit Golf and Country Club split in half, and several decades of exterior growth, combined with interior rot, lost the battle with gravity. By way of collateral damage, there were several feet of fence, a memorial bench, and a marshall's car, all crushed beyond recognition. Like many places, the Regional Municipality of East Beetle Spit has a tree saving by-law, that among other things, states that there is a \$50,000 fine for cutting down any healthy tree with a caliper over twenty-eight inches. So naturally, several members of the local Righteous Indignation Society who saw the remnants of the tree being set upon with chainsaws while driving their children to daycare in their minivans, were quick to inform the township office that an epoch travesty was occurring over at the golf course. The by-law enforcement officer arrived to investigate the alleged arboricide, at right about the same moment that the General Manager was deducing that the only reason the marshall's car was parked there at 3 a.m. was that he'd been living in the clubhouse since his wife had thrown him out. More troubling, was the presence of another unnamed member's wife's car, which although not crushed, was trapped behind the fallen tree and had apparently been there all night as well. She was clearly eager to see the tree removed.

The enforcement officer, whose entire arboriculture experience was a two-hour seminar on tree saving by-laws at the last Municipal Governance Convention, concluded that the superintendent had indeed killed the tree, and dropped it on the marshall's car to make it look like an accident. Many by-law officers desperately want to be cops, and are prone to such hyperbole from watching too much CSI. The superintendent, knowing that a \$50,000 fine would not look good on his resume, called his usual tree consultant to have him verify that the tree was rotten to the core, and had fallen of its own volition. The tree service had very bad news. Not only was the tree rotten, but the other dozen or so that lined the parking lot were all suffering from the same disease, so his advice was to remove them all for sanitary and liability purposes. The insurance agent, who was already there taking pictures of the marshall's flattened car and wondering why his neighbour's wife's car was parked beside it, whole heartedly agreed that the trees must all go. Just as the enforcement officer and the tree doctor began to have words, the member whose wife's car was trapped behind the tree, arrived for his normal 10 am tee time.

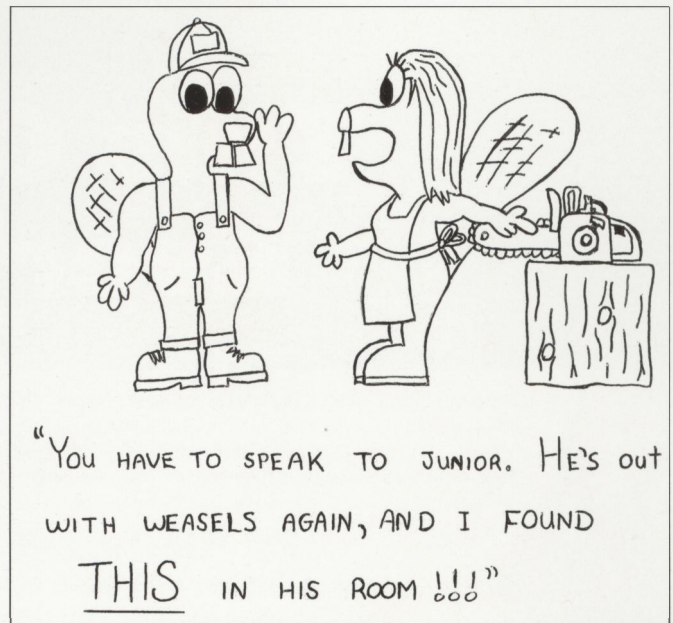
By noon, word had gotten around that the golf course was clear



cutting the parking lot. There was an ever-growing pile of teddy bears, notes, and a class set of poems about the tree by the grade fours from the school down the street. A group of local birdwatchers were presenting a petition signed by everyone in the neighbourhood, demanding that the diseased trees be immediately removed to protect the remaining trees, which are apparently an integral habitat for some kind of Finch or another. Ten minutes later, an activist group called Stop Whatever it is You're Trying to Do, set up a protest in the parking lot, complete with a performance by Sharon, Lois, and Bram singing the Tree Song, demanding that the trees be saved. They also had a petition signed by all of the people in the neighbourhood. The bird watchers countered by bringing in Raffi to perform Baby Beluga, which really wasn't relevant, but everyone present agreed that it was a far better song. Just as Raffi was finishing his second encore, the widow who had donated the flattened memorial bench arrived. Ironically, she was the mother-in-law who the member's wife was supposedly visiting for the weekend. Sharon (or possibly Lois, I could never keep those two straight) was beating a bird watcher with a picket sign while the others waved their Tilley hats and binoculars at her with rage. The by-law officer and the tree consultant were wrestling in a flowerbed, and there would have been plenty of questions for the marshall, but he had abandoned his post and was off looking for golf balls in the naturalized areas. A crushed car and getting caught in the act of adultery was no reason to interrupt his used golf ball business.

The Township is holding a public meeting tonight where 86 people will give their opinion on whether the trees should stay or go, while a candlelight vigil is held outside. Then nine councillors who have never been on site, or know anything about arboriculture will make the decision. While they're at it they might ban the use of pesticides.

Think of the children.



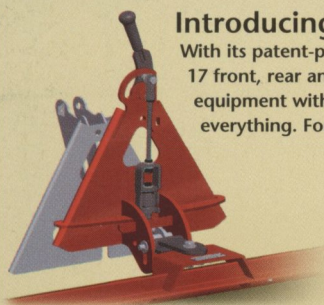


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