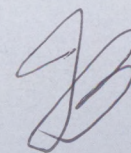
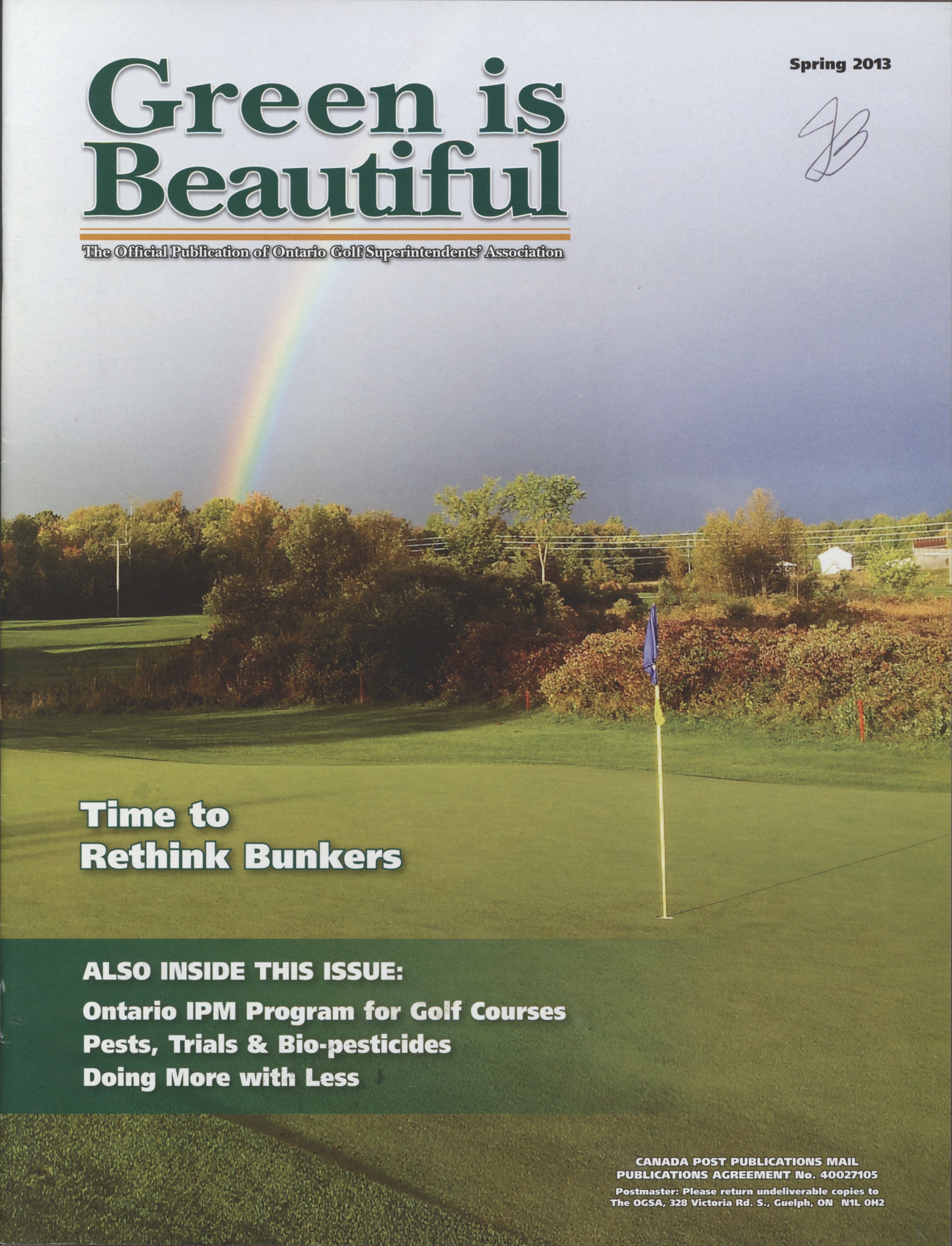


Green is Beautiful

Spring 2013



The Official Publication of Ontario Golf Superintendents' Association



Time to Rethink Bunkers

ALSO INSIDE THIS ISSUE:

Ontario IPM Program for Golf Courses
Pests, Trials & Bio-pesticides
Doing More with Less

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PRESIDENT'S MESSAGE



by Rob Gatto
OGSA President

I hope everyone's golf courses came out of the winter healthy. It was excellent that we didn't have to rush to open this season as it was a more seasonal spring in Ontario, despite the late winter blast that we received.

I would like to encourage our members to participate in our golf outings this year; the schedule is shaping up to be a great one. We can't emphasize enough the value of getting together with your peers to enjoy the day, and share stories and experiences.

The Can/Am Challenge recently took place at Essex Golf and Country Club. We would like to acknowledge the support, once again, of Essex and host Superintendent Chris Andrejicka. It was especially nice networking with our neighbours across the border.

The Pro Super Challenge will be held at Oviinbyrd Golf Club on June 5, 2013, hosted by Greg Aljoe, and President's Day will be hosted by Rob Ackermann at Weston Golf & Country Club on July 15, 2013. We encourage you to register for these exciting events. Both events will be well attended, so please register early.

Plans are now well underway for the Ontario Golf Course Management Conference and Trade Show, which will be held from January 22-24, 2014 at the Westin Harbour Castle in Toronto.

The education programs combined with the networking and social opportunities are of immeasurable value, and our keynote speaker, James Duthie from TSN, will engage you with his interesting sports stories.

Golf course managers from all across Ontario will gather to develop the skills to become leaders in the industry and collectively celebrate the OGSA's 90th anniversary. We have some very special things planned and we hope to see you there!

I would like to wish everyone a successful season and hope that Mother Nature will take care of us with timely rains throughout the season.

Good luck to all! ■

Green is Beautiful

The Official Publication of Ontario Golf Superintendents' Association

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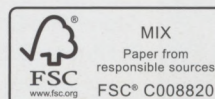


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**Green is
Beautiful**
The Official Publication of Ontario Golf Superintendents' Association

ON THE COVER

**Stone Tree Golf
& Fitness Club**

*Photo courtesy:
Anthony Schirru*

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advancing their profession, and enriching
the quality of golf and its environment.

GREEN IS BEAUTIFUL 2013

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EDITORIAL MESSAGE



by Justin Parsons,
Engage Agro Corp.

Golf course bunkers are a funny thing. Everyone seems to hate them, and yet they play such a prominent role in the landscape of most layouts. Golfers certainly dislike them because the average player is not able to effectively negotiate the challenges they present. Maintenance staff can't stand them because the upkeep involved is tedious and seemingly never-ending. As a result, turf managers despise them

because all they hear is constant complaining from the two aforementioned groups of people. Yet, somehow, if we removed every bunker from every golf course, nobody would be happy with that either.

I don't know why bunkers have gotten such a bad rap. They provide an important strategic element to the game, they often enhance the aesthetic beauty of a property and, well, those are all the positives I can think of. I am sure there are others, but those are two pretty big ones.

On the downside, the shelf life of a bunker is only a handful of years and they require constant maintenance throughout their existence. In fact, all the hard work that goes into preparing a bunker for a day's worth of play can be undone in just moments as an angry golfer exits the trap

without erasing the evidence that he or she was there in the first place. It's interesting how most players demand perfection from a bunker, yet rarely (and by rarely I mean never) do they display the same level of commitment and interest in upholding that standard when the time comes for them to clean up their own mess.

I am convinced that not a single amateur golfer in Ontario, golf course maintenance employees notwithstanding, actually knows how to rake a bunker properly. If they did, their only complaint about bunkers would be the inadequate mini rakes that are provided for them to use. Indeed, I am willing to bet that not one superintendent has ever been asked by a player, "How do I properly rake a bunker?"

Nonetheless, they are a hazard, and, as such, they are not supposed to be meticulously maintained. This often seems to get overlooked by the average player, which is odd because golfers are less apt to complain about the water in the pond that they hit their ball into being too deep, or the forest on the 17th hole being too lush.

In any event, it is always worthwhile to explore various perspectives on the bunker debate. In this issue, golf course architect Jeff Mingay walks us through this subject from a design perspective. Hopefully you will enjoy this article as you read your way through the Spring 2013 issue of *Green is Beautiful*. ■

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Trafalgar Golf & Country Club
Milton, Ontario
Monday, October 7, 2013

by Sally Ross, OGSA Executive Manager

FROM THE OFFICE

The OGSA office is a hive of activity lately with plenty of things on the go. First and foremost, we are planning for Conference 2014 and the OGSA's 90th Anniversary event, which includes the compilation of historical data, pictures, advertisements and articles for display at the conference. We are also preparing the 2013 – 2014 Membership Directory (which you should receive with this issue of *Green is Beautiful*), as well as organizing our summer events and much more.

Please go to the conference pages at www.ogsa.ca, and review the schedule and details we have firmed up to date. These pages will be changing almost weekly with new updates and we expect the online registration pages to be completed for July.

Not only is the OGSA managing the conference ourselves, but we will be managing the online registration for the conference through our own website, rather than a third party.

We have had a new telephone system installed, which allows the caller to select who they wish to talk to specifically and leave a message for, rather than a general mailbox.

IN OTHER NEWS

Since the January conference, the OGSA Board has met twice, with another meeting scheduled for the end of May.

Committees were approved for the coming year, with Mark Prieur stepping down from the IPM Council of Canada and Cory Janzen and Jason Boyce now representing the OGSA. Cory is also sitting on the advisory committee of the IPMCC. Mark is focussing on the Queen's Park lobby and the golf caucus along with Scott White.

Phil Scully is conference chair for this coming January, as well as Events Director and incoming President, and John McLinden as Treasurer, is the conference chair for 2015. The site selection has taken place and the 2015 OGCM Conference & Trade Show will be held in Niagara Falls, January 28 – 30, 2015.

The OGSA Board has approved an 'association exchange' newsletter to be produced quarterly. It will be a cooperative effort between the OGSA and the regional associations, including news from all groups and will be distributed to members of all the associations.

The OGSA Board has also agreed to increase support to the OTRF this year, with a planned goal of returning to the higher financial support levels of the past.

The associate committee has met twice since being formed and is reporting back to the OGSA Board with their ideas and recommendations to assist the association overall, and to bring forward information related to the segment of the membership that they represent.

I encourage all our members to go to our website for updates and information at www.ogsa.ca. If you want to know how your association is doing, look under the 'association reports' tab.

The OGSA staff wishes you a great season with neither drought, nor flood, and some moderate temperatures. ■

Welcome to Our New Members

Kimberley Best Class F
Irish Hills Golf & Country Club

Ryan Campbell Class S
University of Guelph

Ian DeCastris Class A
The Club at Bond Head

Mark Drain Class A
Big Sky Golf Club (BC)

Kyle Emms Class C
The Club at Bond Head

Brent Gibb Class C
Cherry Downs Golf & Country Club

Kevin Hart Class C
DiamondBack Golf Club

Charles Ihrig Class Supt
Sparrow Lakes Golf Club

Brent McDougall Class C
London Hunt & Country Club

David Meyer Class C
Brantford Golf & Country Club

Nick Panasiuk (Jr) Class A
Hydeaway Golf Club

Greg Patterson Class F
Lambton Golf & Country Club

Jeff Robertson Class A
Station Creek Golf Club

Jeff Taylor Class S
University of Guelph

Rob Wilson Class F
London Hunt & Country Club

Gro-Bark (Ontario) Ltd Class E
Chelsea Stroud
Kerri Stevenson

Kam's Growers Supply ... Class E
Doug Hubble
Kameron Fordyce
Julie Fordyce

National Leasing Class E
Todd Fanning
Julie Noschese

Seniors Event

This years event will be held Thursday, August 8, 2013 at Mono Hills near Orangeville. 11 am shotgun. Cost is \$55 per person. Open to all OGSA members, retirees and associates over the age of 50. For more info contact: Mark Schneider at 1-519-372-5181 or email marks@agri-turf.ca

Can/Am Challenge Recap

While the temperatures dipped for the 37th Annual Can/Am Challenge, Essex Golf and Country Club was in great shape despite the frosty morning. This was due to the hard work of Superintendent Chris Andrejicka, his Assistant Greg Brown and the maintenance staff. The sun brought some warmth in between the cloud and the winds.

The Canadians finally brought the cup back to Ontario with a close victory of 26.5 points over the American score of 24.5. American 1st low gross team of Kevin Franks and Gary Thommes, tore up the course with a total score of 151, while the Canadian 1st low gross team of Gavin Worden and Jason Crawford scored a 159.

American 1st low net team was John Cooney and Brian Schwelhofer, while the Canadian 1st low net team was Greg

Brown from Essex G & CC, and Chris Lecour from Direct Solutions. Both teams scored a net 130.

Individual prizes were awarded to Brian Schwelhofer, Graeme Calder, Dave Cours and Ryan Moore.

Second place teams for the Americans were Todd Genske and James Higg (gross), and Steve Loveday and Terry Poley (net). While the Canadian second place winners were Chris Andrejicka and Jeff Alexander (gross), and Greg Anderson and Robbie Robinson (net).

Greg Pattison, MiGCSA President, won the 50/50 draw.

Accolades go out to the golfers from both the OGSA and the MiGCSA who braved the frigid morning, and, despite Mother Nature, thoroughly enjoyed their day at Essex G & CC. ■



The Canadians finally bring the Can/Am Cup back to Ontario. Greg Pattison, MiGCSA President (right) and Rob Gatto, OGSA President (left).



Rob Gatto, OGSA President (right) presents Chris Andrejicka (left) with the Host Superintendent Plaque.

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Lebanon Turf "Dog of the Year" Presentation to OGSA



This photo of Maple overlooking the course was selected for the "Dog Days of the Year" calendar.

Lebanon Turf representative Randy Rogers was on hand recently at the Can/Am Challenge at Essex Golf and Country Club in LaSalle, Ontario, to present the \$3,000.00 cheque to the OGSA for "Dog of the Year".

Tim Muys, Superintendent at Pipers Heath Golf Club, and proud owner of "Maple" was also present to receive his

cheque.

In order for a dog to qualify for the "Dog Days of the Year" calendar, the owner must be a member of an affiliated chapter of the Golf Course Superintendents Association of America and the OGSA is the only Canadian chapter of the GCSAA.

The OGSA has committed to taking the



Randy Rogers, Lebanon Turf presents 'Dog of the Year' award to Tim Muys, Superintendent, Pipers Heath GC for his photo of his dog, Maple.

prize money awarded, and is sponsoring the "Paws in the Park" event, being held this coming September in Toronto. "Paws in the Park" is a fundraiser for the Toronto Humane Society, and the OGSA Board felt that the money raised by the lovely "Maple" and Tim Muys, should go to a worthy animal related cause.

OGSA will also exhibit at the walk, to showcase not only what superintendents do, but also how they love their canine companions. This has certainly been on display recently with the many pictures of Ontario golf course dogs being featured on the main page of the OGSA website, under the ABOUT US/DOGS OF THE OGSA tab. Once again, congratulations Tim and "Maple" and thank you to Lebanon Turf. ■



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Ontario IPM Program for Golf Courses – A Primer

by Cory Janzen, OGSA Director

Since joining the OGSA Board last year, I have been given the Government Relations portfolio. This entails sitting on the IPM Council of Canada Board, and, because of that role, the IPM Advisory Committee. Being a member of these committees has been a learning experience and brought to my attention many things I was not aware of prior to being involved. I thought this article would be a good way to give some inside perspective from a previous outsider, on the IPM Program and what we can expect in the future.

There are four groups involved in the Golf IPM Accreditation Program – The Ministry of the Environment (MOE), the IPM Council of Canada (IPMCC), the IPM Advisory Committee, (a sub committee of the council, with additional representation) and the end users of the program (golf courses). Each of these groups has a different role and varying responsibilities which I will try to explain.

The MOE is obviously the government agency that administers and enforces the legislation set out by the politicians. The legislation involved is the Ontario Pesticides Act and Ontario Regulation 63/09. If you haven't read either of these, I encourage you to do so. They are readily available online. If you take the time to read them, you will learn, for example, that the public meeting component of the IPM Program is part of Regulation 63/09, but NOT part of the accreditation program. This means that only the government can change the public meeting requirement. The Golf IPM Accreditation Program is one of a couple accreditation programs administered by the IPMCC. This accreditation program, developed by industry in 2003, was accepted by the MOE under O. Reg. 63/09. Having this accreditation program is the reason why golf courses are still allowed to use Class 9 pesticides.

Aside from the public meeting, all aspects of the program are set out by the IPMCC. The IPMCC is made up of various industry groups with only one vote per sector to ensure that no one group has undue influence. The following groups currently have representation on the IPMCC: International Society of Arboriculture, CropLife Canada, Landscape Ontario Horticultural Trades Association, National Golf Course Owners Association, Ontario Golf Superintendents Association, Ontario Parks Association, and Structural Pest Management Association

of Ontario. The IPM Advisory Committee is a sub-committee of the IPMCC and is responsible for the development and content of the IPM Accreditation Program. Duties include the review of IPM recordkeeping forms, auditor qualifications and awarding CEC's to educational opportunities. Members of the committee include the following: a minimum of two members of the IPM Council of Canada (this must include representatives from industry sectors affected by the government regulation), OMAF and MRA turfgrass specialist, MOE staff member, a minimum of one IPM researcher/academic, and the Executive Director of the IPMCC (non-voting staff support person).

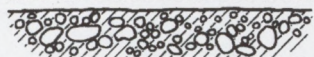
Why is all this important? It is important because we all need to understand how the system works if we are going to try to improve it. It makes no sense to complain to the IPMCC about public meetings when it is part of the legislation, which can only be changed by government. Several OGSA Directors have been directly involved in this program from the onset. I have spoken with all of them over the course of the last year and we have all been made very aware that change from the government comes slowly. Rest assured that the current OGSA Board is working diligently toward improving this program for the end user on many different fronts. Once again though, it is important to remember also that this type of change will be slow. For example, it is unrealistic to think the government will eliminate the public meeting requirement based on one year's worth of data. The best practice for us as superintendents right now is to be patient, work the IPM program diligently, and respond to any requests from the OGSA for IPM related data collection. If we respond to the government as respected professionals with concise data to support us, we have a very good chance of affecting positive change. If we express anger, frustration and non-cooperation, we will not achieve any positive change, and, in effect, cause more harm than good.

In addition to responding to the OGSA's requests for feedback, we have to remember that we are all in this together, and if a fellow superintendent needs assistance or encouragement to get on board with the program, for the good of the industry, we should all provide that assistance and encourage that participation.

Our strength lies in knowledge, professionalism and our willingness to work together, and to that end, we will work toward a sound environmentally friendly process that will benefit all stakeholders in the golf industry. ■

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20 Years Later: Sensitivity of *Sclerotinia Homoeocarpa* to DMI Fungicides in Ontario

by Tom Hsiang, School of Environmental Sciences,
University of Guelph

Turfgrass managers are often concerned about the development of fungicide resistance, particularly if they have experienced it previously. In Canada, we have fewer fungicides compared to the U.S. and we need to ensure that the activity of our registered products remain efficacious. In this article, we will brief look at what fungicide resistance is, how it develops, and ways of managing fungicide resistance, and also announce the continuation of a 20 year project on fungicide resistance in turf.

Fungicide Use for Turf Pathogens

American statistics show that the turf fungicide market is larger than for any other single crop, and that golf course putting greens receive the most intensive use of fungicides. Similar statistics are not available for Canada, but they are likely to be similar for the intensity of fungicide use compared to adjacent American states. The dollar spot fungus, *Sclerotinia homoeocarpa*, is probably the one across North America for which there are the most repeated annual applications of fungicides (Figure 1).

What is Fungicide Resistance?

Fungicides usually act by inhibiting important processes in fungi such as cell division (benzimidazoles), sterol formation (DMI fungicides), electron transfer (QoI or strobilurin fungicides) or other general metabolic activities in fungi (dicarboximides, chlorothalonil, dithiocarbamates). Within populations of a fungal species, there occasionally are mutants that can withstand higher levels of a fungicide than their normal relatives. In these mutants, some process is altered so that the fungicide either does not penetrate to the site of action within the organism, or the site of action is altered so that the fungicide cannot fully exert its effect. An individual that is resistant to a particular fungicide generally will show resistance to other fungicides that have the same mode of action. For example, propiconazole (Banner



Fig. 1. The plot of grass on the right has been treated with a fungicide while the plot on the left has a natural infection of dollar spot disease. This demonstrates that fungicide use eliminates sensitive strains of the fungus. If a resistant type were present and under the pressure of repeated use of the same fungicide, the resistant type could reproduce and establish a population resistant to this fungicide.

Maxx®) and myclobutanil (Eagle™) have the same mode of action, and organisms resistant to one will show cross-resistance to the other one. Another major group of fungicides which shows cross-resistance are the strobilurin fungicides such as azoxystrobin (Heritage®), pyraclostrobin (Insignia®) and trifloxystrobin (Compass™). Under laboratory settings, we can often generate mutants that are resistant to a fungicide, but usually these mutants grow weakly or lack some feature that would allow them to persist in the field. What we are really concerned with is the occurrence of resistance in the field leading to disease control reduction or failure when we make applications at normal rates and schedules.

How Does Fungicide Resistance Arise?

When we use a fungicide, we impose a selection pressure on the

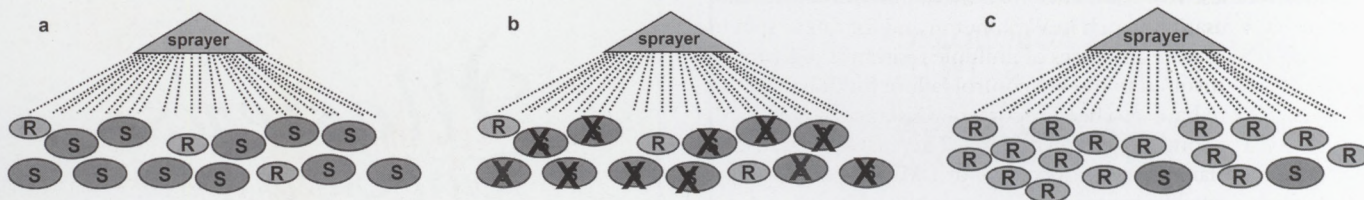


Figure 2a. At the start of fungicide use, there are mostly fungicide-sensitive spores or hyphae in the population. For fungicides where resistance can develop, there may be a few rare mutants that have less sensitivity to the fungicide. The resistant types (R) are smaller than sensitive (S) types because of resistance-related fitness costs.

Figure 2b. Upon fungicide applications, the spores that are sensitive to the fungicide are mostly inhibited or killed off by the fungicide.

fungi and remove ones that are the most sensitive to the fungicide (Figure 2). Within fungal populations, individuals that are able to withstand higher amounts of fungicide may survive and reproduce. The progeny of these resistant individuals are also able to inherit the resistance to the particular fungicide. Other individuals that are very sensitive may be totally inhibited or killed off by the fungicide. What differs between fungicides is the range of sensitivity that may be found within populations. For some fungicides that are general metabolic inhibitors, the range between the most sensitive and the least sensitive is likely very narrow. For other fungicides, there may be a wide range with the least sensitive isolates able to tolerate very high doses without adverse effect. It is this latter group of fungicides where resistance may develop.

How to Recognize Fungicide Resistance?

The first indication is likely to be reduced efficacy intervals, while a normal application controls disease for a shorter period, such as a week rather than two weeks. This reduced duration of control occurs when the sensitive members of the population are being gradually replaced by the less sensitive members who can withstand some level of the fungicide. This interval of control may continue to shorten (Figure 3). Another indication is that initial uses of higher rates of the fungicide give control, but gradually this is eroded also, as there is selection for the less sensitive members of the fungal population which tolerate this higher rate.

History of Resistance in Turf Pathogens

There are several fungicides to which no field resistance has developed. These are fungicides that contain active ingredients such as thiram (Thiram, Arrest®), chlorothalonil (Daconil®), and quintozene (PCNB®). These types of fungicides are usually protectants, and act by inhibiting a wide range of metabolic processes within the fungus. The turf fungicides to which resistance has developed in the past are systemic fungicides. Before the introduction of systemics, the most commonly used fungicides were probably dithiocarbamates such as thiram. There have been no major concerns about field resistance to these older compounds.

Benzimidazole fungicides such as benomyl (Tersan) were introduced in the late 1960's. They provided excellent control of many turfgrass diseases, and their use was very widespread. Very soon afterwards, there were reports of disease control failure for dollar spot disease in Pennsylvania. By the late 1980's there were reports of disease control failure with benomyl for anthracnose in Michigan and Ohio. Iprodione (Rovral®), which is a dicarboximide fungicide, was registered around 1980 for turfgrass diseases. Very soon after that, there were reports of field resistance for fusarium patch in Washington and for dollar spot in Michigan. There were also cases of multiple resistance to benomyl and iprodione involved in disease control failure for dollar spot in Michigan. There have also been reports of resistance to metalaxyl, which is used to control pythium diseases. There have been several cases where dollar spot was not control by DMI fungicides. These have been reported from several American states. Also, there have been cases where anthracnose blight was not properly controlled by regular rates of strobilurin fungicides. None of these reports have come from Canada.

...continued on page 12



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Will the Resistance Go Away Eventually?

In our annual field trials for fungicide control of dollar spot disease, we found that benomyl failed to control the disease after we switched testing for a year to another range of turfgrass, although benomyl had worked well in previous years and in later years at our usual test site. Subsequently, we learned that benomyl resistance had been encountered in that field 10 years previously, but that no benomyl had been used on that range since then. This illustrates how resistance can stay in a population even after the selection for resistance (the fungicide) is removed. In the case of benomyl, the switch from sensitive to resistance just involves a single mutation which does not cause the mutant fungus any loss of vigor or growth. Hence, resistance to fungicides such as benomyl do not incur a cost, which is referred to as a resistance-related fitness cost. Resistance to other fungicides may come at a price, and the higher this price, the quicker the resistant mutants will fade from a population after fungicide is no longer used. There is a cost by fungi for developing resistance to fungicides such as the DMIs, dicarboximides, strobilurins among others. So, theoretically, if their use is discontinued, more sensitive populations will return. But the timing of these shifts has not been well documented in research.

Anti-resistance Strategies

A case study on the development of DMI fungicide resistance illustrates some of the conditions that may lead to disease control failure. At a golf course outside of Chicago where resistant isolates were found, an older variety of creeping bentgrass was used that was very susceptible to dollar spot. This likely led to greater frequency of fungicide use. Secondly, nitrogen levels were purposely kept low to prevent the occurrence of other diseases such as Pythium blight, which again may have contributed to greater fungicide use because dollar spot disease is favoured by low nitrogen regimes. Thirdly, DMI fungicides were used extensively for several years.

General recommendations to prevent DMI resistance problems in fungi include: 1) not using repeated applications of DMI fungicides alone; 2) using mixtures or alternating with non-DMI fungicides; 3) reserving DMI use for the critical part of the season; 4) using label rates rather than reduced doses; and 5) using other measures such as resistant varieties and cultural practices.

The Pest Management Regulatory Agency in Ottawa is re-evaluating older fungicides, and some such as quinterozone are no longer on the market. Others such as chlorothalonil (Daconil®) are under review. This change in fungicide availability can pose a problem for turf managers because one of the major recommendations for resistance management is to mix or alternate a modern systemic fungicide with an older protectant fungicide. If older fungicides lose their registration, we will then have to guard even more vigilantly against resistance to the newer fungicides.

Research at the University of Guelph

Propiconazole (Banner Maxx®), a DMI fungicide became registered for use on turfgrass in 1994. Because of the recent discovery of DMI-resistant isolates of the dollar spot pathogen in the Great Lakes states, there was great concern that resistance would develop in Ontario. We started a study in 1994 to look at



Figure 3b. With repeated application of fungicides with the same mode of action, the sensitive ones are constantly knocked back, leaving the resistant ones to reproduce. Since resistant ones often don't grow as well as sensitive ones because of resistance-related fitness costs, sensitive ones can constantly attempt to re-invade when the pressure from fungicide application is eased up.

baseline sensitivity of the dollar spot pathogen to DMI fungicides. A graduate student, Wayne Barton, worked on sensitivity to propiconazole (Banner Maxx®), while other students and lab members worked on sensitivity to other fungicides. From eight locations throughout southern Ontario, we found that most populations of the dollar spot pathogen were sensitive to DMI fungicides. However, there was one population near the American border that had reduced sensitivity to DMI fungicides and we suspected that there had been previous exposure to DMI fungicides in this population. This 1994 study has been published in the *European Journal of Plant Pathology*, volume 103, starting on page 409.

We continued this study in late 2003, 10 seasons after the introduction of DMI fungicides. By then, myclobutanil (Eagle™) also became registered for dollar spot control. Another graduate student, Angie Liao, examined hundreds of isolates of the dollar spot fungus from nine populations in southern Ontario, including seven of the original 1994 populations. We found that populations of the dollar spot fungus which were not treated with DMI fungicide during the previous 10 years remained highly sensitive, while treated populations showed a bit of reduced sensitivity, but not at an economically significant or noticeable level. This study has been published in the journal *Plant Pathology*, volume 56, starting on page 500.

Our studies are continuing by examining the effects of changing fungicide regimes on the development of DMI fungicide resistance, and continued monitoring of dollar spot populations at several locations across southern Ontario. We want to see if the shifts toward reduced sensitivity have intensified, and extrapolate from this data how much fungicide use could lead to full-blown fungicide resistance. We plan to start this study again in summer 2013. For this study, we will visit many of the same locations sampled in the 1994 and 2003 studies, as well as some additional locations, especially where DMI fungicide use has been high annually. We need to collect small samples of leaf blades from multiple locations on fairways when dollar spot is obvious. If you are interested in participating and have good records of fungicide use from the past decade, then please contact me at: thsiang@uoguelph.ca ■

Pests, Trials & Bio-pesticides

Highlights from the 2013 National Bio-pesticides and Minor Use Priority Setting Workshop

Turf stakeholders in Ontario are consulted annually via the Turf Technical Working Group of the Pest Management Research and Services Committee to put together a turf minor use list of insect, disease and weed management priorities. This stakeholder committee is made up of researchers, extension personnel, representatives from Landscape Ontario Lawn Care Commodity Group, Ontario Golf Superintendent's Association, Nursery Sod Growers Association and representatives from crop protection companies. This process is duplicated in every province across Canada and the national priorities are presented at a meeting hosted by the Pest Management Regulatory Agency. The 2013 Minor Use Priority Setting meeting took place in the national capital region, Hull, Quebec. In conjunction with this meeting, there is also a National Bio-pesticides meeting. If a pest on a crop is deemed to be a significant problem and there are no pesticides currently available in Canada to control that pest, the Pest Management Centre will fund pesticide trials to determine if there is a product that can control the pest.

In 2012, Ontario was successful in obtaining funding to perform a bio-pesticide trial for the control of hairy chinch bugs in turf. The product that was tested for this purpose is the bio-pesticide Grandevo, from Marrone BioInnovations. Four trials were conducted, two in Ontario, one in Quebec and one in Ohio. The results of these trials were varied, mainly due to the very dry conditions experienced in Ontario and Quebec during the trial period in 2012. There are plans to repeat the trials again in 2013. The hope is to provide sufficient data to support the addition on hairy chinch bug to the Grandevo label. Grandevo should qualify as a Class 11 pesticide under Ontario's Cosmetic Pesticides Ban.

At the 2013 National Bio-pesticide meeting, turf obtained funding to

perform a bio-pesticide trial for the control of European chafer grubs in turf. The product that has been selected for this purpose is *Bacillus thuringiensis galleriae*, GrubGONE from Phyllom BioProducts. Trials will begin in the summer of 2014 on this product. Trials on an older formula had been conducted on this product in Ontario in 2009 with modest results. The hope is that the new formulation will be more effective. Again, this product should qualify as a Class 11 pesticide under Ontario's Cosmetic Pesticides Ban.

"An interesting observation at this meeting was the number of crop protection companies that are increasing their research and development into bio-pesticides."

There was an update from Dr. Karen Bailey, Agriculture and Agri-Food Canada scientist who has been developing the fungal herbicide *Phoma macrostoma* with the Scotts Company. This product received registration in 2012, but production issues have held back the launch. Their hope is to have the product in the marketplace by 2014.

Marrone Bio-Innovations has a new bio-herbicide called Opportune or MBI 005. It is a heat killed *Streptomyces* with good pre-emergent control against *Poa annua*. It is supposed to have efficacy against crabgrass applied to bare soil, but they are not sure if it will work when applied to turf. Trials on this product will be conducted this summer at the GTI to determine its efficacy against crabgrass in established turf.

An interesting observation at this meeting was the number of crop protection companies that are increasing their research and development into bio-pesticides. For example, BASF had purchased Becker-Underwood, the UK supplier of insect parasitic nematodes. Bayer has purchased a bio-pesticide company based in California called AgraQuest and this company will be called Bayer Biologics. In addition to these companies, there were at least a dozen other bio-pesticide companies that presented information on new products that they are developing for the Canadian market.

Ontario and Quebec's turf disease priority was summer patch. Bayer and BASF will consider adding summer patch to the labels of Compass and Triton through the Minor Use Label Expansion program. This will require letters of support from the Ontario Golf Superintendent's Association and the Quebec Golf Superintendent's Association.

On the subject of pesticides, the Ontario Ministry of Agriculture and Food and Ministry of Rural Affairs has published a 2013 Supplement to the *Turfgrass Management Recommendations*, Publication 384. The supplement can be found online at <http://www.omafra.gov.on.ca/english/crops/pub384/pub384sup.pdf>. It contains the turf pesticide recommendations for the pesticides that have been registered in 2012 and early 2013. ■



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42 Years and Counting

Lamont 'Monte' Anderson, Superintendent, Pointe West Golf Club

*by Greg Brown, Assistant Superintendent,
Essex Golf and Country Club*

Lamont "Monte" Anderson started working at an early age for his grandfather on the family farm, which had been passed down from generation to generation. One year, his great uncle, who was also a farmer, had his entire crop ruined when a devastating storm passed through the area. As a result, his great uncle decided to sell the farm to Larry Bunkowsky. Bunkowsky then made the decision to develop the property into a golf course.

Monte was hired on by Bunkowsky, for seventy cents per hour, to drive equipment and help build the golf course that is now Burlington Springs Golf and Country Club. After finishing up the construction, it was time for Monte to move on. However, he decided to keep pursuing golf course work. He ended up at a couple other local courses where he eventually landed his first superintendents position.

Within a few short years, Monte found himself at The Toronto Golf Club as the Assistant Superintendent. Even though he was previously a superintendent, he took the job as an assistant because the money was better and so was the experience. To this day he still does not see that move as counterproductive, rather a smart one that helped shape his career. Working at the Toronto Golf Club is where he truly learned the skills necessary to maintain a high end golf course. Working under Fred Charman, Monte was molded into who he is today. From discipline and hard work to dealing with frequent vandalism, the skills Monte acquired at The Toronto Golf Club would prepare him for any challenge he may face as a superintendent somewhere else.

After five years at The Toronto Golf

IN THE HOT SEAT

Q – Favourite piece of turf equipment

A – New updated and advanced irrigation systems

Q – Favourite sport

A – Hockey – played for 30 years

Q – Rate your home lawn on a scale of one to ten (1 worst, 10 best)

A – Three, but I know what is wrong with it and what I need to do to fix it!

Q – What would you envision yourself doing if you weren't working in the turf business

A – Something involving working with the land

Club, Monte made the move to Erie Shores Golf Club where he soon faced the challenges of a low budget golf course. This was especially tough for Monte having come from an affluent golf club in Toronto. Not only was he bringing a great deal of experience to his new position, he also brought modern maintenance trends to the course and the area for other local superintendents to learn from. During his first day on the job, he faced one of his biggest challenges in his career to this day. An irrigation system blow out was not completed the prior year and he soon found himself installing almost six thousand feet of irrigation pipe to repair the damaged system. Monte had his hands full to say the least, as he found himself preparing the course and leading the crew during

the day, then heading home to be with his family for a short dinner break, and then back again to the course to repair any equipment. By the time the sun was beginning to set, he was back on the course night watering.

After a successful stint there, he was hired on at Pointe West Golf Club, Amherstburg, Ontario as the grow-in Golf Course Superintendent. Twenty six years later, Monte remains the course superintendent. He has seen it all at Pointe West during his impressive tenure, from successfully completing a grow-in to just recently overseeing a complete bunker renovation. One of the biggest differences between Monte and a most other superintendents is that Monte didn't necessarily choose this career because of the golf. He was raised a farmer and working the land came naturally to him. Nowadays, dealing with the day to day challenges of meeting member expectations and striving for a flawless manicured piece of property is what motivates Monte most. He also thoroughly enjoys hiring his crew and working alongside them all season long, even if it means he will be seen walking sock footed in the clubhouse as a trail of dirt would be left behind him if he were to wear his work boots.

He claims that the secret to his success was taught to him by his grandfather, who believed that dedication, hard work and keeping a positive attitude would go a long way to keeping day to day operations running smoothly. Throughout all of this, Monte has been a member of the OGSA for 42 years and served on the board for 3 years. With a very understanding wife that has made it possible for him to accomplish all of this, two daughters and five grandchildren, Monte still manages to make any day seem easy, which is likely why he does not see himself retiring anytime soon. ■

Black Diamond Golf Club



705 Pontypool Rd.,
Pontypool, Ontario L0A 1K0
Tel: 705-932-4659
www.blackdiamondgolfclub.ca

Golf Course Superintendent:
Andy Sandilands

Assistant Superintendent:
Justin Chadwick

Equipment Manager:
Cary (Carl) Davis

Hole #11

Photo courtesy: Black Diamond Golf Club

COURSE PROFILE

About the Course

The course consists of two unique nines. The front 9 is a very open links style course while the back 9 is a heavily treed parkland style course with a lot of elevation change.

Established: 2005

Original Architect: Jack Lally/Jason Miller

Type of Club: Public

Number of Holes: 18

Number of Rounds Annually: 27,000

Practice Facility: Driving range

Biggest Maintenance Challenge

The biggest challenge we face is all the varying soil layers we have to deal with due to the property being entirely sodded during construction.

A CLOSER LOOK

What You Need to Know

Predominant Grass Type:
Bentgrass greens and tees/dwarf blue fairways

Predominant Soil Type: Sandy Loam

Type of Greens: L93

Course Length: 7,062 yards

Size of Property: 185 Acres

Size of Greens: 2.5 acres

Size of Tees: 1.7 acres

Size of Fairways: 23.5 acres



Time to Rethink Bunkers

By Jeff Mingay, Golf Course Architect
Mingay Golf Course Design Ltd.

Trying to find ways to cut back on golf course maintenance costs is nothing new. During the early 1930s, another time when financial difficulties and uncertainty forced people to rethink things, legendary golf architect Alister Mackenzie was strongly advocating the importance of designing courses to ease maintenance and reduce costs associated with upkeep. Principally, Mackenzie stressed the importance of building golf course features that could be mown mechanically and minimizing the use of artificial sand hazards.

His Bayside course on Long Island, New York, which opened in 1931 but no longer exists, featured just nineteen bunkers over 18-holes. Reportedly,

Bayside could be mown wall-to-wall with a single machine too. Well, aside from the putting greens of course.

Ironically, Mackenzie's Augusta National was designed along the same lines. Many critics cite that famous course as being the poster child for extravagance and the root of unrealistic expectations that too many golfers have these days. The truth is that Mackenzie and his collaborator, club co-founder and champion golfer, Bobby Jones, allowed natural features to drive the design of Augusta and created a course featuring long, flowing slopes and contour that are easily mown with machines. Most interesting, perhaps, is that Mackenzie's original plan called for just thirty-six artificial sand bunkers.

"I then consulted Jones as to the possibility of eliminating some of these,

as I thought it might be possible to do so without detriment to the interest and strategy of the course," Mackenzie later wrote. "After careful study, we decided to leave out fourteen of them, leaving only twenty-two bunkers in all. If twenty-two bunkers are enough on Bobby Jones' dream of his ideal course, they ought to be sufficient for the average golfer."

As Mackenzie goes on to say in the same article, published in *The American Golfer* magazine shortly after Augusta opened for play in 1933, "On too many courses there are far too many bunkers."

One of the first things I study when devising a golf course improvement plan these days are opportunities to eliminate bunkers. Last year, as part of a comprehensive bunker renovation project at The Oakville Golf Club, we managed to reduce the number of



Approaching the green at Oakville Golf Club's par 4, hole #3. Mingay replaced a bunker right of the green with another mound that ties in with existing mounds behind this green and serves equally as a hazard, but is much less expensive to construct and maintain than a sand bunker. The bunker in the foreground, short right of the green, was restored as part of the 2012 bunker project at Oakville as per historic aerial photos of the course. Oakville Golf Club was originally designed by legendary Toronto Golf Club professional and pioneer course designer, George Cumming, in the early 1920s.

*Photo courtesy
Clive Barber Photography
www.clivebarber.com*

bunkers by half, without detriment to the interest, strategy, challenge and beauty of the course. Getting rid of superfluous bunkers at The Oakville Golf Club not only reduced project costs, but bunker maintenance costs as well.

Similar possibilities undoubtedly exist at many other courses. The key is to solicit advice from a golf course architect. Unfortunately, without advice from a consultant, I've seen too many golf clubs and course owners spend thousands of dollars to renovate and maintain bunkers that do nothing to make a course more interesting, challenging or attractive. Fees paid to a consulting architect who intelligently advises on eliminating unnecessary bunkers are miniscule compared to the savings associated with reducing the number of bunkers on a course.

I'm very fortunate to consistently have opportunity to visit many golf courses throughout Canada and elsewhere. Without exception, the biggest complaint I hear, everywhere, is about bunkers. Golfers criticize their condition and course superintendents complain about the time, challenges and expense of trying to maintain bunkers to that aforementioned unachievable, but expected, standard. This standard is unachievable, at least in part, because no matter how much effort the course maintenance staff puts into preparing bunkers for play each day, the ultimate condition of a bunker falls on the last golfer who raked his or her way out of the sand.

With this in mind, an interesting experiment, which could result in reducing maintenance costs, would be to

legitimately transfer more responsibility for the condition of the bunkers to golfers. Let golfers know that the course maintenance staff will only be raking and doing other work to bunkers, say, three or four days per week and that it is their responsibility to leave a bunker in decent condition after playing from the sand.

Then again, why should bunkers be in decent condition? They're supposed to be hazards after all, places on courses where golfers don't want their balls to go. Bunkers should be unpredictable, because when golfers are sincerely fearful of hitting into those hazards, design strategies and the traditional sporting nature of the game are significantly enhanced.

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The Oakville Golf Club's short par 3, hole #2 where four bunkers were eliminated during a recent bunker renovation project. Two bunkers left of the green were replaced by mounds and another behind the green with a drainage swale that now directs water away from the putting surface. Right of the green, a short grass area was created, replacing another bunker.

Photo courtesy Clive Barber Photography www.clivebarber.com

Too many so-called 'golfers' these days, expect courses to cater to their games, which is why too much time and money is being spent on bunker maintenance.

Overcoming a bad lie, every now and then, has always been an integral part of golf. And, optimistic golfers, like five-time Open champion Tom Watson for example, view bad lies and unfortunate breaks as opportunities to pull off an incredible recovery shot.

The late Bruce Edwards, who caddied for both Watson and Greg Norman at the heights of their respective careers, relayed a great story. Edwards said that when Norman found his ball in a tough spot, his instinct was usually to complain about his luck. Watson, on the other hand, would most often study the situation, grab a club

from his bag, and then look at Edwards and say, "Watch this."

Hitting into a bunker and expecting a good lie is a very bizarre perspective. 'Real golfers', like Watson, accept their fate and tailor their games to specific conditions and situations. Too many so-called 'golfers' these days, expect courses to cater to their games, which is why too much time and money is being spent on bunker maintenance.

More golfers should adopt Tom Watson's perspective and attitude. And more contemporary golf course architects should seriously consider what

Alister Mackenzie was preaching nearly a century ago. Creating golf courses that ease maintenance and reduce related expenses, doesn't mean we have to dumb-down golf course architecture either. It simply means that we need to be more frugal, which actually should inspire more creativity. Alister Mackenzie's original designs at Bayside and Augusta National provide remarkable examples of a frugal yet still creative approach to golf course design. After all, if twenty-two bunkers were enough to satisfy Bobby Jones, they ought to be sufficient for the average golfer. ■



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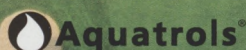


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Understanding Your Workforce

Welcome to spring! What a great time of year to renew and refresh your safety program. You have recently hired a number of young people and maybe some retired folk to work at your club. What a great opportunity to start the season off on the right foot and ensure that you have a safe golfing season.

This article is about the young workers and the older workers that you may have recently hired or have on staff.

Historically, it is known that these two groups are prone to a greater number of incidents in the workplace; young workers because of their lack of knowledge and experience and older workers because of a number of issues that arise during the aging process. New and young workers in Ontario are four times more likely to be injured during their first month of employment than at any other time.

Have you established your training programs with this in mind?

Young workers are full of enthusiasm and energy. They want to prove to you that they can do the job and do it well. Just this morning, I read a comic strip where a pre-teen was asking his dad, "When will I grow up and know everything?" And his dad thought to himself, "In four years he is going to be a teenager!" Young folk sometimes think they know it all.

Young people you are hiring may believe that they have great knowledge about the world around them. However, as managers you have an obligation to ensure that you organize your workplace to channel that knowledge and perceived competence into a safe and productive working manner. This means having clearly defined work processes in place, which establish your work procedures in a manner that allows you to set and enforce the work parameters.

Older workers may have issues with hearing, seeing, balance, strength, flexibility and reaction time. These factors must be taken into consideration when work is planned and completed. An older worker may have a great deal of experience, but may take more time to complete the work.

Older workers may, to some extent, be

set in their ways and may believe that they already know how to complete the work. This may be an issue as you could have a different method that you want followed and your challenge is to work with the older employee to reinforce the need to do the work in a manner that provides for a safe work environment. This may mean having clear requirements for personal protective equipment that older workers have never used before. Or, it may mean ensuring that the older workers follow the rules that you have established for use of various pieces of equipment.

Training and monitoring needs for young workers may be different from the training and monitoring needs for older workers. To assist you, the Ministry of Labour is conducting a workplace blitz this summer, beginning in May.

The goal of the blitz is to:

- Raise awareness of hazards involving new and young workers
- Encourage employers to identify and control hazards
- Address and remedy non-compliance with the OHSA and its regulations
- Deter non-compliant employers
- Enhance health and safety partnerships
- Promote improved health and safety for new and young workers

With the golf season now in full swing, keep in mind that you must have programs, rules and training in place to assist all workers in their efforts to work in a safe, competent manner. Have a great summer! ■

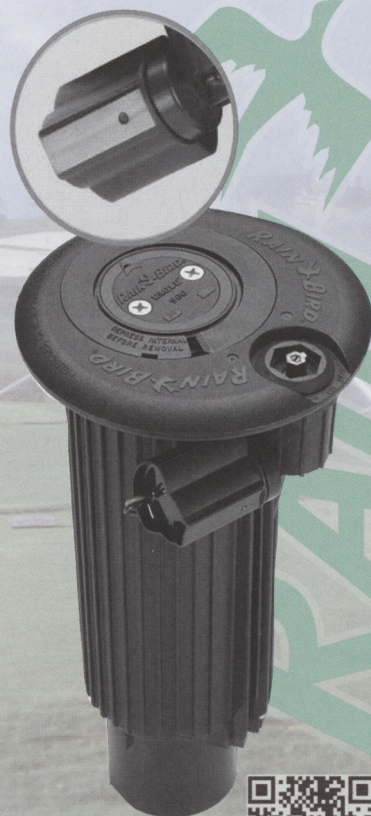


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Doing More with Less

I can't think of a more overused tag line, but Superintendent Brent Stainton, at Peel Village Golf Club, in Brampton, is doing just that with his Triplex. All it took was a four-inch piece of PVC pipe clamped to the steering wheel frame and a simple extension to the step plate to house all the tools required for course setup. "I have been able to save on labour by doing two jobs at the same time," says Brent. "It doesn't take me that much longer to get both jobs done and I can send staff to complete other assignments who would otherwise be busy either mowing greens or with course setup".

The Broken Windows Theory

In Malcolm Gladwell's book, *The Tipping Point*, the broken windows theory is credited to have played a major role in the decline of violence in the United States, and, more specifically, in the New York subway system. The brainchild of two criminologists, the theory argued that crime is the direct result of disorder. For example, "if a window is broken and left unrepaired, people walking by will conclude that no one cares and no one is in charge. Soon, more windows will be broken, and the sense of anarchy will spread from the building to the street on which it faces, sending a signal that anything goes." Therefore, minor problems such as graffiti, public disorder and aggressive panhandling are invitations to more serious crime.

Subway crime reduction was tackled on two fronts; putting an end to both the graffiti and panhandling problems. Rail cars were 'reclaimed' one at a time and never allowed to be vandalized again. Cleaning stations were set up and cars were cleaned of graffiti before being put back into service. Fare-beaters were handcuffed to a chain and left in public

view, while the time to process an arrest for these criminals was expedited. The message was plain and simple: "We are serious about making a change about crime." Soon enough, "the bad guys wised up and began to leave their weapons at home and pay their fares."

As I read about this theory, I was reminded of, "the seven deadly sins against greenskeeping" in Gordon Witteveen & Micheal Bavier's book that I had read years ago. The seven sins were:

1. Fertilizer burns anywhere
2. Poorly adjusted greens mowers
3. Scalped plugs on greens
4. A greens mower scalped into the apron
5. Letting new sod die
6. Killing greens with kindness
7. A messy golf course and maintenance building

At the time, these 'sins' came across as just an exercise in good maintenance practices. Looking at them now in a different light, I would bet that they are 'tipping points' for golf course maintenance excellence just like eliminating graffiti and panhandling was for reducing crime. We can often get caught up with trying to reinvent the wheel and implement 'big changes' to incite drastic adjustments to our maintenance standards or workplace culture at our respective facilities. Maybe looking at implementing a small change and searching out these 'tipping points' is all it takes after all. ■



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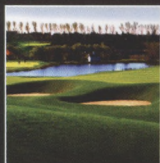


Brent Stainton, Superintendent, Peel Village Golf Club
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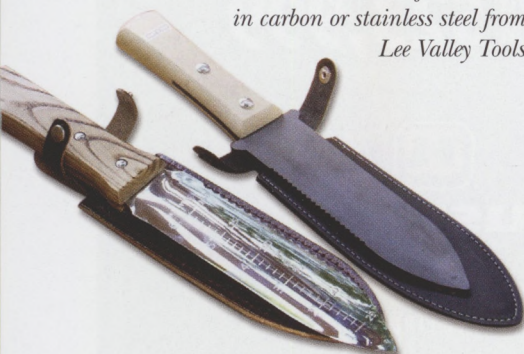


Renia Hemphrey of Brantford Golf and Country Club has a custom gardener's cart.

A Few of Our Favourite Things

I am certainly no salesperson, but there are a few special items in my toolbox that I would go out of my way to promote. Over time we all develop our particular ways of doing things, and find our favourite tools, so I also asked around to see what gems others have discovered.

Hori Hori knife available in carbon or stainless steel from Lee Valley Tools



Hori Hori Knife

I am going to have to try this Japanese knife (available from Lee Valley Tools) because both Rebecca Roy of Toronto and Jo Ann Smith-Gibson from Hamilton Golf and Country Club recommend it enthusiastically. The name means 'digging' in Japanese and it is fantastic for an infinite number of gardening tasks, including planting annuals, dividing perennials, cutting

plants out of containers, and, of course, weeding. This is the one tool (other than our sacred pruners) that the staff is imploringly asked not to accidentally dump out with the garden clippings. It has a long blade (either stainless steel or carbon steel) that is sharply serrated on one side. It is VERY SHARP (beware, stitches may be required!!).

Offset Soil Knife

I was introduced to this knife (sold by A.M. Leonard in the U.S.) 11 years ago when I worked in Philadelphia. Everyone used them there, and when I returned to Canada, I looked everywhere for it but to no avail. What I like about this knife in particular is the offset blade which increases the digging power. In addition to the same uses mentioned with the Hori Hori knife, I like it for planting small bulbs, cleaning off my muddy boots, opening irrigation boxes, and lifting up irrigation spray heads. It's much faster than using a regular trowel for planting annuals. Once during annual planting season, I lent my knife to a helper and ended up using a regular trowel myself. This led me to understand why I was annoyed at staff who were using trowels and seemed to be working awfully slowly...they had a much inferior tool!



Offset soil knife

I was also pleasantly surprised when I found out this knife is good for gaining respect amongst my colleagues and for getting teenaged male assistants excited about gardening! The one downfall is definitely availability. It is difficult to ship across the border, but certainly possible and most definitely worth it.

Long Handled Edger

Jacky Miller from Glen Abbey Golf Club loves her long handled tools for saving her back, particularly the edger. The rest of the crew seems to be partial to them



Soil knives are great for planting small bulbs like this *Iris reticulata*

as well. Although, I like the 'D' shaped style handle. I was certainly envying Jacky and her long handled edger as I edged beds this morning, hunched over with a tool made for someone four feet tall! Two companies that make them are Garant Grizzly and Ames True Temper.

Beet Hoe

Susan Hill, estate gardener in King City, can't work without her beet hoe as her prime weeding companion. She's tried several other types of hoes, but this one is the winner by far.

Skillers/Mascot Workwear

Although I wouldn't normally consider clothing a tool, in this case I will make an exception. Pants with built-in pockets for kneepads – genius. Europeans are light years ahead of us when it comes to gardening gear, as I first saw these (under a different name) when I worked in England. When I came across Skillers in Canada four years ago, I snatched a few pairs up and I've been wearing them every since – literally. They are such good quality that after four years of crawling around on my knees and other forms of gardening abuse, they look practically brand new. When I first bought them I thought I'd only put the kneepads in when I needed them, but I never take them out. If you have clay

tennis courts they are also useful for the poor souls who spend many long days on their knees nailing in the lines. They also have generous pockets that are useful for carrying around radios, pens, folding saws, small tools, and bits of garbage that I'm always picking up. The one drawback is that the material is quite heavy so they're quite hot in the summer, however, I prefer the comfort of my knees and just suffer through it. Recently, Skillers has been replaced by comparable workwear through Mascot.

Custom Gardener's Cart

Sometimes it is not just the tools that are important, but whether or not you have them when you need them! Renia Humphrey from the Brantford



Pants with built-in pockets for kneepads

Golf and Country Club is fortunate to have a handy mechanic who designed and retrofitted her golf cart to hold everything she needs to maintain the gardens. Watering cans, trimmers, a shovel, broom, rakes and more! She never has to worry about being caught without a necessary implement. ■



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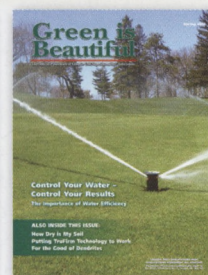
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Thank You and Goodnight

As this will be my last submission to this column, I wanted to leave you with a selection of things, best practices if you will, that I have found to be integral in helping me to do my job over the years. I've mentioned all of these before and there is nothing revolutionary here, just a few things that have and continue to work well for me, and that I feel are crucial to running an efficient turf equipment shop.

First and foremost, look after your reel mowers. Well maintained and properly adjusted reel mowers stay sharp longer, so clean and adjust them daily. Treat them with respect because they are your money makers. Be meticulous with your washing regimen and allow them to dry before making adjustments. Reels that have been adjusted in the hot afternoon sun will feel loose in the cool of the morning on the barn floor. Also, sharpen your rotary blades more often than you have been. It's a fast and inexpensive way to help keep your rough looking its best. Replacement blades are cheap, so buy at least one extra set, two is better because you will bend a few over the course of a season. It minimizes downtime by making changeovers much faster as the dull set can be sharpened at your convenience.

Be organized. Use whatever medium you choose, be it paper or electronic, but try to stay on top of things and don't use your desk for a filing cabinet. Once something is dealt with, deal with the paperwork too. I remember reading a sign in a bathroom somewhere that read, "No job is finished until the paperwork is done". This is very true. And, in the same vein, get rid of unused bench space in your shop because it just becomes a place to store crap, making your shop look the same. A messy work space is generally a direct reflection on the quality of work coming out of it, and impression often becomes reality. How do you want to be looked upon?

Keep accurate and up to date records. I know you've heard this from me many times before, but apparently some of you are still not getting the message. For your own due diligence if nothing else, if it isn't written down somewhere, it didn't happen. Your JHSC should be able to help you get started, and, quite frankly, should be all over you if you are not doing it already.

Do your best to keep on top of equipment maintenance. Even for a dedicated Equipment Tech with a large fleet, keeping caught up on all the maintenance requirements for every different machine can be a struggle (here's where the organization part really comes in handy) so I get what those who are wearing all the hats with shrinking budgets are faced with. Remember this though, maintenance pays, especially if you plan on keeping your gear for long periods. Begin by referring to the individual operators manuals and chart out the various maintenance requirements. You can then add dates and hour meter readings and go from there. The point is, don't neglect or cheap out on maintenance. Turf equipment isn't getting any cheaper. Look after it and it will look after you.

And finally, thank you to the OGSA and the editorial staff at *Green is Beautiful* for allowing me the opportunity to share my experience with your membership these past few years. It has provided me with an opportunity to step a little further outside

my comfort zone and I feel I am a better man for it. A special thank you to the few of you who contacted me in response to something I have written (good or bad). I appreciate that you thought it worth your while to take the time to comment. Finally, to you superintendents who are faced with the prospect of being without a Tech and don't have the time, skills or desire to do the work yourselves, I leave you with this thought: if you want better access to more trained turf equipment technicians, the turf industry as a whole must come together and find a way to provide and support this training. Superintendents must commit to creating and maintaining positions for new techs to learn on the job. It's the only way to really learn what the job entails.

Have a great season! ■



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Five Years Ago Today

The Ontario Golf Superintendents Association executive for 2008 was **Jeff Stauffer** (pres), Credit Valley, **Sean DeSilva** (past), Coppinwood, **Randy Booker** (vice), Otter Creek, **Jeff Alexander**, Parry Sound, **Chris Andrejicka**, Essex, **Jarrold Barakett**, Deer Ridge, **Doug Breen**, Golf North, **Phil Brown**, Summit, **Rob Gatto**, Kings Forest, **Scott Heron**, Bigwin, **Stu Leachman**, Diamond in the Ruff and **Jennifer Pendrith**, Kawartha. **Dorothy Hills** was Executive Manager and **Pat Thomas** and **Debra Badger** were office staff.

ON THE MOVE: The following superintendents changed positions: **Sean DeSilva** to Coppinwood, **Andrew Hardy** to Pheasant Run, **Corey Phillips** to Frog's Breath, **Chris Gulliver** to Settler's Ghost, **Perry Beausoleil** to Hylands, **Andrew Gyba** to Eagle Ridge, **Tyler Ruest** to Dalewood, **Peter Sinuita** to Copetown Woods, **Simon Brunton** to Sawmill Creek, **Chad Ziegler** to Sally Creek, **John Taylor** to Grand Niagara Resort and **Paul Gurr** to a new course in Calgary. **Adam Trenton** to Greystone, **Rick Buttenham** to Marlwood, **Jim Nicholls** to Loch Ness Links, **Dan McCaffrey** to Beach Grove, **Deni Terenzio** to Hawk Ridge, **Bill Gilkes** to Scarboro, **Derrick Weening** to the Fairways at Kirrie Glen, **Caleb Gibbons** to Empire Springs, **Michael Gutteridge** to Ashbrook and **Paul Cutting** to Carrying Place.

MILESTONES: At the Ontario Golf Course Management Conference and Trade Show, **Jim Wyllie** was presented with a 50 Year Member plaque and **Alex LaBelle** and **Stephen Verral** received their 25 Year Member plaques.

EVENTS: Allturf Ltd. and Multitynes Turf Products, **Nigel Rennie**, announced a merger and will operate as Allturf Ltd. Congratulations to Allturf Ltd. in the celebration of their 30th anniversary.

Agrium Advanced Technologies announced the acquisition of the Agronomics Division of Turf Care Products.

ACHIEVEMENTS: **Bill Fach**, of Black Bear Ridge Golf Club

in Belleville, was the recipient of the CGSA Superintendent of The Year Award.

Congratulations went to **Bob Brewster**, of Mississauga Golf & Country Club, as this year's winner of the Gordon Witteveen Award for the best CGSA article of the year.

The Hugh Kirkpatrick Bursary was awarded to **Kevin Collier**, Assistant Superintendent of King Valley Golf Club and **Cameron Kusiek** was the winner of the Turfgrass Education Award. Also congratulations went to **Brian Ross** of Taboo Resort as winner of the OGSA University of Guelph Short Course Award.

Dennis Pelerine was presented with the Distinguished Service Award by the OGSA.

Tom Brain, Burlington Golf & Country Club, won the Barry Endicott Award for best article in *Green is Beautiful*.

Ian McMaster, son of **Blake McMaster**, Royal Montreal, received the OGSA Heritage Award.

TOURNAMENTS: The Spring Field Day was held at Muskoka Lakes Golf & Country Club with **Jim Flett** as host. The winners of the scramble event at 10 under par were **Barry Endicott**, **Ron Biggs**, **T. J. Rule** and **David Kemp**. **Dave Schmelefske** had his first hole in one.

Pro/Super Challenge was held at Batteaux Creek Golf Club hosted by **Paul Mickalko**. **Rob Bell** with pro **Chris Neale**, Copper Creek, won with a score of 65.

The 40th Annual Presidents' Day tournament was held at Deer Ridge Golf Club hosted by **Jarrold Barakett**. The winning team was from The National, **Chris Dew**.

The CGSA Fall Field Day was held at the Georgian Bay Club in Collingwood hosted by **Bert McFadden**. **Bert** and **Thom Charters** had a 72 and **Bert** won in a playoff.

The Alex McClumpha Tournament was held at Craigowen Golf Club. Not only did **Jerry Richard** host the day, but he also won with a 73. **Rhod Trainor** won the George Darou Trophy for superintendents over 50, which was presented by **Ian Chapman** of Turf Care.

IN MEMORY: **Allen (Whitey) Jones**, a member of the OGSA since 1956 passed away and **Gary Sutherland** from Carrying Place passed away. ■



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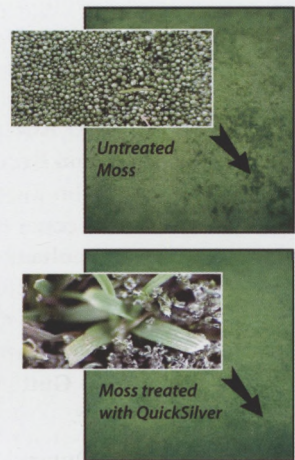
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Bees

by Doug Breen, Superintendent
GolfNorth Properties

I was watching The Learning Channel the other night and there was a program on that described the social structure of a bee hive. Now when I say that I was watching The Learning Channel, what I really mean, is that I fell asleep while flipping through the channels and I woke myself up when I dropped the remote control on the floor and one of the batteries rolled under the couch. I wasn't about to move the couch, so, like I said, I was watching The Learning Channel. I often wonder what TLC told the CRTC that they would be programming when they applied for a broadcast license, but I'm willing to bet that they didn't propose 24-hour marathons of midgits shooting wild boars out of helicopters, storage locker auctions, and Extreme Cougar Housewives every day. But this time, they were actually showing an honest to goodness educational program. I know – I was as shocked as you!

Bee hives are quite literally a hive of activity, where the wee insects are as busy as, well, bees. But I learned that there is an extremely regimented structure to all of that chaos. The Queen Bee runs the whole hive, with a very small number of attendants, and thousands of Worker Bees who fly up to a mile from the hive to collect pollen, which is ultimately manufactured into honey. No idea how they actually make honey – I can only assume that it's magic. Then I got thinking about how a couple decades ago when I started off in the golf business, that our hive wasn't too much different. There was a Queen Bee (or more often, a King Bee), a handful of attendants, and a bunch of workers like me. But today, our hive has been overrun by other bees; that do nothing to aid in the production of our product, eat up a bunch of honey, and more often than not, actually stop us from doing our work.

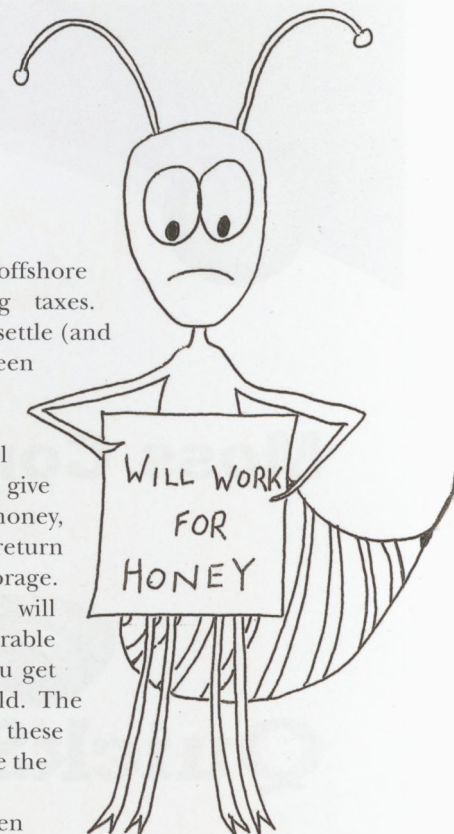
The first one that I noticed, was the Lawyer Bee (often confused with the Insurance Bee). Both of these bees eat a tremendous amount of honey, without actually adding anything of substance to the hive. And when I say tremendous, I mean more honey than anyone could ever need in a lifetime. Most of it gets invested into retirement condo developments

for wasps, or hidden in offshore hives to avoid paying taxes. These bees exist to help settle (and fuel) conflicts between other denizens of the hive, and to make sure that the workers feel just unsafe enough to give up some of their own honey, just in case they don't return from an extended forage. The Insurance Bee will remind you how vulnerable your family will be if you get smashed into a windshield. The worst case scenario is if these two bees mate – those are the real Killer Bees.

Lately, there has been a marked increase in the number of Government Inspector Bees. The government has three hives, Municipal, Provincial, and Federal – and none of these hives are capable of actually producing any honey. As a result (to keep them well fed), the Tax Collector Bees come to every hive and take 54% of the honey that we've produced. What we get in return, is reams and reams of legislation (and swarms of inspectors), to enforce rules that actually make it nearly impossible to produce honey - but ensure safe foraging conditions, a healthy environment to fly around in, and programs to encourage multi-entymologism. At the same time, bee hospitals are underfunded (I know a guy who waited 6 hours to get his busted stinger looked at), and the bee schools are a mess.

These bees would soon cease to exist, or be allowed to starve, if it weren't for the Public Interest Bee. This is a relatively new type of bee, that isn't exactly government, but isn't exactly working either. Somebody's giving them honey, although no one really knows who, and they buzz around everyone else's hives, in a 'holier than thou' manner, stirring up trouble and clutching their bee pearls in horror, at whatever they have been preconditioned to be horrified by. Whatever their bone of contention, it will result in more inspector bees, and possibly another chamber in one of the three government hives. This will require yet another honey tax, while at the same time making it more difficult for the few remaining workers to produce enough honey for everyone else.

Eventually, the remaining hives that are actually producing honey will collapse into bee bankruptcy, or they will transfer their operations to Asia. The golf industry isn't collapsing yet, but it's teetering under the weight. And I sure wish that some of these bees would get off my back, or go find their own pollen, or both. ■





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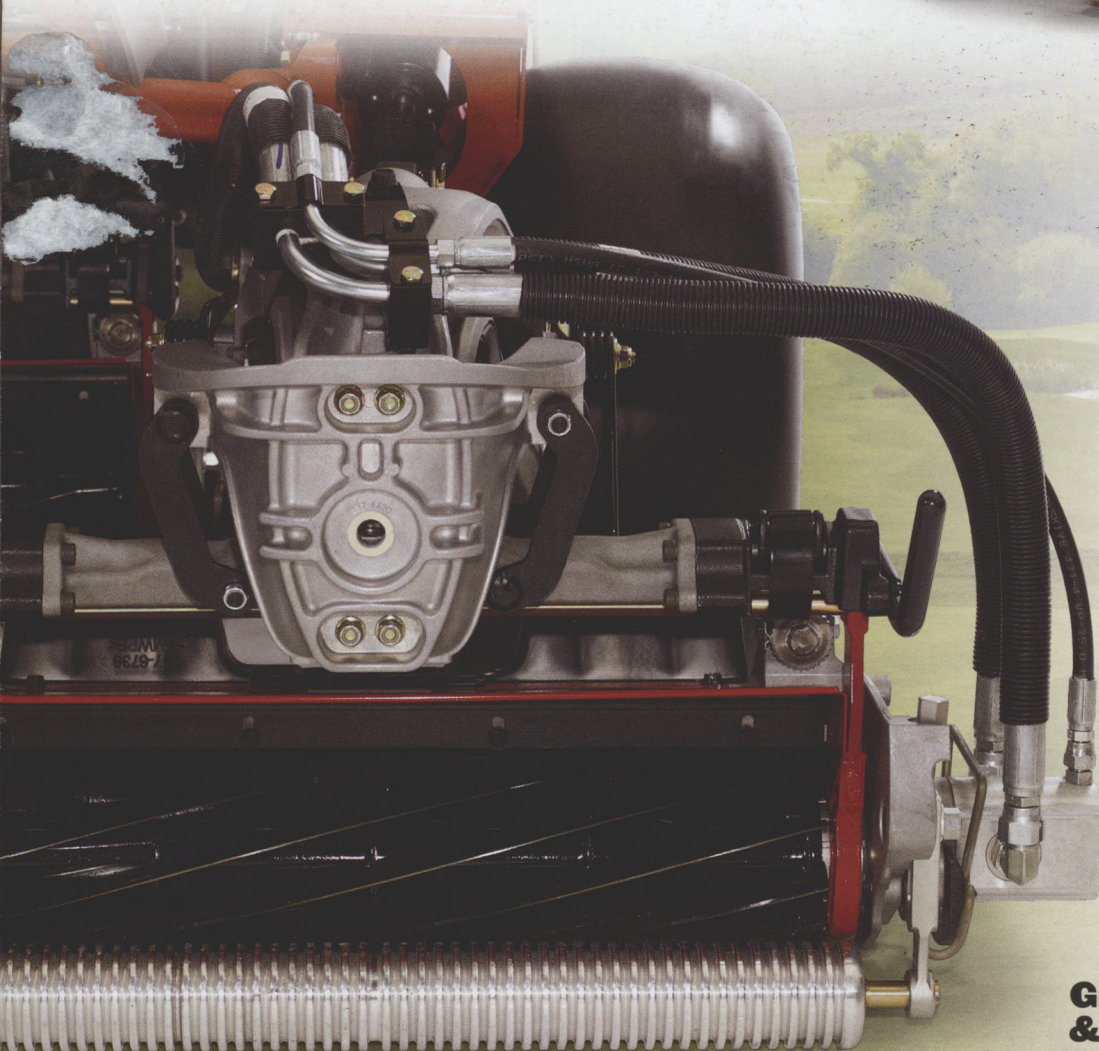


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