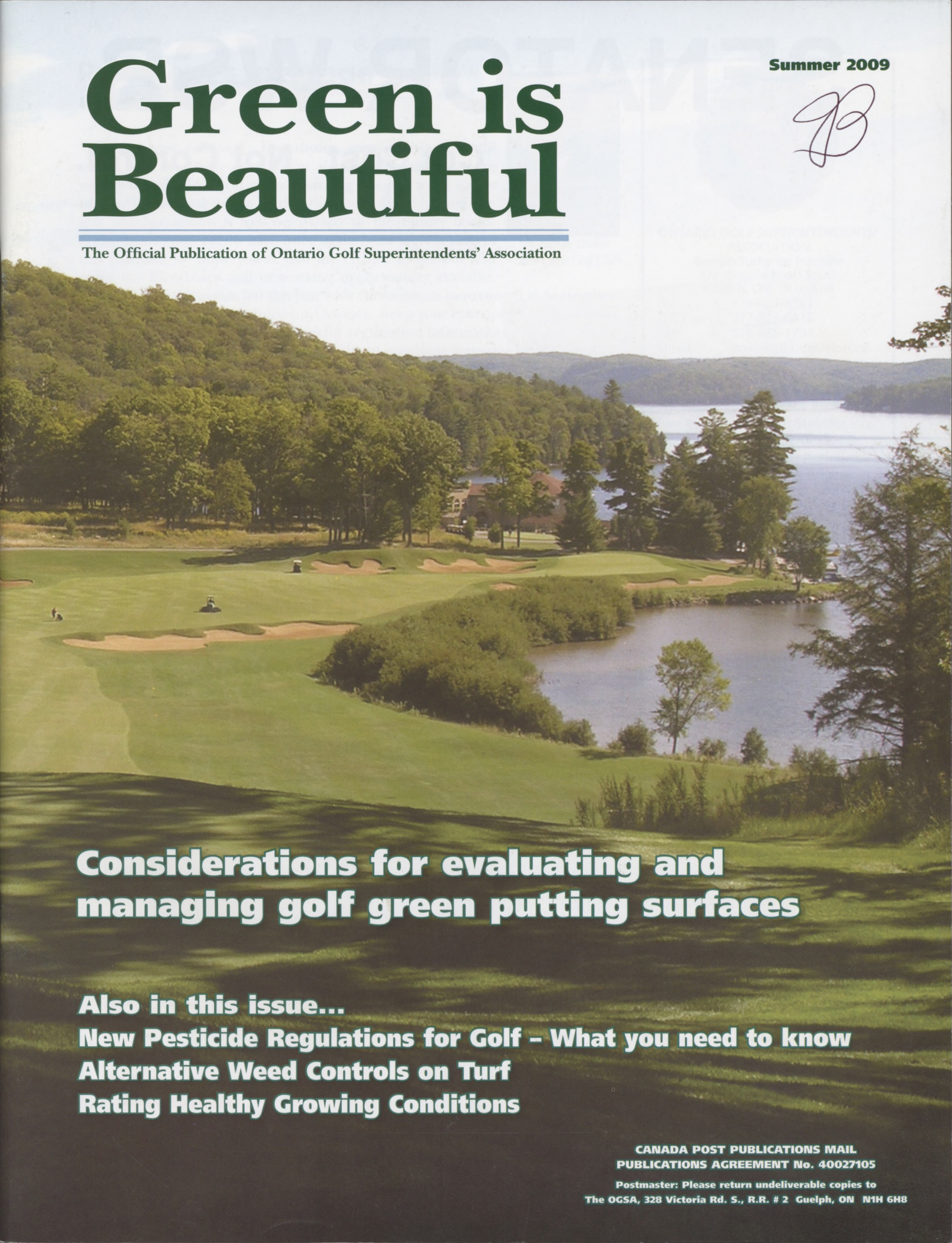


Summer 2009

Green is Beautiful



The Official Publication of Ontario Golf Superintendents' Association



Considerations for evaluating and managing golf green putting surfaces

Also in this issue...

New Pesticide Regulations for Golf – What you need to know

Alternative Weed Controls on Turf

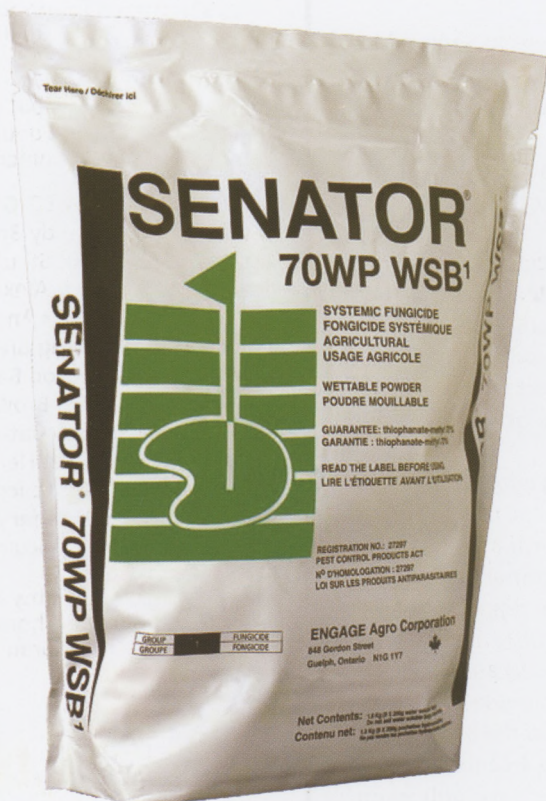
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President's message

Did I miss summer? Has anyone seen it yet? Is it still on its way or do we just accept the Scottish season we're experiencing? Told you global warming was just a fad to get our environmental minds working a notch faster. None the less, another season is well on its way to the history books.

Our association events have once again been a great success this year and we hope you've had the chance to get out and enjoy the friendships and networking opportunities available. There are still two events left this year with the Assistants tournament in September and the McClumpha scheduled for October. Keep your eyes open on the website Events page and the weekly *Clippings* for registration information.

Our association provides an opportunity to nominate someone in the industry for the OGSA Distinguished Service "William Sansom" Award. The purpose of this is to present an award of distinguished service, in the name of our first president, William Sansom, to an individual or individuals, who have been nominated and subsequently accepted by the Board of Directors of the Association. Criteria, qualifications and nomination form can be located on our web site, or you can get additional information from the office. This is your chance to recognize someone in our industry, who has made a significant contribution to the advancement of the golf course superintendent's profession in Ontario. The individual chosen will be presented with the award at our annual Awards Luncheon, held during the conference.

We are working with the CGSA to put together a phenomenal educational and trade show experience in Toronto from Feb. 28 – March 2, 2010 at the Sheraton Centre. Mark your calendars now and watch for registration information, soon to be made available. This is an opportunity to not only attend seminars, the trade show and network with your colleagues. It will also provide an opportunity to attain education points to maintain your IPM, CGCS and MS certification.

As you should be aware by now all facilities must become registered and enrolled in the IPM certification process. Please take the time to read Teri Yamada's article as there still seems to be some misguided information running around the industry. It is our responsibility to educate our management teams, members and the general golfing public on the importance of this process. Remember we have only been given an exception dependant on our IPM certification. There is no guarantee that we will continue to have all the pesticide tools at our fingertips. I think we owe it to ourselves and maybe more importantly both our children and our predecessors, as we don't know what the future holds and a lot of us have had the easy route out with the availability of all these products for many years. The basics of turf brought us to the point we're presently at – maybe it's time to take a step back and begin to fall back on these basics once again; soil building, turf cultivation and personal pride knowing we can provide A1 conditions without the easy use of pesticides.



by Randy Booker
Otter Creek Golf Club



ONTARIO GOLF SUPERINTENDENTS' ASSOCIATION

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Guelph, ON N1H 6H8

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Green is Beautiful 2009

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Green is Beautiful

The Official Publication of Ontario Golf Superintendents' Association



COVER PICTURE

Bigwin Island Golf Club

*Photo by Scott Heron,
Golf Course Agronomist*

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Editorial message



by Dorothy Hills

Yes folks, this is the Summer issue although, at time of writing, we haven't experienced the type of summer we would have all liked and hoped for. That being said, it has certainly not affected our writers.

They are all in top form and have offered up the best of the season, starting with Teri Yamada, Executive Director of the IPM Council of Canada, reporting on what you need to know about the new pesticide regulations for golf. If you are not sure of the new regulations, please read this very informative article. Should you require further information or have any questions Teri has provided an email address to the IPM Council at the end of the article. Our member profile for this issue is on Dean Baker, who has also contributed an article about rating healthy growing conditions and how the criteria was successfully applied at North Halton. David Smith, of DCS Agronomic Services, provides us with a feature article on identifying factors worthy of consideration for evaluating and managing golf green putting surfaces.

I would like to thank all our regular contributors, who time and time again provide us with informative, thought provoking and amusing articles. Warren Wybenga, our mechanical guru has a timely message and reminds us in his On the REEL side of things column, that there is no room for complacency on the job site, and as the dog days of summer roll on, we all need to keep focused on the job at hand.

As our publication is now a 4 seasonal publication, I would like to remind our readers to check out the weekly E-bulletin, *Clippings* that is dispatched every Wednesday afternoon. It will update you on current OGSA news that may not appear in *Green is Beautiful*, due to the four seasonal release dates.

As always, we encourage any comments and suggestions you might have regarding your association's publication. We hope that you will consider submitting an article about something that has taken place on your course, whether it is a renovation, new construction, turf tips, management tips or some maintenance policy or procedure you have found beneficial. Personally, I always enjoy reading the human nature stories.



Mushrooms during rainy season. Photo by: Brenda Nailor, Brenda W. Nailor Consulting

What's new

2009 OGSA GOLF EVENTS

Assistants Tournament Sept. 22nd
Piper's Heath GC, Hornby
Host Superintendent, Tim Muys

Alex McClumpha Oct. 5th
Summit G&CC, Richmond Hill
Host Superintendent, Phil Brown

Registration and details of the above events will appear on our website under both "Events" and "Calendar of Events," as they become available. All events will be announced in our e-bulletin *Clippings* when registration is open.

For your convenience, on line registration will be available again this year.

43rd annual CGSA Fall Field Day
September 21, 2009
St. Charles Country Club,
Winnipeg, Manitoba
Kerry Watkins, Superintendent

OGSA extends our congratulations and best wishes to the following courses that are celebrating a special anniversary this year!



Oxford Golf & Country Club
100th Anniversary



Fox Glen Golf Club
50th Anniversary



Puslinch Lake Golf Club
40th Anniversary



Deer Creek Golf
& Country Club
20th Anniversary



Victoria Park
Golf Club
Victoria Park East
Golf Club
35th Anniversary



Welcome!

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Welcomes
our newest
members**

Tim Armstrong	Class F
Knollwood Golf Club	
Derek Brown	Class Supt
Talbot Trail Golf Club	
April Grabell	Class S
Guelph Country Club	
Chris Jones	Class S
Granite Golf Club	
Ken Manwell	Class D
Orangeville Golf Club	
Kirk Stewart	Class C
Goderich Sunset GC	
Eco Solutions	Class E
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NEW PESTICIDE REGULATIONS FOR GOLF WHAT YOU NEED TO KNOW

by Teri Yamada, Executive Director
IPM Council of Canada

The Ontario Cosmetic Pesticides Ban Act that was known as Bill 64 became law in June 2008. The associated Regulation 63/09 dictates what golf courses must do if they wish to continue to use pest control products.

New Pesticide Classifications

All pesticides have been reclassified into 11 classes and the database is constantly being updated as new products are registered and others are reclassified. You can access the database at www.ontario.ca/pesticideban. The Class 9 list will give you all the active ingredients that are banned. Class 11 gives you the list of biopesticides or reduced risk products that are still available to the public. These are the products that golf courses would be left with if they choose not to comply with the new requirements for golf under Regulation 63/09. The most confusing list is Class 7. Class 7 products are registered for both cosmetic and non-cosmetic purposes. Glyphosate is among these products and is therefore still found at retail outlets. However, it is considered illegal to use glyphosate for any use other than to remove plants that threaten human health, such as poison ivy.

IPM Accreditation

All golf courses in Ontario wishing to continue to use pesticides must become **fully** IPM accredited by April 22, 2012. This means that the golf facility must achieve Level 2 Accreditation by that date. Level 2 Accreditation can take up to three years to achieve; therefore clubs not currently registered in the program should register as soon as possible to meet the 2012 deadline. For new golf courses that are currently under construction or in the planning stages, the clock starts ticking from the first day that pesticides are applied to the property. New golf courses must become fully accredited within two years from that date.

How to Get Started

The IPM Accreditation Program (IPMAP) has two parts; the IPM Agent and the golf facility. The IPM Agent is the individual that must successfully pass an examination on IPM and maintain 8 continuing education credits (CEC) annually to be "certified". The golf facility must register with the IPM Council of Canada and submit documents for an annual desk review audit, including the *Annual Report – Pest Control Product Usage* that is required under the new regulation and pass an on-site environmental audit every three years to achieve "accredited" status.

Certified IPM Agent

Each golf course must have at least one certified IPM Agent responsible for the reporting required for the annual desk review audit and the triennial on-site audit. Some exceptions for smaller operations may be considered by the Council by formal written request. To become a certified IPM Agent, applicants must have a valid Ontario landscape exterminator's license and pass the IPM Examination with a grade of 75% or better.

The application to take the IPM Accreditation Exam, list of study materials and the schedule of examination locations and dates can be found at: www.ontarioipm.com

Applicants are responsible for obtaining their own study material including Ontario Regulation 63/09 made under the Pesticides Act. It can be downloaded at: http://www.e-laws.gov.on.ca/html/source/regs/english/2009/elaws_src_regs_r09063_e.htm

The cost to take the exam is \$250. The examination is currently a 90-minute, closed book exam consisting of 80 questions. All exams will be marked by IPMAP at University of Guelph, Ridgetown Campus (Ridgetown) and a certification number will be issued to all applicants who pass the exam with 75% or better, within ten (10) working days. Unsuccessful applicants may re-write the exam within six months at a reduced charge of \$50.

If an applicant is in the process of taking the exam for their landscape exterminator's license, they may take the IPM Accreditation exam, but the certification number will not be issued until proof of a valid Ontario landscape exterminator's license is presented to Ridgetown.

Certified IPM Agent Annual Registration Fee

There is an annual registration fee for IPM Agents of \$75. Initial registration in the program will be accepted throughout the calendar year following successful completion of the examination. Registration renewal is required by June 1st each subsequent year. Registration must be updated before the annual desk review audit, signed by the IPM Agent, is accepted. Ridgetown manages all aspects of the IPM Agent process and IPM Agent registration fees and examination fees are paid directly to Ridgetown at:

IPM Accreditation Program (IPMAP)
c/o University of Guelph,
Ridgetown Campus
120 Main Street East
Ridgetown, ON N0P 2C0

Certified IPM Agent Annual Continuing Education Credits (CEC)

Starting the year following the successful completion of the exam, all IPM Agents must annually attain 8 Continuing Education Credits (CEC). If 8 CECs are not achieved by Dec. 31st of each year, the IPM Agent has the option to write the IPM Accreditation exam at the full cost of \$250, in lieu of achieving the necessary CECs. A list of educational opportunities offering CECs will be posted on the www.ontarioipm.com website starting summer 2009 and the new www.ipmcouncilcanada.org website starting in 2010. There is a formal process for seminar and event organizers to apply for CEC status and all applications must be submitted at least 6 weeks in advance of the event. Please visit www.ontarioipm.com to download information on the process and the application form.

Registered Golf Facilities

The owner or operator of a golf facility is responsible for maintaining their annual registration in the IPM Accreditation Program. The annual registration fee is submitted to the Council with the name and certification number of the IPM Agent responsible for the golf course. Should the IPM Agent of record leave their employment, the golf course must replace the IPM Agent within three (3) months or before the beginning of the next golf season if the staff change occurs in the fall or winter months.

Golf Facility Annual Registration Fee Payment Options

The annual registration fee covers the cost of administering the IPM Accreditation program, annual desk review audits and an on-site audit every three years. All fees associated with the golf facility are subject to GST and payable to:

IPM Council of Canada
25 Brown Street,
Box #7
Milton, ON
L9T 2Y3

At least two desk review audits must be completed before an on-site audit is scheduled. To be in compliance with the regulation, an on-site audit must be successfully completed by spring 2012. To avoid an on-site audit scheduling logjam, we are encouraging golf courses to register early to ensure their on-site audits are completed on time. This is reflected in the pricing structure for the program. Clubs registering before August 1, 2009 will have their registration fee locked in for the four years (2009-2012) at \$500/yr. If they choose to pre-pay for the four year period, the fee is further reduced to \$450/yr. Clubs registering between August 2 and December 31, 2009 will have their fees locked in at \$600/yr. Those choosing to wait until 2010 to register will pay \$800/yr.

Annual Desk Review Audit

The certified IPM Agent is responsible for submitting the required material for the annual desk review audit. This material consists of six reports that can be downloaded at www.ontarioipm.com

These documents are submitted to Ridgetown. Annual desk review submissions will not be forwarded to the auditors until they are deemed complete. The auditors will check the submissions to verify compliance with IPM protocols and will rate the desk review audit. A satisfactory rating or better results in the facility achieving **Level 1 Accreditation**.

On-site Audit

The IPM Council of Canada will schedule the on-site audit with the registered facility and the auditor. This will be arranged with the golf course at least six weeks in advance of the visit. The purpose of the on-site audit is to give the auditor the opportunity to verify everything that has been reported in the annual desk review audits. The club will be given three months to satisfy any deficiencies noted by the auditor during the visit. A satisfactory on-site rating by the auditor results in the facility receiving Accreditation – **Level 2 (full accreditation)**.

Use of Contracted Licensed Exterminators

If a golf facility has a certified IPM Agent, but wishes to contract spraying to an external contractor, the contractor does not need to be a certified IPM Agent, but may apply pesticides under the written supervision of the facility's certified IPM Agent. The facility's certified IPM Agent will be responsible for the submission of all documents for audit. However, if a golf facility does not have a certified IPM Agent and they are using a contractor for pest control applications, the contractor must be a certified IPM Agent and must therefore be responsible for submitting all materials required for the annual desk review audit and be present for the on-site audit. There is also an expectation that the IPM Agent is completely familiar with the property and should therefore be on-site a minimum of once per week for proper supervision and scouting. Independent contractors may act as the certified IPM Agent for a maximum of three properties.

The IPM Council of Canada is a not-for-profit, multi-sector organization consisting of landscape, parks, tree, sports turf, structural, golf and other industry associations interested in promoting integrated pest management through the IPM Accreditation Program (IPMAP). The Council has been working with the Ministry of the Environment (MOE) to formalize recognition of the Council as the accreditation body within Ontario Regulation 63/09. This formal recognition is expected in August 2009.

For further information, please contact the IPM Council at: info@ipmcouncilcanada.org

From roots to shoots



by Pam Charbonneau
OMAF Turfgrass Specialist

The Summer That Wasn't

While Environment Canada says that June 2009 was near normal for temperatures and rainfall in Ontario, I doubt that they will be able to say the same about July 2009 once it is over. My guess from what we have seen around southwestern Ontario is that it will be wetter and much cooler than normal. The fourteen day trend from

The Weather Network is that temperatures will still be below seasonal normals for the next two weeks. This takes us to the beginning of August so for the entire month the temperatures have been well below the seasonal normals.

Well, the relatively good news is that cool season turf grows best at the temperatures that we have had for the entire months of June and July (15-24°C). Relatively speaking, there has been very little stress on turf. A few things that have resulted from all the cool weather and moist conditions is that the turf has not had a slow down in growth rate. The result is lots of clippings to deal with, especially on fairways and roughs and difficulty keeping up with mowing. This is sometimes exacerbated by the wet conditions that have delayed the usual mowing schedules. So if the grass is growing so vigorously, there is a good chance that it is using up its nitrogen supplies more quickly than normal and may require an extra shot of nitrogen to keep good colour.

Even though the cool temperatures have been good for growth of cool season turfgrass, they have not been ideal for germination on areas with winter injury. Now that the soil temperatures have finally warmed up, the seed that has been added to injured greens will finally germinate. Let's just hope that it doesn't get hot and dry now because it will become virtually impossible to keep new seedlings alive under extreme heat and dry conditions.

Another positive aspect of the cool, wet conditions is that there was a much larger window this spring for core aeration, spiking, light vertical mowing and topdressing. Often these practices can only be done once in the spring before temperatures climb. This year conditions were ideal throughout the entire month of June and for most of July so far.

Speaking of dry conditions, your turf may have been set back in mid-July when we went from all the overcast weather to some lovely sunny, windy and cool days. These conditions can almost suck the life out of the turf. This is made worse by the fact that the turf roots are compromised by too much water and too little air when soils are saturated. The result has been some temporary turf wilting which has resulted in leaf tip scorch on some turf areas. It will be important to incorporate wetting agents into your management practices at this point in the season. In addition, the cultural practices listed above will help maximize root health for the rest of the growing season.

Another phenomenon over the last few weeks is puffy greens. Dr. Karl Danneberger has written an interesting

treatise on puffy greens on the Ohio State University "Buckeye Turf" website at <http://buckeyeturf.osu.edu/>. Puffiness is a combination of soft succulent leaves that come from tillers that result from internodal elongation instead of tillers that originate from the base of the primary tiller. These tillers are higher in the canopy than the tillers that originate from the base of the primary tiller. When the mower tries to mow these uneven areas it grabs chunks of the succulent turf that are sitting high and it ends up scalping them. We all know what it looks like, but it is hard to describe what is physically happening. All of this is worse if you have a thatch problem. Again, all of the cultural practices mentioned above can help alleviate puffy greens.

So what about diseases and insect so far this season. Well, the good news is that there have been relatively few disease outbreaks of to date. Fusarium patch continued, on and on this spring. Dollar spot started much later than normal. My estimates are that symptoms began on June 17, 2009 in the Guelph area. The really cold weather around Canada Day brought dollar spot to a halt and it is only now starting to become a problem again. The cool, wet weather will favour the development of Take-all patch, but we will most likely not see symptoms until we get a few more of those days with high evapotranspiration rates. Conditions so far are not setting up for summer patch to be much of a problem. For it to become a problem we need high soil temperatures and saturated soil conditions. The wet conditions have resulted in some anthracnose basal rot. Topdressing will help keep the crowns dry and should help prevent the further spread of this disease. Anthracnose is a stress disease, so make sure the plant has adequate nitrogen and raise the mowing height. There have been reports of Waitea patch occurring on some golf courses. The yellow patch like symptoms persist when temperatures warm up.

Reports of insect damage from the field have mirrored diseases. There have been very few reports of severe insect damage so far this season. Annual bluegrass weevils have had a very spread out seasonal development but the reported damage has not been too bad. All of the wet weather has somewhat masked black turfgrass atenius damage. European chafer adult flights are over and they were a bit like the adult annual bluegrass weevil situation. The flights were stretched out over a much longer period than normal. If the wet conditions continue, I predict that European chafer grub damage will be minimal this fall. There have been cutworms around, but if clippings are removed and disposed of away from greens, they should not be a huge problem. Probably the most persistent insect problem so far this year has been the turfgrass ant. The wet conditions don't seem to slow them down at all.

If the current long range forecast is accurate, we will have made it through June and July, 2009 with relatively little stress on turf and that is a thing of beauty. Until next time.....

Health & safety



Back to Basics

The rush of the spring is past and summer is soon coming to a close. How quickly the time passes. It seems like only yesterday we were experiencing the last frost of spring!

This is a great time to start to think about preparation for next season. A time to take a moment and look at what health and safety rules you have in place and to reflect on the past golf season and assess the quality of your safety program. Some of the clubs have excellent programs in place while others have struggled to implement written safety protocols. This article provides you with some ideas that you can work on to help your club meet some of the requirements of the Occupational Health and Safety Act (the Act).

If you need assistance in putting these documents together there is help in this area through an organization called Safe Communities on the Grand (<http://www.safecommunitiesonthegrand.com>). Your club could be eligible for a 5% rebate on your WSIB annual premium for accessing this assistance. For more information go to the website or call me.

There are some very simple things that your club can do to establish some minimum safety standards

Firstly, has your club developed a Health and Safety Policy? This is a simple one page document that outlines the management health and safety beliefs and standards. The document covers some very basic issues such as an overview of responsibilities of senior management, supervisors, workers and contractors. This is a basic document that is a statement of the clubs' philosophy on health and safety. The document is written, dated and signed by the senior manager on site.

Another issue that can be defined in a written document is the responsibilities of the various workplace participants. This document sets out the basic rules that the owner (general manager), supervisors, workers, visitors and contractors must follow. It defines who is responsible for the various aspects of

health and safety in the workplace. This is not a complicated document. Most of the information is available in the Act.

Other things that your club can do are also easily accomplished. You can identify workers and managers to be members of the joint Health and Safety Committee (the Committee). The rules vary depending on the size of your club. Having a Committee or health and safety representative is a fundamental requirement in the Act. Along with the identification of members of the Committee the Committee and management can take the opportunity to develop some operating rules or "Terms of Reference" as they are generally known. The Terms of Reference clarify the duties, function and responsibilities of the Committee to ensure that all workplace participants understand what the Committee is all about!

To enhance the safety program a small amount and assist your club in meeting the requirements in the Act, club management and the Health & Safety Committee could start to complete monthly safety inspections. Done efficiently, this process takes a small amount of time but tends to help promote a safe and healthy work environment. The process begins with the development of a basic checklist of items. The workplace must be inspected each month. The check list is used as a guide and over time the checklist and procedure will develop into a valuable guide to health and safety concerns in the workplace.

These are some basic issues that might be implemented. If you need assistance and would like to investigate a 5% rebate, take a moment and check out Safe Communities on the Grand.

Hope the summer went well and that we have a really nice long autumn. Have a great one!

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This year's Challenge was held at Kawartha Golf & Country Club, where excellence has been "Par for the Course" for 75 proud years. The challenging 18 hole course, designed by renowned architect Stanley Thompson, featured impeccable course conditions, mature trees and natural tranquility.



Our thanks go to all the staff at Kawartha for their hospitality and assistance in making this such a successful event. Special thanks go to Host Superintendent, Jennifer Pendrith and her staff for providing such excellent course conditions, and to Host Golf Professional, Mark Ahrens and his staff for their assistance in organizing the day.

CONGRATULATIONS TO OUR WINNERS

Closest to the Pin:

- # 8 James White, Quarry Golf Club (Superintendent)
- #18 Fraser McIntyre, Trafalgar Golf & CC (Pro)

Longest Drive:

- # 1 Jerry Richard, Craigowan Golf & CC (Superintendent)
- # 9 Craig Mills, Dalewood Golf & CC (Golf Pro)

- 1st Oslerbrook Golf & CC (69)
- 2nd Kawartha Golf & CC (69)
- 3rd Cedarbrae Golf & CC (70)
- 4th Brampton Golf & CC (70)

Golf Professional

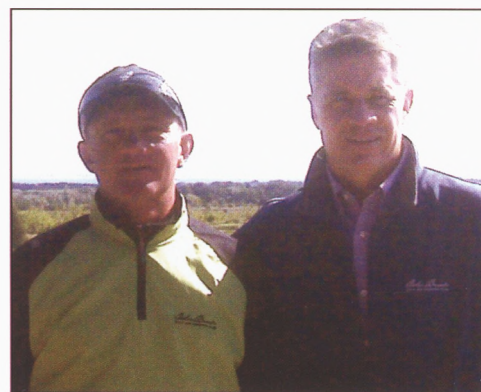
- Tom Jackson
- Brock Edwards
- Michael Moniz
- Emerson Mahoney

Superintendent

- Jay Honeyball
- Gavin Carnegie
- Darren Little
- Martin Kopp



*Jennifer Pendrith,
Host Superintendent*



Jay Honeyball & Tom Jackson 1st place team

THE FRAZ

Again this year, the Ontario Golf Superintendents' Association was proud to participate in and be a sponsor of the 10th anniversary of the Fraz Media Day. This event was held on Monday, June 29th at Mississauga Golf & Country Club. Although the golf game had to be called half way through, due to the thunder storms, the participants spirits were certainly not dampened.

Canadian golfers lost a great friend and supporter for the game in 2000 when Toronto Star golf writer Rick Fraser, known to the golfing community as, "The Fraz" passed away. To perpetuate his memory, the annual GTAGA Media Day, which promotes the Toronto Star Men's and Women's Championships, is named in his honour.

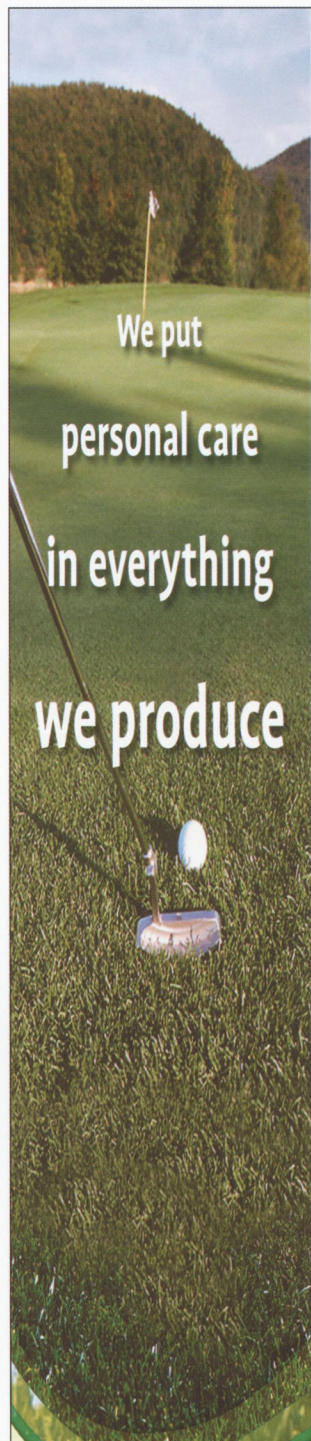
Rick's final round of golf was played at Mississauga Golf & Country Club with good friends Glenn Goodwin and Dick Grimm. This event plays host to the sports journalists and golf writers who help make the Greater Toronto Area the number one golf market in North America.

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RATING HEALTHY GROWING CONDITIONS

by Dean A. Baker, CGCS
The Club at North Halton

A few years ago this article was dropped on my lap with great results. I find it fitting to dig it out this year considering what Mother Nature has handed us so far this season. There have been tough spring conditions, mixed with a cool wet summer start. As superintendents, we have accustomed ourselves to looking at growing conditions. Our courses change through the years with some areas becoming more difficult to grow grass. This was the spring in Ontario where these sensitive areas were hit hard and now are up for scrutiny.



#15 hole at North Halton.

A challenging area to grow grass.

Paul Latshaw at Muirfield Village has a great talk on the four basic growing parameters... Sun, Air, Water and Soil. It does not get any easier than this! Many of us have this criteria so ingrained in our brains that we can look at any particular site and know if we can grow grass on it. Here is where the fun starts, with those wonderful walks in the forest, with a club owner or greens chair who thinks this would be a great place to put a tee! In our minds, we already know the reasonable answer. A verbal response from

a knowledgeable superintendent holds weight and will suffice. It is easy to understand our response, if the person you are talking with has any kind of agronomic sense. We do however run into those who do persist and require a more tangible answer that is understandable to the masses. These are people who are non-educated in growing grass. Here's another one... someone is inclined to tell you, twenty five years ago we had really good grass on this green! It would be easy to tell the individual the trees that surround the green now were some time ago twenty five feet shorter. This is when we need to educate... give them something in writing... give them something that is easy to understand! Here is one more interesting tool for the toolbox.

This rating system was developed to evaluate an area and its ability to grow healthy turf. It is also a useful tool to help achieve better conditions when considering renovations. Ratings are on a scale of 1 to 5 with 1 being the worst conditions and 5 being the best. The material was developed by Dr. Milt Engleke, a Professor of Turfgrass Science at the Texas A&M Research and Extension Center in Dallas, Texas, (Forgive me for not having the complete research work and dates). Dr. Engleke started with a more simple criteria and it was expanded to cover more growing conditions.



Bad soil conditions on #15 green only compounded the challenge of growing good turf in an already tough area.

Golf Course Putting Green

Rating Healthy Growing Conditions

North Halton Golf & Country Club

The two greens in question were #14 and #15. Part of the exercise was to take a green with favourable health that the members liked... #4 was this chosen green. Our largest green growing in a wide open area with lots of sun and good soil conditions... does not get any better! As we ran this green through our criteria we found it had an 80% success rate. Not 100% but enough to make it the best green on the course. When evaluating 14 and 15 we found their success rate to be 36%... not good at all. With our renovation plan and budget in hand, we explained to the club that we could increase the success rate of these greens to 73%. Not 100%, but enough to grow better grass in this tough area.

The idea, in any case, is to increase the percentage of success. Could we have achieved better numbers, yes, but at a greater cost? We felt that with the budget we had, we could be successful without going too far overboard and breaking the bank. Other considerations were just too extreme, i.e. we could have spent an enormous amount on cutting down more trees for better sunlight and air movement. We reached a happy medium without stripping an entire hillside of trees!

CRITERIA

1. **Size of Area:**
 - Size of area and its ability to tolerate traffic (rate area 1 to 5)
2. **Sunlight:**
 - Minimum 8 hours of full sun to sustain healthy plant life
 - Heavily shaded compared to wide open (rate area 1 to 5)
3. **Air Circulation:**
 - Air circulation generally goes hand in hand with a dense tree population or surrounding topography i.e. cliff walls, valleys etc.
 - Closed in areas compared to open / good air circulation (rate area 1 to 5)
4. **Water:**
 - Irrigation Water quality / sustainable for plant life (rate quality 1 to 5)
 Irrigation system / sprinklers (rate system 1 to 5)
 - Drainage Natural surface drainage (rate 1 to 5)
 Tile sub drainage (rate drainage 1 to 5)
5. **Soil:**
 - Nutrient capacity...soil versus sand (rate 1 to 5)
 - Soil structure...compaction (low rating) (rate 1 to 5)
 - Infiltration rate...low infiltration versus moderate, 8 to 10 inches/hour
 - Note: high infiltration over 20 inches/hour...low rating (rate 1 to 5)
6. **Plant:**
 - Proper plant selection for area of growth...
 - Tolerates: cutting height, traffic, weather conditions, shade!!
(rate plant 1 to 5)
7. **Traffic:**
 - Amount of traffic / golf... i.e. under 20,000 rounds (rating 5) over 50,000 rounds (rating 1)

Golf Course Putting Green Rating Healthy Growing Conditions North Halton Golf & Country Club

EVALUATION

Greens #14, #15 & #4 green	before	after	4 Gn.
1. Size of Area: (1 to 5)	2	2	5
2. Sunlight: (1 to 5) (removal of trees!!)	2	3	5
3. Air Circulation: (1 to 5) (removal of trees!!)	2	3	5
4. Water:			
Irrigation / water quality (1 to 5) (acid injection was added)	2	4	4
Irrigation system / sprinklers (1 to 5) (new heads and spacing)	2	4	4
Drainage / natural surface drainage (1 to 5)	2	3	4
Drainage / tile sub drainage (1 to 5) (USGA spec. greens construction)	1	5	3
5. Soil:			
Nutrient Capacity (1 to 5)	3	4	4
Soil Structure / compaction (1 to 5)	1	5	4
Infiltration rate 8 to 15 inches /hour (1 to 5) (USGA spec. greens construction)	1	5	4
6. Plant Type: (1 to 5) (Pennncross to L-93)	2	4	4
7. Amount of Traffic: (1 to 5) (approx. 35,000 annually)	2	2	2
Total (60 points)	22	44	48
Total (success rate)	36%	73%	80%

CONCLUSION

We were given the green light after this presentation to renovate. Our theories held up and the two greens are doing very well. These greens have not been talked about since. I keep this criteria well fixed in my head for times I need to be supported with numbers. Mother Nature is constantly testing us on many occasions and through different growing seasons. We need to always remember the basics... what are we trying to do (grow) and under what conditions.

My professional philosophy has always been one of education. Good verbal explanations are a start but something easy to understand and tangible in writing for our non-agronomic grass growers goes a long way. Not to mention me being an over the top optimist at all times does help. I have looked at my position as one of an educator, to the membership and or shareholders of the club. I have never been one for confrontation, only good communication. I have also stuck strongly with four things that make grass grow... Sun Air Water & Soil.

Member profile

Interview with Dean Baker, CGCS The Club at North Halton

by Greig Barker, Superintendent
Highland Country Club



Dean” as his friends and colleagues know him, started his golf career at the tender age of 15. Dean worked through the ranks from greens staff to assistant superintendent at Glen Abbey Golf Club. Along the way he attended the University of Guelph and attained his Diploma in Horticulture. It was in those years at Guelph that Dean formed an incredible network of friendships that would last to this day, some in and some out of the golf business. A few years later, at the age of 27, he was appointed the golf course superintendent at Glen Abbey Golf Club, one of Canada’s premier golf facilities. One of Dean’s feathers in his cap is the fact that he has hosted 10 Canadian Open Championships at Glen Abbey. For years Glen Abbey was the perennial host of Canada’s National Championship. He always enjoyed the pressure of PGA tournament golf, although he remarks, **“My favourite part was when the last putt dropped in the hole on Sunday.”**

After the famous “Tiger Open” of 2000 Dean took on a new challenge when he was hired as the golf course superintendent at what is now known as The Club at North Halton in Georgetown, Ontario. Dean loves his current position at North Halton; he is able to get his hands dirty from time to time and even now lives on the property. Dean can be found in the evenings strolling the golf course with his dog Stella, planning the next day’s tasks.

During the winter months Dean is an instructor at his Alma matter teaching Human Resources to the Turf grass Diploma students. Everyone that knows Dean would tell you that he is the epitome of a people person. When it comes to managing people he is one of the best. There is an endless list of superintendents, assistants, consultants and industry folk that have been mentored by Dean. Dean is always up for new challenges and earlier this year he became a Certified Golf Course Superintendent through the Golf Course Superintendents Association of America. This achievement is recognized around the world for dedication and commitment to our profession.

When I asked Dean what he attributes his success to he says, **“I love my job and I work too much.”** I think that goes for a lot of us, but Dean definitely wears the Golf Course Superintendent profession on his sleeve.

“In the Hot Seat”

- | | |
|---|---|
| • Favourite tournament: | The Memorial |
| • Favourite advancement in turfgrass management: | Verti-drain, greens roller and plant growth regulators |
| • Favourite golf course architect: | Jack Nicklaus |
| • Ultimate foursome: | Tom Cochrane, Alice Cooper, Kenny G |
| • Best golf experience: | The Glen Abbey Turf Staff of 2000 w/ Tiger Woods |
| • What’s in your CD right now: | A Marco Scenna compilation (Memorial 2009) |
| • What would you be if not a golf course superintendent: | A full time teacher (U of Guelph) |

41st ANNUAL PRESIDENTS' DAY

by Tom Brain, Superintendent
Burlington Golf and Country Club



For those who made the trek to Muskoka for the OGSA Presidents' Day, it was well worth the effort. They were treated to a fabulous day. The weather was ideal and Scott Heron and his team had the golf course in perfect condition.



From the boat ride to the island, the incredible vistas from many places on the course, the abundance of wildlife to the hospitality of the staff, Bigwin is an incredible experience of great golf in cottage country. The day was full of camaraderie, fun and friendly competition.



President's Day offers a unique opportunity to spend some time with your club officials in a low key, stress free

environment away from the every day rigors of your own club. Many groups made an outing of it and stayed either the day before or after and enjoyed some quality time in Ontario's north.

The day was ruled, once again, by Chris Dew and his group from The National who won the event for the second year in a row. Dennis Piccolo's team from St Catharines Golf & Country Club and Justin Heptinstall's team from Port Carling Golf & Country Club rounded out second and third place, respectively.



Scott Heron accepts Host Superintendent plaque from Phil Brown

After a lovely meal in a wonderful setting overlooking the lake, the groups reluctantly started to gather for the ferry back to the mainland. There was many a wistful look as the participants reflected on a very special day. A special thanks to Scott Heron and the management team at Bigwin Island for allowing us to use their club for a day and for providing such a great atmosphere to enjoy the premiere event of the year.



The National Team

1st Place Team – The National

2nd Place Team – St. Catharines G&CC

3rd Place Team – Port Carling G&CC

Closest to the Pin #2 - Any Player

Closest to the Pin #7 - Team

Longest Drive #8 Ladies Only

Longest Drive #18 Men Only

Tom Brain

Bigwin Island GC

Dianne Dyer

Brad Bell

Golf course highlight

Bigwin Island Golf Club

1139 Old Highway 117

Baysville ON P0B 1A0

Phone: 705 635-3553

Website: www.bigwinisland.com

Golf Course Superintendent:

Scott Heron

Email: shbigwin@vianet.ca



Photo by Scott Heron

COURSE PROFILE

What region is your club located in?
Lake of Bays

What is the classification of your club?
Semi-private

Size of membership and number of rounds?
200 members and 14,000 rounds

Typical opening and closing dates?
May long weekend
until Thanksgiving Monday

Name of Superintendent
Scott Heron

How long have you been a superintendent?
10 years

List other accomplishments
OGSA Director, Certified Audubon
Cooperative Sanctuary

How long have you been an OGSA member?
15 years

How many year round staff?
4

How many seasonal staff?
20

How many mechanics and assistants?
Assistant: Kevin Schultz
Mechanic: Joe McGrath

COURSE STATISTICS

How many holes?
18

What is the yardage from back & forward tees?
7166 yards from back tees
5346 yards from forward tees

How many bunkers?
75

How many ponds, and/or how many times
does water come into play?
No ponds, course is surrounded by water

Who was the original architect?
Doug Carrick

What was the year of original construction?
1998-2001

What major tournaments held?
OGSA Presidents' Day 2009
Georgian Bay Wrap-Up Event 2007
Member/Guest

What type of irrigation system?
Toro LTL Plus

What is the size of your maintenance shop?
6,000 ft²

What is the size of the greens, tees &
fairways?

Greens: 2.5 acres
Tees: 3.5 acres
Fairways: 38 acres
Approaches: 2.5 acres
Roughs: 80 acres
Bunkers: 4 acres

What is your predominant grass?
5% Poa, 95% Bent

How many USGA greens and loam greens?
California Style

What is the predominant soil type?
Native topsoil

What equipment do you have in inventory?

1 John Deere tractor 5210
1 John Deere tractor 4500
1 John Deere tractor 4520
1 John Deere Skid Steer
1 John Deere backhoe loader
1 John Deere Sandpro 1200A
1 John Deere Aercore 800
6 John Deere trailers 22"
3 John Deere heavy duty trailers
1 John Deere round bottom trailer
1 tow behind sprayer
1 Dakota topdresser
1 Ty-Crop MH 400
1 Ty-Crop conveyor
1 Ty-Crop spinner
1 Pronovost trailer
1 Skidoo Rotax 500
1 Lely spreader
3 John Deere 7500 fairway mowers
3 John Deere 8800 rough mowers
2 John Deere 2500B triplex mower
2 John Deere Prognators
6 John Deere 220C tee mowers
13 John Deere Gators
6 John Deere trailers
2 John Deere 17P clipping trailers
6 Stihl trimmers
3 John Deere rotary push mowers
1 Sweepster PTO brush
1 Agrimetall Turf Vac

2 Agrimetall Blowers
14 Fly-mos
1 Grademaker 600
1 Bearcat chipper
1 Vicon fertilizer spreader
1 Walco snow blower
1 Aerway slicer
4 John Deere weedwackers
2 Redmax reciprocators
2 rotary mowers JS60
1 rotary mower JS63
and miscellaneous small equipment

COURSE PROJECTS & PLANS

What projects have you recently completed?
New stairs, new washrooms.

What long range plans for renovation do you
have in the next five years?
Re-do bunkers, narrow-in fairways.

Are there any particular challenges you face
with your property?
Logistics of arranging all supplies,
equipment and services by boat.
Finding quality maintenance staff.
Underground springs causing wet areas.

Do you have any success stories?
Getting an ecologically responsible course
built on an island with no road access.
Experienced, loyal turf operations staff
able to develop and constantly improve
course.
Golf Digest "Best New Course" 2002.
Consistent Canadian top 20 ranking in
SCORE.

What type of innovative cultural practices
have you performed?

To combat collar problems, we cut once
or twice a week at a slightly higher height
than the approaches. Always with a solid
roller on walker. Never roll over collar
with roller.
Shrink-wrap maintenance equipment to
protect over winter.
Use a 6' brush to sweep all grass in the
spring prior to first roll and first cuts.
This helps with any snow mould, sticks
and wakes up the grass.

In a perfect world... Considerations for evaluating and managing golf green putting surfaces

by David Smith, P.Ag., CGCS
DCS Agronomic Services

Introduction

In a perfect world all greens would have 4,200 square feet of pinable area, receive eight hours per day of full sunlight exposure, have ample area provided for entrance and exit points to the green and the membership would totally understand and support the importance of cultural management practices such as aeration, vertical mowing and top-dressing.

Utopia – you bet! While we all know that this does not exist in the real world, it is important to have reference points to strive for. The intent of the following article is to identify factors worthy of consideration when managing putting surfaces.

Light

Healthy plants cannot grow without the required amount of sunlight. Plants create their own sustenance by converting sunlight into energy through a process known as photosynthesis. Turfgrass plants evolved in an environment with full access to sunlight and are technically Heliophytes - plants that require direct sunlight for optimum health and vigour. To sustain vigorous, healthy, turfgrass plants, able to withstand the abuse of continuous low mowing, as well as wear from foot traffic and frequent mowing, it is imperative that the putting surface of the green have access to required sunlight.

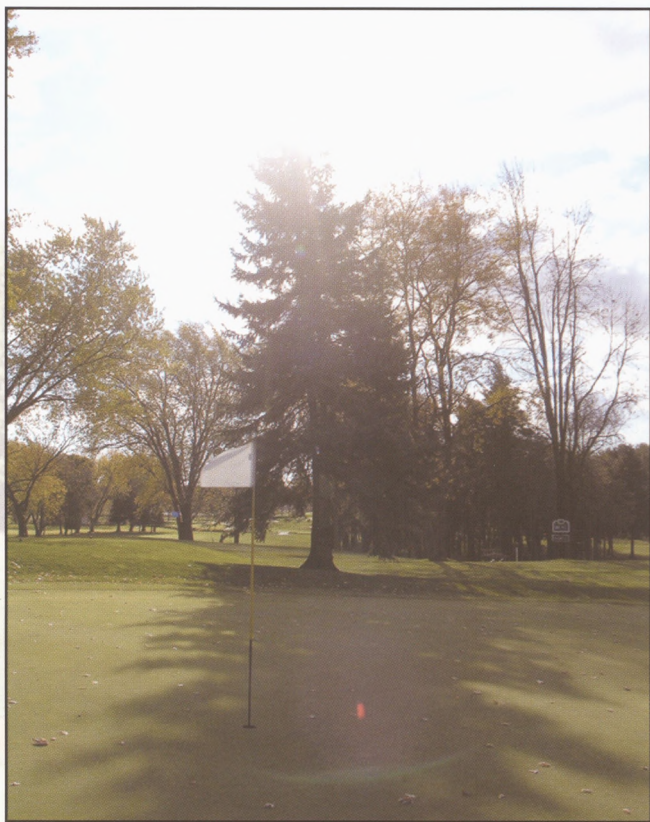
Sunlight that reaches the earth's surface is composed of a wide spectrum of energy, with wavelengths ranging

from 200 to 1,800 nanometres. Plants use light energy particles called photons, with wavelengths between 400 and 700 nanometres for photosynthesis and growth. This wavelength band is called photosynthetically active radiation.

Growth and survival of turfgrass plants is largely dependent on the intensity and quality of light that reaches the plant. Turfgrass managed in an environment where sunlight is limited will be more susceptible to biological stresses like disease and insect invasion as well as abiotic stresses such as ice damage, desiccation, wear tolerance and drought. Many of the problems associated with shade may show up as stress in walk-on areas or as chronic disease problems that are not an issue in areas of the green where adequate sunlight is available. Unhealthy turf is unable to stand up under the rigors of a cultural management regime required to maintain a firm, fast putting surface.

When evaluating sunlight availability to golf greens, consider that only 37% of the energy in sunlight is within the wavelength range useful for photosynthesis. Of the sunlight that reaches the plant leaf, approximately 1-5% is used for photosynthesis, 10% is reflected and 10% is transmitted through the leaf.

As a general recommendation busy golf courses should strive for a minimum of eight hours per day of full sunlight exposure to the entire putting surface with morning sun given priority.



Sunlight filtered through a tree canopy has little left to offer the turfgrass plants on a shaded putting green.

Slope and size of the putting surface

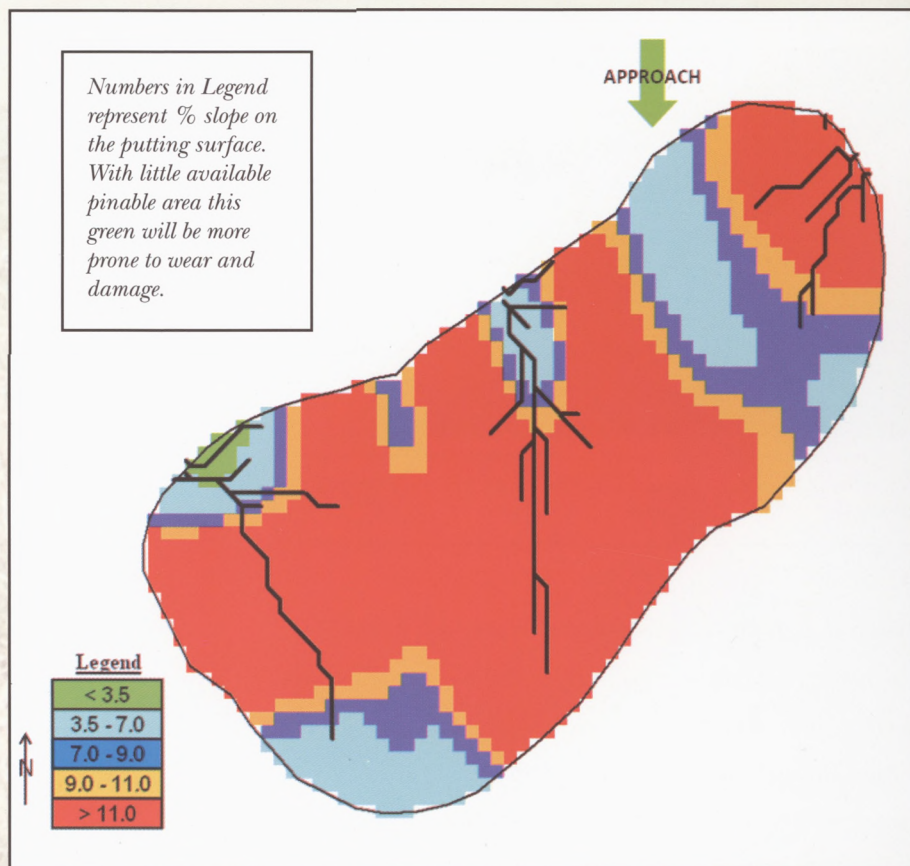
A factor we sometimes lose track of when evaluating putting surfaces and subsequent management programs for greens is the size and topography of the putting surface. Unlike most other turf related sports the playing surface for the game of golf is not regulated in terms of area sizes, slope, mowing heights etc. While this makes the game enjoyable to play it creates challenges in terms of evaluating the playing surfaces.

When turf is maintained at a normal daily mowing height a steep slope is described as one where golf balls rolling down the slope will not lose speed. On

greens maintained at mowing heights between 0.10 and 0.125 inches it has been found that a maximum slope within 8 feet of the hole greater than 3% creates a scenario where skill is replaced by luck and enjoyment of the game is compromised for most golfers.

Pinable area and pin placement

The area most damaged around the hole during normal use occurs within an eight-foot radius of the hole. This equates to an area of approximately 200 square feet. If we estimate the time required for a badly worn hole location to heal as 21 days then there should be a minimum of 21 hole locations on a golf green. Considering 21 hole locations X 200 square feet per location results in a minimum need for 4,200 square feet of area suitable for placing the cup. The USGA recommends that holes be located at least three paces from the edge of the green. Realistically some areas with slope greater than 3% are required to provide interest in the green so a minimum area of 1,800 square feet is a reasonable amount to factor into the minimum size of a busy green. The final benchmark then for size of green



would be 6,000 square feet.

Of course not all greens provide 4200 square feet of pinable area but the numbers above provide a mathematical formula for assessing the green and determining how best to manage the putting surface. Greens with less pinable area will probably require additional input in terms of fertility, aeration and other cultural management practices to maintain optimum playing conditions.

Investigation and management of organic matter

Oxygen is vital to plant growth and required in higher amounts than most other nutrients. Oxygen is involved in the process of photosynthesis and is vital to the health and well being of microbial populations within the soil/plant root-zone. Oxygen exists in the air and root-zone as a gas. Diffusion of gas is 10,000 times slower through water than through air and therefore essentially zero when pores in the soil or thatch are full of water.



Note: thatch holding water that impedes the movement of air and toxic gasses within the root-zone.

When thatch and organic matter is allowed to build up on a putting surface the golf ball will have a tendency to sink into the organic layer resulting in a slower green. Double-cutting thatch layered greens is often practiced to increase green speed resulting in scalping. Scalping not only impacts trueness of the putting surface but also

predisposes the turf to stress factors such as drought or disease pressure. Management of organic matter on the putting surface is vital for general putting green health, quality, trueness and speed.

Consider the following to assist with maintaining a firm true putting surface:

Conventional (light) Vertical Mowing:

Vertically mow the greens on a frequent basis. Frequent vertical mowing provides slits in the turf canopy for sand accumulation that will dilute and help break down thatch. Putting surface quality and consistency is also enhanced by frequent vertical mowing. A goal of vertically mowing all greens twice per growing month when they are in good health and not under stress is a reasonable goal.

A general recommendation is not available for adjusting the depth of the blades. Adjust one unit first and test it at the rear of a green. This may require adjusting the unit several times prior to final set up. Once the unit is adjusted to the desired depth the other units (if part of a triplex setup) can be set the same.



For best results ensure the blades of a deep-vertical mower are set to reach the bottom of the thatch layer so none is left behind.

Note thatch remaining in slit below depth of blade setting.

Deep-Vertical Mowing:

The benefits of the Graden GSO4, Sisis Rotorake 600 or Thatchmaster TM-480 Vertical mower equipped with 1 mm carbide tipped blades are worthy of investigation. Ideally, the greens will be vertically mowed with one of these units with a goal of removing 15% of the turf surface per season through a combination of core aeration and deep vertical mowing. A 1 mm blade will impact approximately 8% of the surface area per vertical mowing event.

Information on these machines can be found at:

<http://www.graden.com.au/verticutters.htm>

<http://www.sisis.com/str18.html>

<http://www.turfspecialties.net/custom.html>

Deep-tine Aeration of Soil Based Greens Only:

The health and vigour of *soil based* golf greens benefit from aeration with a deep-tine aerator equipped with 10 to 12 inch long solid tines. Ideally the greens would be aerated a minimum of twice per season with this type of aerator.

If *sand based* greens are properly constructed there is little benefit in deep-tine aeration. The sand was selected for its ability to resist compaction.

Core Aeration:

To ensure adequate soil aeration, water infiltration and root development consider impacting 15 to 20% of the surface area during the growing season through core aeration and deep vertical mowing.

Topdressing:

Consider top-dressing all greens twice per month with a year end goal of applying 1 cm of applied sand per season. The additional wear to the blades and bed-knives cannot be avoided and should be factored into the cost of operation.

Weather conditions can have a significant impact on how much sand can be applied in a season. Weather also plays a role in how much thatch can develop in a season. The general recommendation is to ensure sand is applied at a rate sufficient to dilute thatch as it develops on the green.



Thatch in this photo accumulated over two seasons. While this is an extreme case it demonstrates the importance of aeration and topdressing to manage organic matter and putting green quality.

Rolling:

Rolling greens is a means of improving ball roll and consistency between greens. There are numerous rollers on the market and most do a good job of improving the putting surface. Research on greens rolling is on-going but it is generally accepted that you shouldn't roll greens more than 3 times per week. Many clubs now practice a system called "target rolling". Target rolling is done by rolling the complete green once or twice per week and rolling the immediate area around the pin three times per week. This scenario relieves stress on the green and has provided satisfactory results in terms of playability at many clubs where this is practiced.

Conclusion:

The art and science of managing green speed and putting quality becomes more complex each year. As more equipment and resources become available the bar is raised just a little more. We must never lose sight of the basics of light, water, air and organic matter when evaluating and managing golf green putting surfaces.

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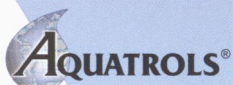


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Above the hole

by April Grabell, Student and Intern

Three months down and two more months to go! This summer has gone by fast. It seems as though just last week I was finishing up exams, and here I am today in the prime of 'Golf Season', striving to get the most out of my internship experience. I have already put some of my knowledge to the test, and have learnt quite a bit. I can't wait to see what the next 2 months bring. I am also looking forward to getting back to school in the fall to finish up my program and to enter the turf industry full time.

This summer has been rather exciting. With fellow turf students set up with internships through-out Canada, U.S. and England it is interesting to catch up with them to see how things are going. With turf students all over the world I have been asked several times, why did I choose a 9 hole, local course? My answer to that question is taken from the 4-H motto "Learn to do by Doing!"

Rather than only learning in a class what to do in certain circumstances at a golf course, at the Guelph Country Club I am given the opportunity to put my knowledge to the test. Now don't get me wrong choosing to work at a smaller course was definitely a big decision. With the past experiences that I have obtained over 2 years working at the Guelph Country Club, I knew that I would have the chance to make my internship very

rewarding if I were to go back to work there. With that in mind I chose local! In the past 2 years I have been given the opportunity to "get my hands wet" in several aspects of the golf course, from everyday cultural practices to construction and everything in between.

Another feature of a 9 hole, local course that I enjoy is the friendly environment. Being a member of a small crew, members know your name and are often very grateful for all the hard work that you do. A compliment from a member is appreciated and can go a long way! I think that many times members don't realize how much work is involved in maintaining a golf course. When the golf course members take the time out of their day to acknowledge our efforts it is quite rewarding. I think interaction with members is key to maintaining a golf course, and have found this out while working at the local course.

I believe being a part of a smaller, local golf course has many benefits. Hands on experience and friendly environment are 2 of many pros to working at a local course. Having started out late in the industry, I think this was the best step to take. I am excited to see what the rest of the season brings and am very grateful for all the experiences that I have obtained so far.

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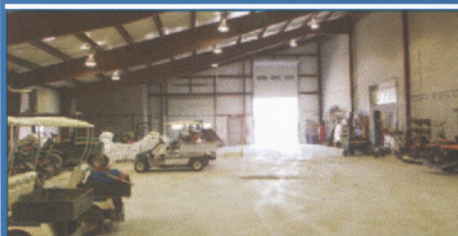


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University of Guelph update

Department of Plant Agriculture
by Katerina Jordan, Turfgrass Science and IPM
Eric Lyons, Turfgrass Science and Plant Physiology
François Tardif, Weed Science

Alternative weed controls on turf

One thing that golf course superintendents don't worry too much about on their golf courses is weed invasion (*Poa annua* excepted, of course). Often, pre-emergent herbicides are applied in the spring to take care of annuals that are difficult to control once they have germinated and then multi-action selective herbicides are applied to areas where weeds invade throughout the season. Although weed competition can definitely weaken a turfgrass stand and create unsightly areas when they invade, they are often not as great a concern on golf courses as insects and diseases. This is because weeds are easy to see (they're always above-ground) and except in the case of allelopathic plants, they do not attack or infect the turfgrass plants as insects or pathogens do.

All that said, with the passing of Ontario's Cosmetic Pesticide Ban Act, certain areas of the golf course can no longer be treated for weeds with conventional herbicides. These include any areas that are not in play – clubhouse lawns, areas surrounding landscaping, etc. This may lead to increased weed pressure on the in-play areas due to increased seed production of untreated weeds or just the opportunity for encroachment if cosmetic areas border the playing surfaces. Increased weed infestations are already evident on city boulevards and athletic fields in regions where pesticide bans have been in effect for some time (Fig. 1). In addition, since golf courses are now required to become accredited in integrated pest management (IPM) there is increasing interest in the use of effective alternatives to combat weed issues on turf. At this point, labeled products for weed control on turfgrass include corn gluten meal, acetic acid, fatty acid salts and *Sclerotinia minor* (sold as Sarritor). The purpose of this article is to discuss some of the alternative weed options that are available in Ontario, as well as to review the literature on research that has been done to determine efficacy of these products.



Fig. 1. Heavy infestation of dandelions evident on a boulevard in Guelph

Corn Gluten Meal:

Corn gluten meal (CGM) is a by-product of the wet milling process of corn and was discovered to have herbicidal activity by Nick Christians at Iowa State University. It can come in two forms, as a meal and as a hydrolyzed liquid product. Currently, only the meal products are available in Ontario. Corn gluten meal works due to the activity of four specific compounds in the meal that inhibit root formation in seedlings. Corn gluten meal is non-specific so it will also inhibit the rooting of turfgrass seedlings. Therefore, you should avoid its use if you are planning to overseed within 6 weeks of application.

Corn gluten meal works on emerging seedlings and therefore must be used as a pre-emergent herbicide. It has no effect on established weeds and must be applied in a preventative manner. Many turfgrass weeds are perennial in nature so they must be controlled with other methods and then CGM can be used to prevent their return from seed. In order for CGM to be effective a short drying period is necessary following the weed germination. If the soil remains wet the plant may survive with limited roots and then continue to grow after the CGM has lost effectiveness. Additionally, frequent irrigation will lessen the effectiveness of CGM as the weeds will be able to

survive without roots. Typically the CGM has a residual of 5-6 weeks and after that period overseeding treatments can be applied or reapplication would be necessary. CGM is a registered product and should be applied as per label instructions.

Acetic Acid :

Acetic acid is in a number of products and typical forms labeled for weed control contain anywhere from 5% to 25% active ingredient, although most of the publically available products for turf are closer to the lower end. Acetic acid is a nonselective weed control product and will damage both broadleaf weeds and grass species, both desirable and undesirable. It would be used in place of glyphosate in a weed control program. Acetic acid burns the plants and often causes them to turn black and become wet in appearance. There are two modes of action: first, the acetic acid solution can damage the cuticle of the plant making it more susceptible to desiccation; second, the solution acts as a salt pulling water from the plant cells causing damage similar to a fertilizer burn.

Typically, multiple applications (2-3) are necessary to achieve greater than 50% control of weeds. These products typically work best on smaller, actively growing weeds. As the weeds mature they can survive and regenerate because they have a thicker cuticle than the younger plants. One drawback of acetic acid products is they often have a strong yet familiar odor associated with them. Golfers and other user groups will often complain of a pickle smell near application sites.

Fatty acid salts:

Fatty acid salts (or soap salts as they may be known) are essentially the addition of salts such as potassium hydroxide to naturally occurring fatty acids, found in plant and animal oils and fats. They can be used against plants, insects, fungi and even algae, although for cosmetic use, they are currently only labeled for use as herbicides. They work by disrupting the cell membrane in the plant (in the case of herbicide use) and are non-selective, contact-only products. As such, they will affect any plant parts that are green, as long as the product is able to get inside the cells through the leaf's waxy cuticle. They tend to be active on most plant species although weeds with a very thick,

waxy cuticle, such as milkweed, may require multiple applications. The contact-only action means that coverage is critical and that you may expect re-growth from perennial weeds such as dandelion. You must also be very careful not to apply this product onto your turf, but rather to use it as a spot spray for weeds either on sidewalks and other non-turf areas or in a turf stand where you can avoid contacting the turfgrass. The efficacy of these products has not been thoroughly tested, or at least results are not available to the public at this time. However, if you have an area that you want to try some non-selective weed control on, you might want to give these a try and see how they do.

Sclerotinia minor (Sarritor)

Sclerotinia minor is a fungal pathogen of a number of broadleaf plant species, including soybean, sunflower, cucumber, lettuce, sweet potato, Irish potato, pepper and tomato, just to name a few. It was discovered that this fungus was also able to successfully infect dandelion plants on home lawns, while leaving the neighboring turfgrass plants unaffected. Through many years of research at multiple institutions, including the University of Guelph, a biological control agent was developed for use on dandelion plants invading a turfgrass stand. The pathogen infects plants through sclerotia, much like the *Typhula* species that cause gray snow mold. Once the fungus initiates infection symptoms on the host plant begin as brown lesions on the leaf blade and quickly lead to wilting and necrosis. As the fungus colonizes, white cottony mycelia soon form over the leaves of the dandelion plant, leading to collapse of the foliage. The final stage of infection is a rot of the crown tissue, ultimately leading to the death of the plant and no regeneration of vegetative structures in infected plants. If the conditions are right for infection, this fungus can be extremely effective in killing dandelions and possibly other broadleaf weed species, although studies on efficacy on other weeds has not been published to date.

As effective and safe as this biological control agent is, there are specific conditions that are needed for the pathogen to successfully infect dandelions. Just as with turfgrass pathogens, the presence of the pathogen and susceptible host are not enough for successful infection

Alternative weed controls on turf

to occur – the proper environmental conditions must also be present for this control agent to infect its host. Ideal conditions are air temperatures between 18 and 24°C, pre- and post-treatment irrigation or rainfall, and overcast conditions to ensure that the leaf blades and the fungus do not dry out prior to infection. That means there is a rather narrow window during which application should be made and you must be diligent about irrigation, especially once the control has been applied.

Conclusions:

Whether using conventional herbicides or alternative control methods for weeds, cultural practices for promoting turf growth and health should always be performed. Specifically related to weed control, the most important are mowing height and frequency, proper fertility, adequate irrigation, thatch control, and of course overseeding. Keeping your turf too short will weaken your turf stand, while keeping it too long will create shading and competition between turfgrass plants. Mowing more often also stimulates tillering and lateral growth in turf, helping it to keep weeds out. Proper fertility and irrigation ensure that your turf stand is healthy and that is always the best defense against weed invasion. For those of you who have been battling *Poa annua* invasion on your creeping bentgrass greens over the years (which is more than likely most of you), you know how important a healthy stand of the desirable plant species is. Thatch removal and relief of compaction are also very important in weed control as many turfgrass weeds are shallow rooted and are favoured in compacted environments. Finally, each time that you remove a weed, you are leaving a void behind. And just like with *Poa annua*, which you often start to see invading where ball marks were left behind, weeds are excellent at filling voids. So, overseed following every weed control that allows for it. You want your turf species to have the advantage over the weeds whenever possible.

With all the information floating around regarding weed management, there is still a lack of data from research trials to determine the efficacy of alternative products in Ontario. In addition, very little research has been conducted about the interactive effects, if any, that these products and management tools may have when used together. With funding from the Ministry of the Environment, the authors of this article are currently conducting a large-scale multi-year project to determine the cultural practices and alternative control methods that

continued from page 29...

are most effective for reducing weed populations in both new and established turf stands (Fig. 2). It is our hope that this research will aid not only the sports turf and landscaping industry, but also the golf course industry for management of non-play areas and in its effort to increase use of IPM throughout the golf course grounds.



Fig. 2. Weeds trial conducted at the Guelph Turfgrass Institute. Note plots (brown areas) where overseeding and de-thatching treatments were performed.

References:

- Au-Dieyh, M. H. and Watson, A. K. 2007. Population dynamics of broadleaf weeds in turfgrass as influenced by chemical and biological control methods. *Weed Science* 55:371-380.
- Christians, N. Corn gluten meal research page. <http://www.hort.iastate.edu/gluten>
- Schnick, P. J. et al. 2002. 2,4-D and *Sclerotinia minor* to control common dandelion. *Weed Science* 50:173-178.
- National Pesticides Telecommunications Network. 2001. Technical Fact Sheet: Potassium salts of fatty acids. npic.orst.edu/factsheets/psfagen.pdf

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Second to one

by Justin Parsons, Assistant Superintendent
Trafalgar Golf & Country Club

The other day I peered into our staff room during lunch break and I saw that all five kids in the room were on their cell phones. Not one of them actually had the phone to their ear. All of them were either 'texting' their friends, playing a game on their mobile device, or browsing the internet. Not one of those five people was engaged with another individual in the room. Now, for some reason this image has stuck with me and I feel it worthwhile to explain.

I should preface this all by saying that I have noticed that the expectations of the younger staff have changed in the last few years. There seems to be this overwhelming sense of entitlement among many of the student workers. Most of them no longer feel like they need to earn anything. They just sort of expect it right away. I can remember when I first started working on a golf course, we all knew that the best way to move up the ranks was to bust your butt and do a good job of what you were given.

Nowadays, if you tell a rookie that they are in bunkers their body language resembles that of Virgil the monkey from that movie Project X. They give you a look that says, "Aww, bunkers again?" In turn, as assistants, we must give them a look that says, "Yeah, bunkers again. Shut your piehole and get raking". I think we all know that there are far worse jobs than raking bunkers on a golf course.

Now, I should tell you that I am nearly 30 years old and thus, about 10 years older than most of the students who compromise the younger constituent of our staff. To most of you reading this, that probably doesn't seem like a big age difference. But to me, and I'm sure many other assistants like myself, there seems to be an immeasurable disconnect between ourselves and the tail end of Generation Y that is now entering the workforce.

Granted, since the beginning of time, every generation feels that the one that follows it are a bunch of spoiled, lazy punks who don't realize how good they have it. But I truly believe that more has changed with society, in particular our youth, in the last ten years than at any time previous. The young kids that are now entering the workforce have grown up with two unique technological advancements that have had a profound impact on how they approach their part time work. I am referring specifically to cell phones and the internet.

The youngest workers of society really haven't known a time when these two conveniences didn't pervade

every facet of life. Everything is far too easy. Now, again, this can be said of every generation that trails the one previous. But for the first time in our history, when staff are eating lunch they can have a sandwich in one hand and do their banking in the other. The advent of the internet has meant that kids can send their resumes out to dozens of potential employers without ever leaving their bedroom. They can make plans with their friends during their work break and then change them while en route after their shift.

We are now a culture of instant gratification. If it isn't now, it isn't good enough. As employers, it has become all the more challenging to motivate a staff that expect way too much, way too soon. In fact, it is perhaps the hardest part of an assistant's job.

So, when I think back to those five kids sitting in the lunch room it reminds me of how much things have changed in the last few years. Just a short while ago I was one of those kids sitting in that break room. I can assure you, not one of us was on a cell phone.

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On the REEL side of things

by: Warren Wybenga, Equipment Manager,
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Doggie Doggie

Mentioning the *Dog Days of Summer* conjures up several images for me, like oppressive heat and humidity, lots of aeration clean up and complacency. Well we can't do anything about the weather and anyone who's been through it a few times already knows the effects that a week of hole pounding can have on your course, crew and equipment...but as I was reminded recently during one of our superintendent's morning addresses to the crew, this is also the time of year when there is a danger of becoming complacent with our work.

Looking back over the years, August is probably the second most probable time for somebody to get hurt due to a mental lapse while maintaining a golf course, behind the initial early season training period when crew members are only just learning the nuances of operating turf equipment for the first time.

It really should come as no surprise though that we become more accident prone at this time of year. Contrary to the spring time batch of foul-ups and the ensuing months of gradual yet steady improvements in performance, by the time August rolls around, most operators should be very competent in their abilities. You must watch that they aren't becoming complacent or even bored with their tasks to the point where they start taking short cuts or conversely, either in an effort to please or under pressure to perform, try to do too much, too quickly. Either way, the result is often the same...with any luck at all, nobody gets hurt and it is only the machinery that ends up in need of repair. No matter how much damage is done to a machine, it cannot compare with the costs involved in repairing a human body.

Summer students are particularly notorious for having late summer brain farts that for the most part, should have been completely avoidable. Their hormone driven quest for fun, coupled with a penchant for chasing each other around like bunnies while suffering from an inane ability to be easily distracted by shiny objects can lead to some head scratching discussions during accident reconstructions. Equipment techs are inquisitive by nature and I always want to know as much as I can about an accident, as much to satisfy my own curiosity as to learn from the event in an effort to prevent or limit the frequency of any further such occurrences.

Students, busy dreaming up the "call in sick" excuse that will enable them to squeeze in one last bash up at the cottage before returning to school, aren't the only ones

guilty of swallowing a pre Labor Day stupid pill. Mature, reliable and otherwise rock-steady staff are responsible for their fair share of messes. Let's face it, not every job we send them out to do is the most stimulating task they have ever been asked to do and the conversation usually begins the same way...*"I don't know what happened. I was just driving along and..."*

I believe that in order to keep my universe in a state of balance, things will go wrong from time to time. They have to...it's inevitable. But that doesn't mean we should stop reminding people to pay attention. Most accidents are completely preventable and it is better for everyone's bottom line if we can all remain focused on the job at hand.

Don't get lazy with making regular mower adjustments and keep on top of all of your machinery's lubrication requirements. This includes not only all fluid levels but also those one or two grease fittings that likely require you to be part contortionist to reach with a grease gun. A bit of heavier gauge cardboard scavenged from the recycle bin behind the clubhouse laid over decks usually provides my ribs just enough protection from bolts, pins and the like to get the job done though always be cautious of where you lay and what is underneath you...its machinery, not a couch after all. A little discomfort now may just avoid the need to tear that machine down later due to a lack of lubrication. That grease fitting is there for a reason and I have found that the more regularly they are used, the longer they keep accepting grease as they should. If you find a fitting that is not taking grease anymore, find out why as soon as you can. Sometimes, if you catch it early enough you'll find that a simple cleaning of the film of dirt that can form under the fitting is enough to make things right again but if it's clearly blocked, just replace it. Resist the urge to poke at the fitting with a bit of wire as there is a tiny spring that keeps an equally tiny ball seated against the top of the fitting. It is in effect a one way valve, allowing grease to enter while keeping debris and depending on the application, water out. They're cheap to buy and you should keep an assortment on hand because they do fail, get damaged or even break off on occasion.

Wishing you, your staff and your equipment a safe and accident free summer and remember to support your industry's future by registering a Turf Equipment Technician apprentice 421C today!

Off the fairway ...



by Daisy Moore

Summer Gardens 2009

*I*t was a fantastic spring for growing things. Slow to start mind you, with wind and rain and less than our average heat units through June. Corn was not "knee high by the first of July", as the saying goes, and other heat loving plants and cottagers held back in want of warmth. A week is a long time

in gardening though and things have since caught up. Those of us in the green industry have done our share of laughing and crying at the absurdities of the demands placed on us, often by ourselves, the weather, the lists, the frustrations and the triumphs during such a season. The rush is finally over and we can kick back a bit and let nature take its course. That is what I am going to do anyway.

Getting the gardens (and the turf) ready for summer so you can kick back and relax is a daunting task at the best of times. There is a lot to do in a short period of time, but I don't have to tell any of you that. The window of opportunity closes when crabgrass or black medic start to flower. At that point the soil is too dry and you will be doing more harm than good to try to dig or cultivate. The most critical part in your preparation is to have the plants married to the soil they live in, before heat and drought stress are a factor. By this I mean that the roots of newly planted stock should have moved into the soil and the soil has the ability to water and nurture the plant. This is accomplished by early planting, preferably the fall for perennials and shrubs, having the plants well heeled in, providing a rich soil containing lots of organic matter and water holding capacity and protecting the soil surface with compost, mulch, or ground cover. If you've done it right, a summer garden will show robust, colourful growth with few gaps showing exposed soil. Another important factor

is the balance of the existing plants and how this affects the overall look. Trimming up, pruning back, thinning out and managing the population of plants is necessary in the spring in order to sustain the good looks of a garden until the fall. You can modify, amend or renovate then, if necessary.

Before the season started we braced ourselves for the uncertainties ahead and we couldn't really predict how the public mood and behaviour would impact our business. It seems to me that people have put aside the worries and woes that brewed over the winter and are getting out and enjoying themselves. More people are walking and using parks than I can ever remember. There are people on the golf course whenever I go by one. There seems to be a general participation and enthusiasm for local recreational activities. African Lion Safari for example. Local food is big in my area and market gardens are enjoying a Renaissance of sorts. The economy has forced us to look closer to home for things and this bodes well for golf and for the green industry.

The pesticide ban has been a non-event on the home owner front, at least for now. The fall and next spring will be another matter. Lawn care companies have been doing a good job promoting "fertilizing the grass to keep out the weeds" because I have never seen so many lush green lawns, at least for now. It is a great industry we are in. You win some you lose some and survivors adapt to the changing environment. Part of that survival is to take a break when you can because there will be no lack of demands placed on us again in the fall and we will need to be ready.

Daisy is a professional horticulturist. She operates a garden design and consulting business from her home in Elora.

Her website: www.daisymoore.com has samples of her work.



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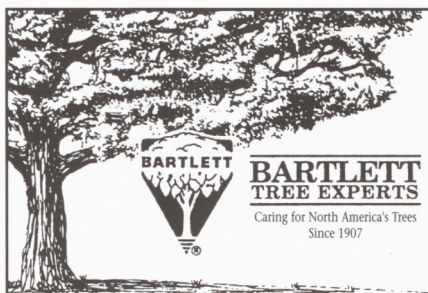
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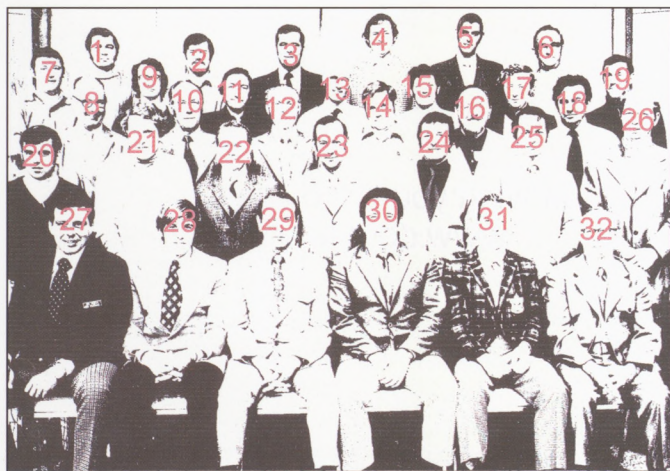
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The way we were

Below are the pictures that were in the Spring issue of Green is Beautiful on page 27. We printed a group picture and asked if anyone could identify the individuals #'s 1 through 32. Bill Hynd, Jamie Worden, Ron Craig, Bob Heron and Barry Endicott came very close to naming all however, John Piccolo takes the prize. He not only had the names for all but also where they were from. We would like to thank all for their participation. Here is the outcome.

# 1	Dave Holmes	Derrydale Golf Club	Mississauga, ON
# 2	Roy French	Beverly G&CC	Copetown, ON
# 3	Jack Murnahan	Golf Course Division	Cedar Valley, ON
# 4	Doug Heron	Golf Course Division	Brampton, ON
# 5	Norm McCullom	University of Guelph (Hort Sci)	Guelph, ON
# 6	Ross Haines	Brampton Golf Club	Brampton, ON
# 7	Bob Heron	Markland Wood Golf Club	Etobicoke, ON
# 8	Geoffrey Cornish	Fiddler's Green	Amherst, Massachusetts
# 9	Cameron Cairncross	Foxwood Golf Course	Kitchener, ON
#10	Charlie Behm	Cherry Hill Golf Club, Ltd.	Ridgeway, ON
#11	Charlie/Rene Muyaert	Pine Valley Golf Course	Woodbridge, ON
#12	Art Dodson	Maple Downs Golf Club	Maple, ON
#13	Jim Woodhouse	Bluegrass Turf Farms, Ltd.	Cedar Valley, ON
#14	Larry Smilsky	Smilsky Turf Farms, Ltd.	Cookstown, ON
#15	Dennis Pellrene	Glen Abbey Golf Club	Oakville, ON
#16	Mac Frost	Brookwood Country Club	Agincourt, ON
#17	Mike Donahue	Metro Parks Department	Toronto, ON
#18	Gord Evans	Gormley Green Golf Club	Gormley, ON
#19	Doug Suter	Credit Valley G&CC	Mississauga, ON
#20	Paul Dermott	Islington Golf Club	Islington, ON
#21	Kimmo Salonen	York Downs Golf Club	Unionville, ON
#22	Ron Hambly	Metro Parks Department	Toronto, ON
#23	Vince Piccolo	Brantford Golf Club	Brantford, ON
#24	Helmut Kopp	Uplands Golf Club	Thornhill, ON
#25	Alex Baillon	Manderley Turf Farms Ltd.	North Gower, ON
#26	John Bennet	Cedar Brae Golf Club	Miliken, ON
#27	Bob Wilhelm, Manager	Professional Turf Institute	Marysville, Ohio
#28	Douglas Firth	Golf Course Division	Louisville, Kentucky
#29	John Piccolo	St. Catharines Golf Club	St. Catharines, ON
#30	Paul (Pelino) Scenna	Galt Country Club	Galt, ON
#31	Bill Hynd	St. Georges's Golf Club	Islington, ON
#32	Nicol Thompson	Niagara Parks Commission	Niagara Falls, ON

The photo was taken at a Canadian Professional Turf Seminar at Marysville, Ohio, October 25-26, 1972.



Looking back

25 Years Ago Today

by Barry Endicott

In 1984 the board of directors of the OGSA were as follows: **Al Draper** (president) Greenhills, **Hugh Kirkpatrick** (vice) Westmount, **Rusty Warkman** (past pres.) Oshawa, **Bob Kennedy**, Garden City, **Barry Endicott** (newsletter editor) Chinguacousy, **Bill Fach**, Essex, **Gordon Nimmo**, Sarnia, **Scott Dodson**, Chedoke, **Thom Charters**, Islington, **Shorty Jenkins**, Bay of Quinte, and **Gordon Witteveen**, Board of Trade. 1984 was the 60th anniversary of the OGSA and **Jackie Dermott** was office secretary.

New members: **John Schaller Jr.**, CFB Trenton (F), **David Plant**, St. George's (F), **Daniel Walton**, Seaton (F), **Greg O'Heron**, Board of Trade (F), **Terry Heatherington**, Hidden Lakes (F), **Dan McNeil**, Greenhills (F), **George Dzuirka**, Orchard View (B), **Carol Edwards**, Penryn Park (B), **Peter Horrill**, Southbrook (B), **Rick Serrao**, Glen Cedars (B), **James Teeter**, Wyldewood (F), **James Burlington**, Indian Creek (B), **Bill Neff**, Indian Creek (D), **Nigel Rennie**, Unionville Fairways (A), **John Hughes**, Horseshoe Valley (A), **James Hosick**, North Bay (B), **Chris Galbraith**, Bayview Golf Centre (B), **Blair Smith**, Bancroft (A), **Peter Kuzmivh**, Trenton Heather (A), **Joe Kenny**, Oaklands (A), **Daniel Yake**, Pine Lake (F), **Kelly Barnett**, Baldoon (B), **Jed Mathews**, Royal Downs (B), **John Herman**, North Frontenac (B) and **Richard Butler**, Idylwyde (B).

Gordon Witteveen was the Score Magazine Award Winner as the 1984 Top Canadian Superintendent. **Dr. Clayton Switzer**, who was the former Dean of OAC, became Ontario's Deputy Minister of Agriculture and Food. **David Gourlay** moved from Ancaster as assistant to Toronto Ladies as superintendent. **Ed Doda** took the position at Barrie Golf Club and **Rick Serrao** moved to Glen Cedars from Markland Woods where he was the assistant. Minimum wage was increased to \$4.00/hr.

The CGSA held their conference from March 11-14 at the Constellation Hotel in Toronto. **Dr. Clayton Switzer** was the keynote speaker. Other turf experts speaking were **Dr. James Beard** and **Dr. Richard Skogley**. There was a pre-conference golf tournament held at the Board of Trade Country Club on March 10th. The GCSAA Conference was held in Las Vegas. **Keith Nisbet** was presented with the Distinguished Service Award for his dedication and service to golf course superintendents and their profession. The Leo Feser Award was presented to **Gordon Witteveen** in recognition of the best superintendent written article in the Golf Course Management magazine.

There was a Michigan and OGSA Border Cities joint meeting on April 25 at Beachgrove hosted by **Ron Heesen**. An OGSA meeting was held at Sawmill Golf Club hosted by **George Julie**. The Galt Field Day was once again held at the Galt Country Club hosted by **Paul Scenna**. **Dean**

McEwen presented the Clayton Switzer trophy to **Keith Nisbet** and **Bill Hynd** for their best net aggregates. Other winners were: 1st low gross **Bruce Burger** (74), 2nd low gross **Hugh Kirkpatrick** (74).

Al Draper presented a cheque to **Paul Dermott**, President of the OTRF for \$1,000. **Neil Acton** was presented with a plaque for becoming a Certified Golf Superintendent of the GCSAA and **Rick Zeigel** was presented with a scholarship for the Turf Managers Short Course presented by **Jack Webb**, president of the OGA.

Ab Reeve passed away on December 3rd 1984. Ab was a charter member of the CGSA and he retired in November 1982 after 20 years as superintendent at the Whitevale Golf Club. After retiring he worked at the Seaton Golf Club until his death.

The Georgian Bay Superintendents Association was in full swing with tournaments at Brooklea, **Neil Acton**, Midland, **Alex LaBelle**, Royal Downs, **Stew Picken**, Barrie, **Ed Doda**, Blue Mountain, **Kim Hanley** and Borden, **Ray Richards**. **Ray Richards** was the president and **Alex LaBelle** was the secretary.

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Turf or consequences

by Doug Breen, Superintendent
Golf North Properties

Paperchase

The world is infested with middle management. Too low on the pecking order to actually cause the production of widgets and other useful things, but too high to actually ever touch those widgets. They live in castles of paper. Annual reports, quarterly reports, spreadsheets, sales summaries and endless PowerPoint presentations. They can build you a pie chart, but they couldn't build you a birdhouse if it came pre-cut and pre-drilled.

When did the paperwork become more important than the actual act? Properly filling out a washroom cleaning chart, has become infinitely more important than actually doing a good job of cleaning it. I have a training binder for all of our staff, complete with diagrams, flowcharts, and quizzes, because the Ministry of Labour demands it. We used to just show people how to do stuff, and then leave them alone to do it once we decided that they were ready to go it alone. Now that nugget of common sense is a 500 page binder and filing cabinet full of "sign off" forms. When my wife worked for the City of Toronto Parks Department, she spent five hours in a room with about \$160/hour in salaries, writing a twenty page policy on the proper procedure for removing fence posts from a trailer. Here's my policy – get the posts off the trailer.

As a result of the flood in New Orleans, every Ontario municipality now has an Emergency Action Plan. It's a big binder. In fact, the folks at Queens Park produced an even bigger binder to show you how to make your own binder. Naturally, it's so unintelligible, that each municipality had to hire an Emergency Action Plan Administrator to oversee the plan's implementation and liaise with the Bureaucrats in Toronto. About ten years ago, there was a minor passenger train derailment in the little town where I live. The Township unlocked the Community Hall, and the Lioness Club came in and made everybody soup and sandwiches. The Mayor was baling hay, so I went over and gave everyone a *Welcome to Rockwood* speech, told them to use our phone to call home, and Via bussed them to the next station. That's now a 500 page binder too - and the Lioness Club would have to prepare the soup and sandwiches in a fully inspected commercial kitchen with thirty-seven sinks.

Bureaucrats love policy and procedure manuals - the thicker the better. And the first page needs to be an unreadable overarching flowchart. Wherever possible, use acronyms. Nothing is more exclusionary, or makes you sound more important, than making up your own language. It's exactly the same technique employed by girls in grade three to torment each other.

Teachers are great proponents of paperwork too. My kids each have an agenda that has to be signed by a parent every day. Things got pretty hectic back in May, we missed a couple days, and Walker got a detention over it - so I signed it off for two weeks in advance. That day I learned that folks who love paperwork, don't like to have their paperwork mocked.



Think of the Neanderthals. If the tribe got hungry, you'd get together a bunch of burly lads and bring down a mammoth with a few clubs and stone spears. Everyone ate for a month, and somebody would paint the hunt on the cave wall. Today, you'd need a permit for the weapons, which would require an online safety course (renewed bi-annually), a mammoth tag from the MNR for each member of the party (distributed by lottery), and it would have to be slaughtered (humanely of course) in a federally approved and inspected abattoir, under the direct supervision of the Canadian Food Inspection Agency and an Agriculture Canada Vet. The meat would then have to be stored in a part of the cave where the temperature is always in the "safe zone" (thermometers checked hourly) and cooked on a fire that adheres to all municipal burning by-laws (permit may be required). If the fire is to be inside the cave, a working smoke detector would need to be on every floor, and you'd need engineered drawings (and a building permit) to stack up flat rocks at the cave entrance to keep the snow out. Then 54% of the meat would be given to the civil servants who would create the paper trail on all of this, with an additional 1% handed over as a Federal Arts Grant to the vegetarian Neanderthal painter who would capture the moment by randomly splattering blood on the cave walls as a piece of protest art. I realize that the Neanderthals only had an average life-span of about thirty years, but I assume that the average was skewed by the fact that they ate all the civil servants if the winters dragged on too long.

So we fill out forms, make applications, submit records, swim through endless email (just electronic paperwork), generate reports, review reports, get fired or applauded based on accounting statements... Endless, endless paper, and not a blade of grass grown, or a cent made, or anyone any better off as a result. It's like the "busy work" that teachers used to give us in school to keep us occupied while they went to the staff room for a smoke, or to distract us from the fact that they were having an affair with the French teacher. Perhaps that's it. Maybe this is all just designed to distract us from some greater evil – like the HST.



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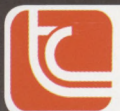
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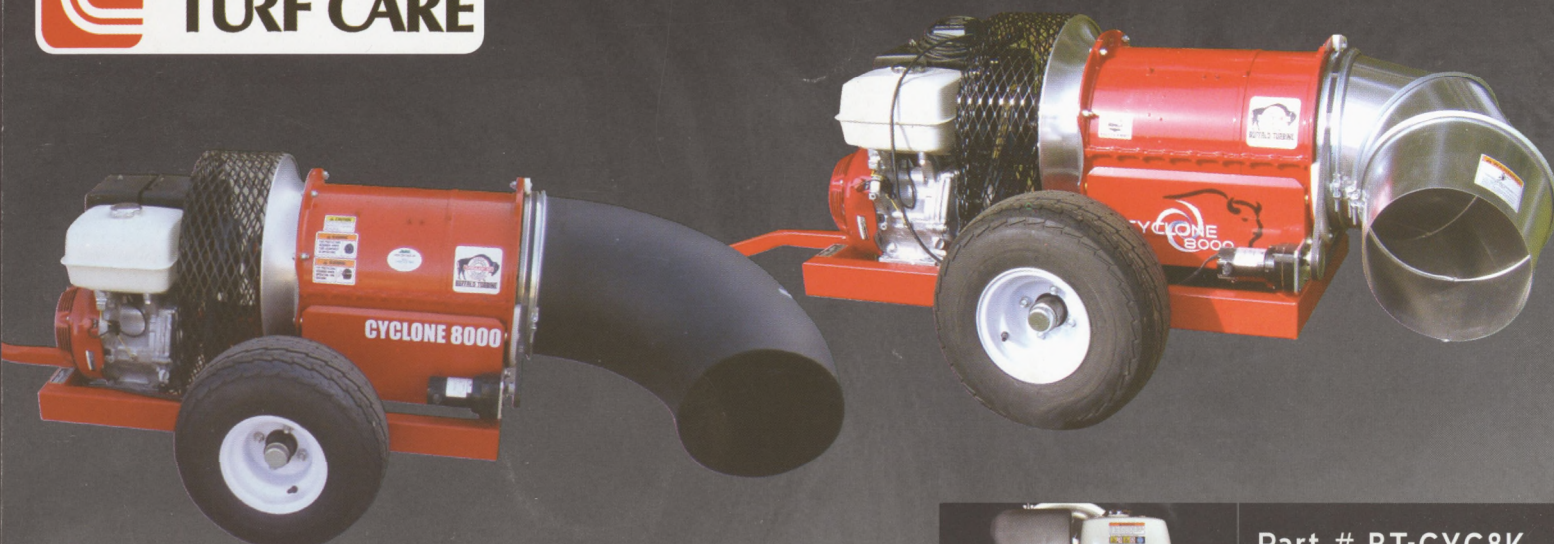
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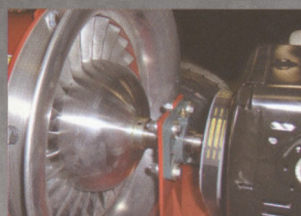
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