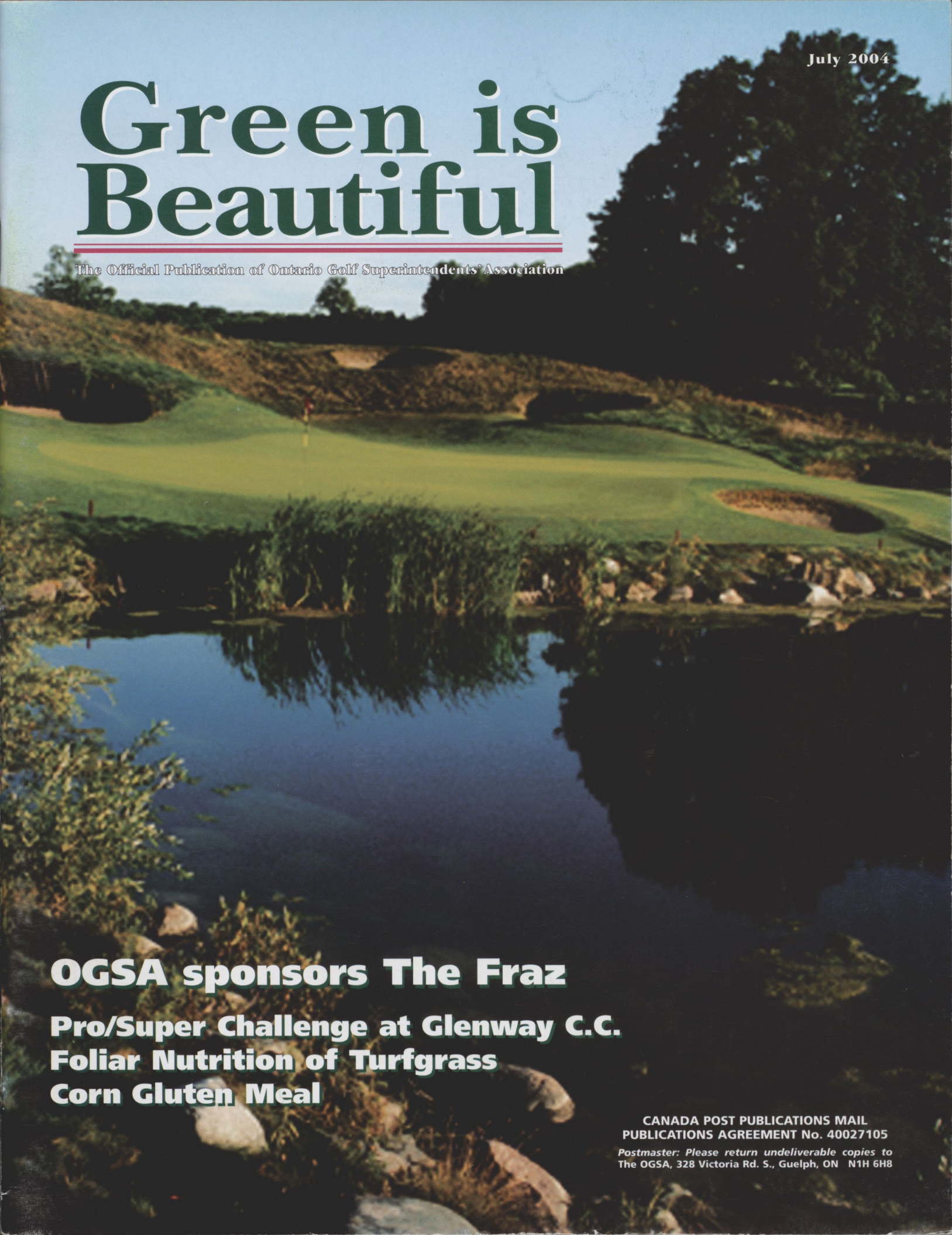
July 2004

Green is Beautiful

The Official Publication of Ontario Golf Superintendents' Association



OGSA sponsors The Fraz

Pro/Super Challenge at Glenway C.C.

Foliar Nutrition of Turfgrass

Corn Gluten Meal

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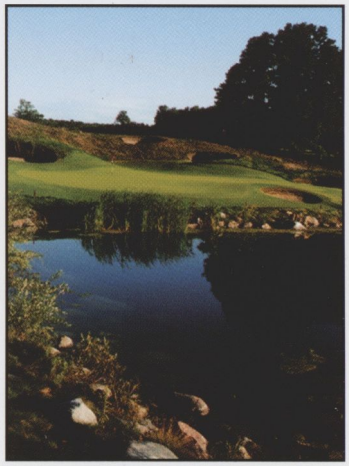


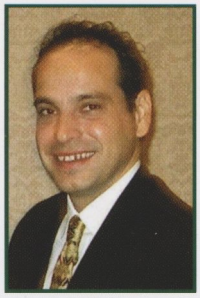
COVER PICTURE

Devil's Pulpit Paintbrush

Photo by Doug Ball

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

President's message



by Rob Ackermann
Weston Golf &
Country Club

When was the last time you played golf with some neighbouring Superintendents? Was it last month, last year, or never? I encourage you to make an effort to pick-up the phone and set-up a game. Our industry is filled with innovative, intelligent, and extremely creative individuals who all maintain golf courses in a style that differs from your own. It is through our shared differences that we can expand our knowledge.

The cliché *"there is more than one way to skin a cat"* applies perfectly to golf course management. During your round, be sure to ask each other questions on whatever topics are important to you. I guarantee that you'll have more insight on the subject than you did before you walked to the first tee.

Don't limit your round of learning to shared experiences. Make it clear on the first tee that you are willing to deliver and receive constructive criticism. Listen to what your peers have to offer. Their comments are sure to be highly motivating and can do nothing more than help you and your golf course.

Always Play to Win!

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Green is Beautiful 2004

Although every effort is made to check material for publication, the association is not responsible for material published on behalf of its contributors.

Editor's message

by John Bladon

Well, things are finally starting to dry up and now I'm wiping sweat from my nose... for crying out loud! It seems each season brings new challenges and the weather has been so thus far...from one extreme to the next we go!

There is some excitement around the University of Guelph these days with the appointment of Dr. Eric Lyons as our new turf research chair. I had the pleasure of meeting Eric and listening to him lecture. He is enthusiastic about turfgrasses and is a dynamic lecturer. In this author's opinion, he will be a great addition to the program at Guelph.

Green is Beautiful continues to evolve each season. We have a dedicated group providing regular submissions to the magazine and we recognized their volunteer efforts at the Spring Field Day. Richard Creed and the Cutten Club were our hosts. Pam Charbonneau is now providing us with a regular piece and this issue covers "Highlights of the 2004 Revision to the USGA Specifications for Putting Green Construction". Sprinkled in amongst those regular contributors are the articles of interest that come from others or are sought out by the *Green is Beautiful* Editorial Committee. In this issue, Gary Grigg has provided us with an excellent submission on Foliar Nutrition and Chelsea Stroud, a University of Guelph student, has submitted a roundup of her work at the Guelph Turfgrass Institute, with Corn Gluten Meal.

Remember, keep that camera in hand and think of something to write about...*Green is Beautiful* would welcome your efforts.

Welcome!

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

Jason Andress Class C
Elmira Golf Club

Brad Bell Class C
Copper Creek Golf Club

Nathan Drumm Class F
Grey Silo Golf Club

Rick Farwell Class F
Deer Ridge Golf Club

Jason Gillard Class C
West Haven Golf & CC

Kirk Harrison Class F
Beaverbrook Golf Club

Noel Herron Class A
The Landings Golf Course

Mark Holloway Class C
BraeBen Golf Course

Shawn Karn Class C
Rosedale Golf Club

Frank Kuypers Class A
Shawneeki Golf Club

Garry McBeath Class C
Royal Ontario Golf Club

Chris McPhail Class F
Marvel Rapids Golf Course

Owen Ledwith Class S
Victoria Park East Golf Club

Richard Pivnick Class D
Glen Eagle Golf Club

Mark Reich Class C
Blue Springs Golf Club

Craig Robinson Class C
Ingersoll Golf & Country Club

Robert Snoulten Class C
Shawneeki Golf Club

Scott Thompson Class A
The Toronto Hunt Club

From roots to shoots

Highlights of the 2004 Revision of the United States Golf Association Specifications for Putting Green Construction

by Pam Charbonneau
OMAF Turfgrass Specialist

Since their release in 1960, the USGA's specifications for green construction have been the standard in the golf industry across North America and many other areas of the world. The purpose of the specifications is to provide a consistent, high quality golf green. They are also often used as specifications for high end sports fields. The specifications are reviewed periodically and updated as new construction techniques and products become available and as scientific research proves them reliable. The last updates to the USGA Recommendation for Putting Green Construction was in 1993.

Increasing demands on putting greens coupled with volumes of research into new construction techniques and amendments for golf greens have prompted a review of research findings and incorporation of those techniques and products which have proven effective. Over a hundred scientists, agronomists and industry experts reviewed the scientific literature to incorporate some of these research findings into the recommendations. In April 2004, the revised "USGA Recommendations for a Method of Putting Green Construction" were released. There are six changes to the 1993 recommendations. The goal is to make construction of a USGA green less expensive and less complicated.

One main change deals with the addition of the recommendation to include the use of a flat pipe, in addition to round PVC drain pipe. As well, there are changes in gravel size recommendations for greens where an intermediate layer is not used. As an alternative to round pipe placed in a trench, flat pipe placed directly on the prepared subgrade may be used, provided the flat pipe conforms to ASTM D 7001, is a minimum of 30cm in width, and is not covered by a geotextile sleeve. The flat pipe should be stapled to the subgrade, or otherwise held in place to prevent shifting during construction.

In addition, there are two changes in gravel size recommendations for greens without an intermediate layer. In previous recommendations the bridging factor specified that the D15 of the gravel be less than or equal to 5 times the D85 of the rootzone. This has changed to the D15 of the gravel to be less than or equal to 8 times the D85 of the rootzone. The permeability factor remains the same. The uniformity factor specified that the D90 of the gravel to D15 of the gravel must be less than or equal to 2.5. That has changed to have the D90 of the gravel to the D15 of the gravel to be less than or equal to 3.0. There are additional uniformity factors. These changes are summarized in Table 1.

The key to the success of these new recommendations is to work closely with the soil testing laboratory in selecting the gravel. These changes will make materials that comply with the specifications easier to obtain and will reduce the constructions costs.

Porous inorganic amendments such as calcined clays, calcined diatomites and zeolites can now be used in place of or in conjunction with peat in root zone mixtures, provided that the particle size performance criterion of the mix are still met. The performance criteria are represented by the physical properties of the root zone mix. The USGA also specifies that it requires that any of these amendments be incorporated throughout the whole 30 cm depth of the rootzone mixtures.

In previous recommendations the depth of the rootzone had to be 12" plus or minus 0.5 inches. This was an extremely tight tolerance that proved difficult to achieve. In the new specifications that has been changed to 12" plus or minus 1.0".

The 1993 recommendations for physical properties of root zones had a normal range for saturated hydraulic conductivity and an accelerated range. The accelerated range has been dropped and the normal range is 150 mm per hour or 6" per hour. The physical properties of the root zone mix are presented in Table 2

Table 1. Size Recommendations for Gravel When Intermediate Layer is Not Used

Performance Factors	Recommendations
Bridging Factor	D15 (gravel) less than or equal to 8 X D85 (rootzone)
Permeability Factor	D15 (gravel) greater than or equal to 5 X D15 (rootzone)
Uniformity Factors	D90 (gravel)/D15 (gravel) is less than or equal to 3.0
	No particles greater than 12 mm
	Not more than 10% less than 2 mm
	Not more than 5% less than 1mm

Table 2. Physical Properties of the Root Zone Mix

Physical Properties	Recommended Range
Total Porosity	35-55%
Air-filled Porosity	15-30%
Capillary Porosity	15-25%
Saturated Hydraulic Conductivity	Minimum of 150mm/hr (6 inches)

For the complete 2004 USGA Recommendations for Putting Green Construction you can visit the USGA web site at http://www.usga.org/turf/course_construction/green_articles/putting_green_guidelines.asp

Health & safety

Diving for Golf Balls

by Doug Johnson,
SAFETAID and Health and Safety Consulting
First Aid and Safety Supplies and WHMIS Training

As you read this, the summer season will be in full swing. I hope that your summer of '04 will be prosperous and safe. This season will provide new challenges. Here is just one.

I wrote about this issue four years ago. The concern has not gone away. We just haven't experienced the deaths that we did in 1998-99.

If you have ponds on your course then there is a good chance that you have a few golfers who have lost golf balls in those ponds.

As ponds are part of most courses I believe that you and the golf professional at your course should be aware of some of the rules that apply to the recovery of golf balls from your ponds. This applies to ponds that are deep enough to require a diver for golf ball recovery.

In the event that you have ponds it is likely that you will be approached by an individual or company that will recover golf balls for you from your ponds. As soon as your club enters into an arrangement with these folks you are now in a position of dealing with a contractor. You are responsible for their safety! As this is the case your club must ensure that the recovery operation meets all the requirements of the diving regulations in the Occupational Health and Safety Act (the Act).

Ontario Regulation 692/94 regulates Diving operations. If your club enters into an agreement or "allows" a diver to access your ponds then your club must ensure that the diver is following the Regulations. If something goes wrong you may be charged with an offence.

The club must ensure that the Ontario Ministry of Labour (OMoL) has been notified of the diving operation prior to the commencement of the dive. This notice must be on a "Notice for Commercial Diving Operations" form. This form identifies things like the location, date, duration, depth and a description of the tasks expected to be performed. This form must be completed with input from the diving supervisor appointed for the diving operation. The plan also indicates the emergency procedures for recovery and evacuation in the event that something goes wrong.

The regulation requires that whenever SCUBA is required for golf ball retrieval, there must be a minimum of three people involved with the dive; a diving tender, a standby diver and the diver. All divers must have had a medical examination within the last 24-month period and the employer must ensure that each diver, the supervisor and one other worker at the site has basic emergency first aid and CPR training. All divers must use a lifeline while in the water and it must meet the criteria as identified in the regulations. You must also ensure that there is a two-way communication system for the submerged diver.

This is a quick overview of the regulation, so if you require more information or clarification on this issue, please contact the OMoL or Doug Johnson.

SAFETAID
Your 1st stop in safety!

Cyber super

Operator Safety Training

by Mark Prieur,
Assistant Supt.
Markland Wood CC

There seems to be a never-ending push to keep up-to-date with Occupational Health and Safety standards. Turf maintenance crews can sometimes have a high turnover from season to season which can lead to increased training costs. Wouldn't it be great if you could have the training done for you? For free? Online?

For those who have purchased Toro products, there is a tool available to make this a reality. Yet again I am recommending a Toro website. If you recall last year, I endorsed the Toro Partsmaster viewer as a tool to order parts in lieu of a paper-based parts list. The URL for the site is toro.com, click on "Golf Course Management", then on "Customer Care" and finally "Education and Technical Reference". Here, the staff can watch the safety video (it also helps if the staff member has high-speed internet access) and learn about the safety mechanism on each unit.

NOTE: This is not a replacement for actual instruction but merely another tool to aid in the instruction of operator safety. Your staff should then be able to take a quiz on how to safely operate Toro equipment. There is a quiz for virtually every mower and utility vehicle they make.

I have had several of the staff at Markland take the quiz. The staff skill level ranged from seasoned veterans to rookies. All of the staff that took the test enjoyed it and felt confident in the fact that there was a quantitative way to measure their abilities. In addition, toro.com has recently updated the site and now includes quizzes for the spraying equipment as well.

Mechanic's corner

by Larry A. Murray, President G.E.T.A.O.
Equipment Manager, Pheasant Run Golf Course

The annual mechanic's tournament is approaching. This year the tournament is at Silver Lakes Golf Club in Queensville, Ontario, on September 9th 2004. We will be playing a modified shotgun format. The first 100 players registered will qualify for the tournament. Everyone is invited to this tournament for a day of enjoyment, unequaled in the industry. The prize table is available to every participant and trophies to some. Come one come all and meet your directors and peers for the event of the year. ***It is imperative that you register now!***

You can email me **l.a.murray@sympatico.ca**
fax (905) 989-2326 or call Eddie at (905)889-7620 ext 503.
If you want to set up a team or arrange to play with someone, mention it at this time.

There is an annual meeting breakfast scheduled for 8 am for all eligible mechanic members, prior to the tournament on Sept. 9th This is an important meeting for our association and as such the board of directors has approved a complimentary breakfast for voting members.

The apprenticeship program will probably be approved by the time this magazine is read. The next step will be setting up an education section. I know colleges are making plans, however we need to get students into the program. I think that this can be accomplished with co-operation from every field in the industry. The board of directors are in talks to accomplish our goals of being an effective Canadian entity. There is a lot of management to operating an association nationally and we are obtaining advice and assistance. There will be news presented at the tournament and in the up coming *Reel Grind.*

Hoping to meet some of our readers at the tournament. If more information is required about the tournament, or association check out our web site www.getao.org from which membership applications can be downloaded.

Corn Gluten Meal: The Two in One Product for Turfgrass Weed and Feed

by Chelsea Stroud,
University of Guelph BSc Student

The science of growing grass is quickly becoming an art in dealing with the politics that comes with pesticide and fertility issues. Turfgrass managers are faced with new challenges in identifying and treating diseases, insect damage, weed invasion and fertility imperfections. Although chemicals with increased efficacy and low toxicity are available, synthetic pesticides and fertilizers are constantly being deemed as harmful to the environment and human health. This has led to an increased demand for organic products in order to meet the everyday challenges in managing a golf course.

Corn gluten meal (CGM), a by-product of corn wet-milling, has been shown to be an effective natural pre-emergence herbicide and fertilizer for various plants (Unruh et al, 1997; Christians, 1993). Research by Nick Christians from Iowa State University has shown that corn gluten meal controls several weed species such as annual bluegrass, black medic, buckhorn plantain, dandelion, green foxtail, large crabgrass, orchardgrass, quackgrass and yellow foxtail all of which are common turfgrass weeds in Ontario (Christians, 1993).

Corn gluten meal inhibits root development, and causes seedlings to die under moisture stressed conditions (Christians, 1993). Root elongation would normally occur under drought stressed conditions causing the plant to 'drive' and compete for water. Corn gluten meal prevents the root growth of newly germinated seedlings, and causes the plant to ultimately die from drought.

Along with herbicidal qualities, corn gluten meal contains approximately 10% nitrogen by weight (Bingaman and Christians, 1995). Studies suggest that a rate of 98g CGM m^{-2} of established turfgrass provides 40 to 60% control in the first year of application. Applications in subsequent years increase the control to greater than 85%. The added fertilizer increases turgrass vigor and may contribute to the reduction in weeds observed (Christians, 1993).

Corn gluten meal is currently on the market as an organic granular fertilizer for turfgrass management systems, and has recently been granted a temporary registration for use against dandelion and smooth crabgrass in established residential lawns where the grass is predominantly Kentucky bluegrass (PMRA REG2003-09). Further research to test the efficacy of CGM is needed in Canada before a final regulatory decision will be made (PMRA REG 2003-09).

Currently, research at the Guelph Turfgrass Institute at the University of Guelph is being conducted to test the effect of corn gluten meal on the germination and establishment of broadleaf and grass weeds in bare soil. The weeds that are being tested are annual bluegrass, black medic, buckhorn plantain, dandelion, green foxtail, large crabgrass, orchardgrass, quackgrass, yellow foxtail, white sweetclover, common groundsel, and knotweed. The study is being conducted in a greenhouse environment so that environmental conditions can be observed.

Four management treatments have been used: 100g CGM m^{-2}, 200g CGM m^{-2}, dithiopyr at recommended rates and an untreated control. The weed seeds were planted in 80:20 v/v USGA standard sand: milled sphagnum moss peat in plastic containers. The corn gluten meal was applied to the soil surface at the time of weed seed planting. Dithiopyr was applied as a separate management treatment at the time of planting. The pots will be monitored for germination rate and survival, as well as root and shoot growth.

The results of these tests will help to determine the actual effect corn gluten meal has against a wide range of turfgrass weed species.

The possibility of using corn gluten meal as a natural herbicide with fertilizer qualities is a step in the right direction for turf managers faced with the challenge of growing grass without synthetic pesticides and fertilizers under water stressed conditions.

Above: Dandelion and Crabgrass. Two common turfgrass weeds found in Ontario that corn gluten meal has the potential to control.

A sample of corn gluten meal used for turfgrass weed control at the GTI.

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Can/Am Challenge

Port Huron Golf Club in Fort Gratiot, Michigan was the site of this year's Canadian/American golf challenge match. A great day of golf was enjoyed by all the competitors, as temperatures in the low 80's and sunny skies dominated the day.

The weather held off just long enough to get the golfers into the clubhouse to enjoy the steak dinner and guest speakers that included architect David Savic, who spoke about his restoration efforts at Port Huron Golf & Country Club. Ron Calhoun, from Michigan State University, also spoke about using the chemical Velocity for reducing and even removing Poa Annua from Bentgrass putting surfaces.

The staff of Port Huron was tremendous and truly helped to make this day a special one. This event is always looked forward to by both sides, in that it really creates a unique camaraderie amongst all the competitors.

Our thanks to John Cooney and the Greater Detroit Superintendents Association for organizing this exciting event. Everyone involved is already looking forward to next year, when the event will be held back on home turf, on Canadian soil.

There were 18 total matches played. The Ryder Cup format saw Canada with 21.5 points and the USA 50.5. The cup remains on US soil, at least until next spring.

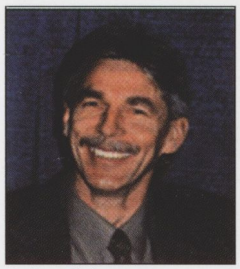
Long Drive	#16	Paul Scenna
Closest to the hole	#5	Klem Wolfrum
	#8	Paul Scenna
	#11	Scott Turbovich
	#13	Jim Dimitri

Scott Ford accepting the trophy

Rob Ackermann, and Fritz McMullen

Ron Calhoun, Michigan State University

Member profile



Robert Kains

Interview with Robert Kains
Robert Kains Golf Course Design Ltd.

by Richard Greig Barker, Assistant Superintendent
North Halton Golf & Country Club

In January I attended the Ontario Turfgrass Symposium in Niagara Falls. One of the featured speakers was Mr. Robert Kains of Robert Kains Golf Course Design Ltd., who spoke on *Reducing Maintenance With Smarter Golf Course Design.* Immediately following his presentation, I had the opportunity to meet with Robert Kains and discuss his career as a golf course architect, in this day and age.

Bob's life of golf began at the young age of eight. He created two golf holes on the farm where he grew up. Once he realized that he wanted to spend more time on a golf course he began to caddy at Sunningdale Golf Club. It was there that he got to see the "green" side of the golf business and began to research a career in the golf course design business. Bob had the opportunity to meet Robbie Robinson and went to him for some advice on the business. Mr. Robinson advised him that if he wanted to pursue a career in golf design that it would take approximately fifteen years of education, experience and "paying your dues" to get to where he wanted to be. Where Bob wanted to be was in the driver's seat of his own golf course design business with himself as the architect.

Bob attended the University of Guelph and obtained a Bachelor's degree in Landscape Design. After he completed his education, a job opportunity took him west to Alberta, as he accepted a position in education at Fairview College. Along with a number of other professional affiliations, Bob has been a member of the OGSA for about four years. He sites association memberships as a very important part of business. Bob advocates attending affiliated functions for networking as well as taking part in educational seminars, to further his knowledge as part of the golf management business. Bob often gives seminars on a number of topics; he feels that it is important to contribute on both sides of the educational part of conferences, by not only attending but also presenting and sharing knowledge and experiences with colleagues.

Bob has long been an admirer of the famed Canadian architect Stanley Thompson. He sites his favourite courses as a group; those that were built in the 1920's by Thompson. *"The longevity of those designs is what makes this business so interesting"*, says Bob. Renovations are a huge part of golf course architecture these days. He fondly remembers his work at Beachgrove Golf & Country Club, in St. Clair Beach near Windsor. The renovations that he did there, with Superintendent Randy Hooper, CGCS, are among his most satisfying and successful.

When it comes to business Bob reveals that one of the most important tools in his "tool box" is e-mail. It is literally the first thing that he does every morning when he gets to the office. Communication is key in any business and the architecture game is no exception. Although Bob's staff is small he maintains that an integral part of his job as a manager is to continually challenge his staff, whether it is through a design issue or through a computer software "problem".

When Bob gets a chance to relax you will find him hitting the slopes at one of Canada's premier ski resorts. Banff Springs not only offers tremendous skiing, but also is the home of one of Stanley Thompson's greatest designs, Jasper Park. When vacation takes him outside of the country, the Caribbean is a favourite spot to hit the beach and unwind.

One of Bob's newest ventures takes him overseas to Sweden. Although there are numerous golf courses already in existence in Sweden, there is a current trend of renovations and new developments in golf. Bob shares that it is a very different "golf environment" in Sweden. The Swedish golf courses are often maintained with a limited staff, generally under five people, including the Superintendent. This provides a difficult balance between unique and challenging golf design with a property that is manageable under a limited staff. Through experiences like these we can see where Bob gets his expertise on lower maintenance through smart design.

Bob continues to design, renovate and consult, on both sides of the ocean. I personally find it interesting to see what our members are up to, and Bob represents a part of our membership that is not the majority but an integral part of our diverse organization.

"In the Hot Seat"

- Favourite Major? **The British Open**
- Best piece of equipment ever? **CAD/ e-mail**
- Favourite Golf Course Architect? **Stanley Thompson**
- Your ultimate foursome, you and what three? **Old Tom Morris, George Newson, Stanley Thompson**
- Lowest round ever and where? **76 @ Canmore Golf & Country Club**
- This year's Stanley Cup pick? **Vancouver Canucks *"We should check with him now."***
- Favourite meal? **A Swedish smorgasbord**
- Favourite course played outside of Canada? **Wairaki Country Club, New Zealand**
- What's in your CD player right now? **Leonard Cohen, Blues Mix**
- Rate your home landscape on a scale of 1-10? **0, with an explanation. Just recently purchased new home. Plans on becoming an 8 when finished.**
- What would you envision yourself doing if you weren't working in the design industry? **Something that would allow me to play more of the sport that I love (golf). Possibly a surveyor.**

Pro/Super Challenge

The 2004 Pro/Super Challenge was held on Tuesday May 25th at Glenway Golf and Country Club. Despite the horrendous spring our region has endured, the teams that participated were well ready for a morning of competition. The format was a two player best ball, with the Golf Course Superintendent being able too use 2/3's of his handicap. This event allows the Professionals and Superintendents to have a day of fun, networking and the opportunity to represent together their respective clubs.

It was a great day of golf! After golf, Chef Marcello and his staff served up a beautiful buffet, before ending with the prize presentations.

Winners

1st	Markland Wood Country Club –	Frank Marando 65 Chris Nelson
2nd	Shawneeki Golf Club –	George Lacey 67 Frank Kuypers
3rd	Fox Glen Golf Club –	Kevin Corriveau 67 Kelly Barnet

Longest Drive
Professionals…….Highlands Golf Club, Glenn Garrett
Superintendents….Bayview Country Club, Thom Charters

Closest to Pin
Professionals…….Lakeridge Links Golf Club, Jerry Nemish
Superintendents….Credit Valley Golf Club, Jeff Stauffer

The OGSA would like too thank Peter Dickey, Golf Course Superintendent, and his staff for having the course in excellent playing condition, considering the extreme weather. Also Rob Larocque, Head Professional and his staff for helping organize the day. Thanks to the rest of the Glenway Country Club staff in making the day a success! A thank you as well to Dorothy Hills and her staff for making our events run smoothly.

L - R Rob Larocque, Golf Pro, Jeff Alexander, OGSA Director, Peter Dickey, Host Superintendent

Winning Team from Markland Wood L-R Frank Marando, Golf Pro and Chris Nelson, Superintendent

Hole #4

Glenway Country Club

Hole #9 taken from the first tee deck

Golf course highlight

Glenway Country Club

4470 Crossland Gate
Newmarket ON L3X 1B8
Golf Course Superintendent: Peter Dickey
Email: pdickey@glenwaycountryclub.com
Website: www.glenwaycountryclub.com

Hole #1

COURSE PROFILE

What county is your club located in?
York Region

Is the club private, semi private, public or municipal?
Private

Size of Membership?
500 golf and 3000 facility

Number of Rounds?
29,000

Typical opening and closing date
April 25 to November 7

How long have you been a superintendent?
15 years

How long have you been a member of the OGSA?
15 years

How many year round staff?
2

How many seasonal staff?
18

How many mechanics and assistants?
1 Mechanic: Mike Hutson
1 Assistant: Jon Pollington

How many gardening staff?
1 - Vicki Begley

COURSE STATISTICS

How many holes?
18

What is the yardage from back and forward tees?
6250 yards from the back tees and
5220 yards from the forward tees

How many bunkers?
68

How many times does water come into play?
9 times

Who was the original architect?
Doug Carrick

What was the year of original construction?
1987

When/ by whom has course been remodeled?
Bunker and fairway renovation by Ian Andrews of Carrick Design

Major tournaments held and winner.
1992 Ontario Open
Won by Don Farden

What is the size of your maintenance shop?
7,500 square feet

What type of irrigation system?
Osmac Toro, Age 2 years

What is the size of the greens, tees & fairways?
4 acres of greens
4 acres of tees
16 acres of fairways

What is your predominant grass?
Bentgrass/Poa

How many USGA greens/loam greens?
19 USGA greens

What is the predominant soil type?
Heavy Clay – rough and fairways

What equipment do you have in inventory?
5 – Jacobsen Greensking VI
2 – Toro 3100
1 – Toro 1000
2 – Toro 5400
1 – Toro 228 D
1 – Toro 223 D
1 – Toro 4000 D
6 – EZGO Workhorse
1 – Toro Workman
1 – Thomas Skid Steer
1 – CN Suter Field Sprayer
1 – Smithco Runabout Sprayer
1 – Ford 1910 Tractor
1 – Ford 3910 Tractor
1 – Universal Loader
1 – Toro Green Aerator
1 – Ditch Witch Trencher
1 – Badger Fairway Topdresser
1 – Olathe Topdresser
1 – Jacobsen B40 Blower
1 – Toro Rake O Vac
1 – Hardy 3PH Backhoe
1 – Toro Sandpro
2 – GM Pickups
1 – Jacobsen Overseeder
Assorted power and hand tools

OTHER COURSE INFORMATION

What projects have you recently completed?
Irrigation update on all greens and tees: Installed Rainbird Eagle 700 series automation of fairway heads to Rainbird Eagle 900. This project is ongoing.

What long range plans for renovation do you have in the next five years?
Cart path construction and paving
Complete irrigation update from manual to automatic
Renovate to increase tee deck size
Tree planting: 100 trees per year
Relocate putting green
Fairway drainage

Are there any particular challenges you face with your property?
Glenway is a subdivision golf course with 650 homeowners:
- noise complaints
- pesticide issues
- dumping on golf course property
- complaints about golf course aesthetics

Do you have any success stories?
Planted 1000 seedling trees 15 years ago, transplanting almost complete with great cost savings
Water supply is collected from subdivision into 9 storm water management reservoirs and used for irrigation purposes
No winter protection is applied to fairways and spring conditions are excellent

Please list any innovative cultural practices you may perform.
In late October, all greens are vertidrained and holes are left open allowing the green to breathe.
In mid November, a heavy blanket of sand is applied. I believe the sand creates an air space between the ice and snow plus adding insulation.
I started this practice 15 years ago and the results are impressive year after year.

Foliar Nutrition of Turfgrass

by Gary T. Grigg, CGCS, MG

When discussing foliar applied and absorbed nutrients, several concepts need to be clarified. The first concept one needs to understand is that the "non-root" parts of plants can and will take up nutrients from nutrient sprays and other applications. This concept has been shown over a long period of time by many researchers. The second concept to discuss is the difference between fertigation, foliar applied fertilizers, and foliar absorbed nutrition.

Fertigation is the application of small amounts of liquid or dissolved fertilizer through the irrigation system. The main advantage of this application technique is that relatively inexpensive inorganic fertilizers can be applied, often in small amounts. This method keeps only what nutrition the plants require for short periods of time in the root zone. It is seen as an alternative to slow release fertilizers, which do the same thing. Both methods are environmentally sound since they prevent soluable nutrients from leaching below the root zone. The drawbacks to fertigation include: the need for a highly effective irrigation system; access to dealers who sell the bulk liquid fertilizer or the equipment to make it; and the fact that some climatic zones do not require irrigation on a steady basis throughout the growing season. While very small amounts of nutrients may be taken into the plant direct, nutrients applied by fertigation are still root uptake and should not be confused with foliar nutrition.

Another method of applying small amounts of nutrients to the turf, sometimes referred to as "spoon-feeding", is to dissolve the inorganic powdered fertilizer in water and apply with your spray tank, then water in. The advantage to this method is that you can make even distribution of very small amounts of fertilizer that would not be possible with granular fertilizers. Again, although the plants may absorb small amounts of these compounds, it should not be confused with foliar nutrition. The advantages of this method are similar to fertigation and slow release granular fertilizers. The main disadvantage to this method is that many of the inorganic soluable compounds can be phytotoxic and cause burn of the foliage if not either properly applied or watered in. Several researchers have shown that plants have the ability to absorb some forms of carbohydrates directly and utilize them for plant bio-functions. When compared to other forms of foliar nutrients that contain usable carbohydrates to help with plant growth, the inorganic soluable compounds do not contain these various forms of carbohydrates.

Foliar Nutrition

Foliar absorption of mineral nutrients by above ground plant parts including leaves, stems, and flowers have been reported for over 200 years. Interest however has been mainly since the 1950's. This interest has grown over the years because of the increased cost of fertilizers, environmental concerns about leaching and runoff, a better understanding of how to facilitate the absorption process, and a better understanding of plant growth. Minor element deficiencies in fruit have been corrected by foliar applications for 80 to 90 years. More recently, over the last 40 years or so, foliar absorption of the macronutrients has also been studied extensively. It is now known that not only nutrients can be absorbed, but also pesticides, growth regulators, organic acids, and many carbohydrates.

Among the advantages of foliar absorbed nutrients include the fact that they can be rapid and effective, with quick plant response. Because they are so effective, they require less fertilizer input by avoiding soil fixation, leaching and runoff. They are applied to the leaf blade and allowed to remain there until fully absorbed. You do not water them in and no fertilizer is carried into the soil. Today we have the knowledge of how plants grow in order to make the most effective use of this technique. Other advantages revolve around the fact they are effective when turf has restricted root systems. Restricted root systems can be caused by closely mowed turf, periods of environmental stress, seasonal root loss, periods of low photosynthetic output and correspondingly low carbohydrate reserves.

In turf, unlike agriculture, the plants are continually mowed. This continual loss of leaf blade creates the main disadvantage of foliar fertilizers on turf. Due to the constant mowing, they need to be continually applied. However, this spoon-feeding is the best method of application, even if we were not removing the blade constantly.

Some nutrients including phosphorus become fixed in the soil and result in low efficiency as a root absorbed nutrient. Foliar applications of the marconutrients as a supplementary fertilizer are highly effective. Foliar application of micronutrients can and have been used successfully for deficiencies in turf. Another advantage of foliar applied nutrients is that in wet climates, the highly soluable nutrients, such as nitrogen and potassium, cannot be leached from the plant once absorbed, as they can be from the soil.

Factors that affect foliar absorption

Several factors which affect foliar absorption include relative humidity, temperature, pH of the nutrient solution, variety of the turf, age of the leaf, concentration of the nutrient solution, difference in the nutrient compounds (formulations) use of surfactants, and the addition of non-nutrient facilitating or carrier-mediated agents.

Humidity and temperature have a direct relationship with absorption of nutrients. As they increase, penetration also increases. The total amount of time the nutrient is in contact with the leaf is critical. Optimum pH is a factor that varies from nutrient to nutrient and most good formulators recognize the need to have optimum pH for the nutrient used.

The formulators should also study chemical compounds closely, as many are ineffective as foliar nutrients. For example Shafer and Reed studied a total of 31 organic and inorganic potassium compounds for their efficacy as a foliar fertilizer. Their results showed a broad spectrum in foliar absorption efficiency for potassium from both organic and inorganic carriers. Studies from other researchers show similar results on many other nutrient compounds.

Golf course superintendents need to know and trust the expertise of formulators from the various companies who make foliar absorbed nutrients, and follow their recommendations.

Modern Foliars

The effectiveness of modern foliar fertilizers varies significantly.

Using both organic and inorganic facilitating agents to transport the cations into and throughout the plants has become a very exact science and is the main difference in the claims between companies in the foliar business. Golf course superintendents need to separate facts from claims and gain a high degree of confidence in the company which they choose to work with and purchase products from. The process of building excellent foliar fertilizers is an exacting and complex one.

Many humic and organic materials have the capacity to bind substantial amounts of metals and other cations. They can therefore exert considerable control over the supply and availability of nutrient elements in plants and water.

When the metal ion combines with an electron donor, the resulting substance is said to be a complex or coordination compound. If the donor atoms are attached, not only to the metal ion, but also to each other forming a ring, it creates a chelate.

There are good complexes and bad complexes and there are good and bad chelates. Some of the organic agents used in these products are: humic acids from many sources; fulvic acids; ligno sulfates; amino acids; sugars and carbohydrates; hydrolyzed protein mixes; and derivatives from the wood pulp industry. Many of these have low stability constants and when mixed with anions, such as phosphates, may result in precipitation. Once again, select your products wisely. When added to the nutrients, organics are biodegradable and available to the plant and the soil micro community as an energy source.

Since the 1950's, synthetic chelating agents have been used as aids in plant nutrition. Among the more popular are EDTA, HEDTA, and EGTA and others. They are cost efficient and can be effective if used properly, but generally, they are not biodegradeable.

Synthetic chelates are used extensively in many turf products. Many researchers have reported that they remain as a residue in the plant tissue or in the soil, tying up other nutrients and providing no additional energy source.

Mobility

Absorption is only one aspect of a foliar fertilizer. In addition, the absorbed nutrient generally must be translocated throughout the plant. While absorption is a key process in selecting a foliar applied nutrient, the extent of re-distribution or mobility of each nutrient in the plant is also an important consideration.

Buyer Beware

There is little regulation over the complexing and chelate foliar industry.

The presence of an organic or synthetic chelating agent in the formulation legally makes the product a chelate.

It does not matter whether there is enough chelating agent in the mixture to chelate all the metals in the formulation or not to be considered a chelate.

Any agent that can be shown to cause chelation is considered a chelate, without regard to whether it is stable or not.

Unstable chelates that precipitate when mixed with anions, such as phosphorus, are poorly absorbed by the plants and do not translocate well in the plant.

The concentration of these complexing and chelating agents in the various formulations need not be on the label.

I personally believe that the best chelating agents are those that are natural components found in the metabolism of the plant and my personal observation is that they need to compose a high concentration within the formulation.

Summary

I like chelated compounds over non-chelated, complexed products. However, complexed products, in my opinion, are better than the foliars that have neither. There are some good quality chelated liquids out there in the market place. I like natural organic chelating agents over synthetics. Use the ones that will hold against precipitation of phosphorus. Try this easy test: take some water, mix in enough 10-34-0 liquid fertilizer to be representative of your fertilizer mix, and add a little of what you are testing and see what happens. If it is a good chelate, it will remain in solution, while poor chelates will tie up with the phosphorus and cause a precipitate. Many products are not 100% chelated and as I have stated, some companies put only enough chelating agent to claim its presence. Although classified as a chelate by law, it will be ineffective.

Even with organic agents, some chelating agents are far superior to others. In most cases, the form of the nutrient will react differently to different agents. Find someone who understands this and uses the form of nutrient and type of chelating agent to give the strongest chelate.

Conclusions

Look at your soil fertilizer program as a "bank". The soil tests show how much you have on deposit in your "bank" and you balance the nutrients on the cation exchange sites with soil applied fertilizers. This is traditionally the way golf course superintendents have developed their fertility programs.

Tissue tests are also important and show what our intermittent withdrawals from the soil "bank" are. If we see a need, we can make the appropriate "deposit" directly to the plant with foliar nutrients and bypass soil cation exchange and root absorption.

Why foliar feed turfgrasses? Most professionals agree that foliar feeding gives you:

- ***More control with less risk.*** If you combine soil testing and regular tissue analysis, you can tank mix any compatible products in order to give your turf up-to-date needs.
- ***Lower overall nutrient inputs.*** Since foliar fertilizers are more effective than soil fertilizers, you can reduce the overall amount of fertilizer used.
- ***No nutrient leaching past the root zone and therefore no chance of ground water contamination.*** Since foliar fertilizers are absorbed by the plant and will not leach from the plant, they are not present to leach from the soil.
- ***Better response with a poor root system.*** Because foliar fertilizers are plant absorbed and quick to respond, you can put nutrients into action even when you have less than an ideal root system.
- ***Better response without optimum soil pH.*** Foliar fertilizers do not depend on any given soil pH.
- ***Good results with plants under stress.***
- ***The very best in a "spoon-feeding" program.***

You can balance these advantages with the following concerns:

- Applications need to be every 7 - 14 days depending on growth, season, and how much leaf is removed during mowing
- All organic and inorganic compounds vary in their efficacy of foliar absorption; therefore choose your formulator wisely.
- Absorption is only one aspect of a useful foliar fertilizer. In addition, the absorbed nutrient must be translocated throughout the plant to be effective.
- Phytotoxicity can be a concern with some compounds, especially the inorganic compounds.

Foliar nutrition is an effective method of providing a steady flow of nutrients to the turfgrass. In combination with some traditional types of root uptake fertilizers, it is another effective management technique for progressive golf course superintendents who wish better control of nutrition and growth.

Gary holds a Bachelor of Science degree in Agriculture and Entomology from Utah State University and a Master of Science degree in Agronomy from Michigan State University. After a 34 year career as a golf course superintendent, he retired to become co-founder of Grigg Brothers Fertilizers.

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OGSA sponsors "The Fraz"

by Paul Scenna, Superintendent
Donalda Club

The fifth annual Toronto Star Amateur Tournament and media day, THE FRAZ, in memory of golf writer Rick Frazer was held June 1st at the Devi'ls Paintbrush. It was a beautiful day to play the awe inspiring Caledon gem, complimented by a property that was in spectacular form, thanks to Course Manager Ken Wright and his staff.

Glenn Goodwin, the President and Founder of the GTAGA had organized another terrific day which had special significance this year, as it celebrated the induction of Rick Fraser and Ben Kern into the Ontario Golf Hall of Fame. Ben Kern had been the Golf Professional at the Devil's Pulpit Golf Association from 1996 – 2003.

Over 80 media personnel from print and television joined Marlene Streit, recently inducted into the World Golf Hall of Fame, other special guests and selected club officials from participating tournament courses. As well, four of your OGSA directors; Rob Ackermann, Sean DeSilva, Jeff Stauffer and Paul Scenna represented the OGSA.

Our association was able to provide an insert into the media kit, including a copy of the article entitled *Golf Courses are Part of the Solution*, written by Ken Cousineau, as well as a media release written by Jeff Stauffer announcing the IPM accreditation program. Dorothy Hills greeted all guests and presented a Paintbrush hat to all players with the slogan "OGSA *Keeping Golf Green"* inscribed on the side.

After golf, in traditional "Fraz" format, stories were shared. This year, with good humor and respect, John Gordon spoke of Ben Kern and Dave Perkins reminisced about Rick Frazer.

It is an honour and great opportunity for our association to celebrate amateur golf, the memory of a Canadian writing legend and the chance to offer factual environmental information that supports current issues at all golf courses in Ontario. This has all been made possible only through the generous efforts of Glen Goodwin. Thanks Goodie!

Glenn "Goodie" Goodwin with Dorothy Hills at registration

Sean DaSilva, Rob Ackermann, Ken Wright and Paul Scenna

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Hidden Lake
Golf Club

June 11, 2004

Dear Ron,

We have been using your product for two years and have had no problems with the hydraulic system on any machine.

This spring on our first cut on the approach to number one green, a hydraulic line broke and fluid leaked all the way across the front of the green. We did not have the irrigation on at that time and so we filled the sprayer and used the hand hose to flush the area thoroughly. We were amazed that there was no hint a leak had occurred. It was amazing.

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Sincerely,

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OGSA Pledges support to new University of Guelph Turfgrass Research Scientist

by Rob Witherspoon, Director
Guelph Turfgrass Institute

The Ontario Golf Superintendents' Association has committed $15,000 in start-up funds to Dr. Eric Lyons, the new turfgrass research scientist at the University of Guelph. Dr. Lyons recently accepted an offer to join the University of Guelph as a faculty member in turfgrass management. He will be leaving a post-doctoral position in turfgrass physiology at Rutgers University to join the Department of Plant Agriculture faculty at Guelph.

Dr. Lyons, a native of the state of Iowa, is a graduate of the University of Northern Iowa where he received his B.Sc. with a double major in Biology and Philosophy. While at Northern Iowa he played several seasons as an offensive lineman on the University football team and later served as an Undergraduate Assistant Offensive Line Coach. He is also an avid golfer and received his first instruction in the game from next door neighbour and one time Tiger Woods' swing doctor, Butch Harmon.

Upon completion of his undergraduate studies, Dr. Lyons attended Penn State University where he completed a Ph.D. program under the guidance of Dr. David Huff and Dr. Dan Knievel. His graduate work investigated the seasonal competition and physiological responses of different ecotypes of annual bluegrass and creeping bentgrass. He was awarded both a National Science Foundation Fellowship and Golf Course Superintendents Association of America Watson Fellowship. While at Penn State, he was actively involved as an instructor in the turfgrass management diploma program.

Dr. Lyons is scheduled to arrive at Guelph in early July. His research interests are varied and his initial efforts at Guelph will be directed towards establishing new research priorities in collaboration with the turfgrass industry and colleagues at the Guelph Turfgrass Institute. Dr. Lyons will also be involved in University of Guelph professional development programs, undergraduate teaching and supervision of graduate students. He will begin teaching in the new Associate Diploma in Turfgrass Management program this September.

At their spring research funding meeting, the Ontario Turfgrass Research Foundation generously committed $30,000 in start-up funding. After his arrival in July, Eric hopes to attend a number of events over the summer to informally meet with Ontario superintendents and other industry professionals. He will be formally introduced to the turfgrass industry at the GTI Summer Research Field Day on August 17th.

What's new

Congratulations to Adrian Hodson-Walker,
Adrian was the winner of the 2004 Turf Managers' Short Course Award. With an overall average of 94%, he will receive an OGSA cheque in the amount of $500.00 and a certificate of accomplishment. Adrian is currently the assistant superintendent at Kleinburg Golf Club.

Tired of your college kids calling home for money?

Encourage them to fill out the Heritage Award Application Form.

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DEADLINE DATE JULY 31, 2004

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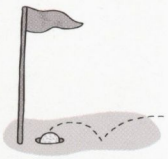

Updates will be posted to our web site www.golfsupers.on.ca as information becomes available.

Ontario Golf Superintendents' Association

Call for Nominations for 2004 2nd Annual

"William Sansom" Distinguished Service Award" Deadline Friday, Sept. 3, 2004

Nomination forms have been mailed or emailed to you. If you have not received your form please call theOGSA office.

Reminder
Applications for the Hugh Kirkpatrick 2004 Bursary are due in the OGSA office by August 31, 2004.
Don't miss out on this chance to win $2,000.00 to go towards furthering your education in the industry.
Application forms were sent out in April and have been posted to our website.
This Bursary is open to all OGSA Assistant Superintendent members.

Turf Managers' Short Course
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See enclosed insert for full details

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On the road again

by Angelo Capannelli
Hutcheson Sand and Mixes

To build or maintain?

At this time of the year my travels typically take me to visit existing golf courses throughout the province that require topdressing materials. It's the spring time and golf course superintendents are anxious with the thrust of new growth and warmer temperatures to get out and topdress greens and tees. However, with the plethora of new golf courses at various stages of construction I find myself distracted with frequent visits to these sites and it got me thinking about the subject matter for this article which is, "to build a golf course or to maintain one", that is the question?

What possesses a person to be constantly up to their knees in mud? Is it the same thing to have a person up to their knees in grass clippings?

According to Brent Rogers of Eagles Nest Golf Club in Vaughan, Ontario it's much different, but both very rewarding. Brent has been fortunate to be involved in both the maintenance and the construction of golf courses. He was the assistant superintendent at Olympic View Golf Club on Vancouver Island and he has been involved in several new golf course construction projects. In his current capacity, Director of Turf Operations at Eagles Nest, he comments that we took a totally exhausted piece of property with no life and turned it into something very special. It's an adrenaline rush to show up on site every morning to know that you are creating something out of nothing. There are constant obstacles and every day presents new and interesting ones and then comes the grow in?

Luke Beardmore of NMP Golf, who is the Construction Superintendent at the Grand Niagara Resort in Niagara Falls, has this to say, "During the construction of a golf course it's the only time you get an opportunity to build it right." That, to Luke, is somewhat of a challenge and that is also the motivation of being involved in this aspect of the golf course business. "Once it's built you can't really go back and change it", he adds. It's the thrill of working with different architects and owners and also with different soil types and topography. Once the golf course has been constructed Luke very graciously hands the "grow in" component over to Paul Gurr. Paul is the golf course superintendent of the Grand Niagara Golf Resort and is certainly no stranger to that environment.

One other project that I had a chance to visit this spring was the Bond Head Golf Resort, a Michael Hurdzan design. Daryl Van Impe of ASL Golf has been around golf courses for 20 years. Growing up in Saskatchewan his father managed a small golf course where he was taught the maintenance side of the operation. The construction side of the business soon followed and when he saw first hand the site and development of Silver Tip Resort in Canmore, Alberta, he was hooked. He has been building golf courses ever since. For Daryl, it also appears that he loves the challenge of working with different designers to create the vision of the architect which is shared by the owners, as in the case at Bond Head. He longs for the day that another "Silver Tip" gets built in and around his home in Canmore. Here he hopes to build, grow in and maintain so that he can finally settle down close to his home and get some time to pursue his other passions,which are fly fishing and kayaking. Ian McQueen, formerly the assistant superintendent at Magna Golf Club in Aurora, has the challenge of growing in the golf course here at Bond Head.

There are several other golf courses that are currently under construction, being grown in or set to open that employ former superintendents. Greg Aljoe, formerly of Deer Ridge Golf Club in Kitchener, Ontario, is building Oviinbyrd Golf Course in Minett, Ontario. Bert McFadden, formerly of Chateau Whistler Golf Club in Whistler, BC, is about to open The Georgian Bay Club in Collingwood, Ontario and Jason Honeyball, who was the superintendent of King Valley Golf Club in King City, Ontario, has just recently been hired by the Oslerbrook Golf & Country Club in Collingwood to oversee the construction of that golf course. Hopefully, these individuals will still have their wits about them and they will allow me to speak with them about their experiences to follow up with the true comparisons of maintaining a golf course versus building one. ♪Stay tuned♪

Off the fairway ...

by Daisy Moore

In early spring, people are often wrought with anxiety in anticipation of the season ahead. A gardener needs patience through April and endurance in May.

Weather-wise, it was a disappointing spring and many people were dissatisfied with the appearance of their garden through April and into May. Plants were slow to start and if you didn't have bulbs, gardens were colourless and uninteresting. In other words, the Hostas were not showing yet and many gardens rely heavily on this lovely group of plants. Ornamental grasses, another popular plant, didn't look so good either.

To correct the lull in attractiveness in early spring, one approach I advise is to give the garden something to liven it up early. This buys some time in the early spring for the later things to show. You can go for bulbs, bulbs, and more bulbs: early flowering species tulips and daffodils go a long way to brighten things up.

Another approach I recommend is to provide something sculptural, something with height and form. This can be a specimen plant or a stone or an evergreen grouping or even a sign. The seasonal appearance of the garden needs to be considered so that the greenery and bloom times combine well together.

But too many specimen plants can be a bad thing. This spring I came across a number of clients' gardens that contained many unique and exotic plants, but what I saw was collections of plants rather than gardens. Too many star plants make them all seem ordinary. I prefer to build a garden around an outstanding specimen plant, and frame the specimen as a showpiece. In many gardens, my job has been to address the question of the plant collections and build plant communities from those collections to make the gardens feel right. This can be as simple as adding trees and rocks or it may be quite complex, but overall, the organization of the plants needs to make some sense.

Weather conditions make a huge impact on the appearance and content of gardens. On the weed front, the cold wet spring benefited tap-rooted biennials such as dandelions and wild carrot. They seeded themselves last year and had all the energy they needed to burst through anything. I had an extraordinary number of these weeds because my lawn was ravaged by grubs two years ago and is still struggling. I think that the grubs have made a pact with dandelions: the two most hated urban pests are ganging up!

Biennials in the cultivated garden also showed their early strength. For example, forget-me-nots expanded quickly when the heat came and gave the appearance that there was nothing else growing in the garden. Unless you tackle these early overenthusiastic problem plants, the remainder of the garden plants will suffer. A good gardener will know when to move in and be ruthless to plants with invasive tendencies so that the garden can endure and look pretty in every season.

I like to know the place of origin of the plants that I buy or work with. It helps in deciding what plants look right together and what type of habitat to try to create. Place of origin also gives clues to plant care. For example, I don't think I will have a hardiness problem with my new plant from Siberia. I would also predict that the Prunus species from Manitoulin Island can withstand some wind! Clearly, our indigenous plants would be happy to make their home in our cultivated gardens and can make great sense in their right season.

Gardens are soon forgiven when they become beautiful again in the summer months, but we must remember how we felt during a cold, wet spring and prepare the gardens so that they wake up more gracefully in future.

Visit my website
www.daisymoore.com
for more tips on gardening.

Turf or consequences

by Doug Breen, Superintendent
Golf North

The fine people at Canada Post recently took some time out from their busy schedule of taking sick days and shooting at each other to give me a new address. It was apparently far too confusing to use the street address that my house has used for the last century, and now I have a box number. I suppose that it *is* easier to put my many unsolicited direct mail flyers into a mail slot that has a corresponding number on the envelope; but honestly, my house was built in 1864, and up until last week the mail's been getting here on an almost daily basis since then. The Breen house predates Canada Post by a fair shake. Heck, it predates Canada the Country by a few years. And 140 years ago, a young lass back in Ireland could address a letter to her intended in Upper Canada with an address like, "The Little Cottage on the King's Highway between York and Guelph at the Eramosa River", and know that it would have a better than average chance of getting there before the St. Lawrence froze over.

Last week, the post office returned my new cheques to the bank, even though the envelope had a street address, a postal code, a computerized barcode thingie, and a sixty-eight dollar stamp – but no box number. The bank naturally shredded the whole magilla to protect my security and privacy. I don't really understand how shredding my new chequebook protected either, but the bank *did* send by courier, not one but two, letters explaining how they were looking out for my best interest by destroying my undelivered mail as opposed to - oh, I don't know - sending me the undelivered mail by courier.

It reminded me of the flyer from the mail carriers explaining that they were improving my service by no longer delivering to my house. Instead, I would now have a postal box, and I would have to send out change of address cards to half the people on the planet, and I missed a few (like the bank), which ultimately led to all of this. Of course, we still get mail with *other* people's street addresses on it. We get a magazine every month with no box number, a street address on the other side of town, and no connection to us at all, except that the subscriber to Guns and Ammo happens to have the same last name my wife stopped using ten years ago when we got married.

The golf course where I work is in a town called Conesto**go**. It was named after the Conesto**ga** wagons that the German settlers from Pennsylvania brought with them to the Kitchener/Waterloo area. Note the spelling. The wagon, the river, the threshing machine, the corn binder, the construction company, the golf course, and half the businesses in the K/W phone book, are all spelled with an "A" at the end. The town is spelled with an "O". Why? Canada Post.

When the postal service was being set up in this country, lots of little towns had no name. Or in some cases multiple names. Rockwood, was once called "Brother's Town" and "Strange's Mills" at the same time. The Canadian Postal Service, in it's infinite wisdom, had a very reasonable, one town/one name, policy. They even furnished a list of suggested names to pick from, if your town either lacked the creativity to come up with it's own, was too stunned to steal one from back in Europe like everybody else, or couldn't decide who to name it after. The good people of Conestoga named their town after the wagons that got them all there alive, but since that word wasn't on the approved list of names of people in the British Royal Family that were supplied as potential town monikers, someone in Ottawa spelled it wrong, and there was no turning back.

They just renumbered the golf course's street address too. It used to be 16 Golf Course Road, now it's 400 Golf Course Road. I have no idea why. We didn't move down the street. 384 people didn't move in between us and the corner. Once again; however, the Mensa members in the short blue pants can't remember where we are unless the correct number is on the envelope. For the love of Pete, we're the golf course, it's not like there's ten of them in our neighbourhood. Then it would be called Golf *Courses* Road. Everybody else has a half acre lot, we have 260 acres, but they can't find us unless the right address is used.

I shouldn't really complain though. It's actually amazing to me that the system works at all. They move millions of envelopes all over the world every day, through any weather, from places all over the globe. When they can get a postcard from Bora Bora to Kapuskasing in less than a week, at a price that doesn't add up to the change under the floor mats in my truck; I guess it's not too much to ask me to use a box number.

Looking back

25 YEARS AGO TO-DAY

by Barry Endicott

In 1979 the OGSA directors were **Stuart Mills** (pres.), **Paul White** (vice-pres.), **Blake McMaster, Ken Nelson, Paul Scenna, Bill Bowen, Paul Dermott, Bob Brewster, John Smith, George Garner** and **Rusty Warkman.**

Hugh Kirkpatrick moved to Westmount Golf & Country Club, in Kitchener and **Dan Ardley** replaced **Hugh** at Dalewood Golf & Curling Club. **Jim Wyllie** accepted the position at Bayview Country Club and **Paul White** moved to Lambton Golf & Country Club. **Nicol Thomson,** who was professional and superintendent at the Whirlpool Golf Club, from the time it opened until his retirement 7 years ago, passed away.

The OGSA welcomed these new members: **Thom Charters**, Islington Golf Club, **Allen Zettler**, Walkerton Golf Club, **Ron Thorne**, South River Golf Club, **Ted Tom,** Uplands Golf Club, **Raymond Richards,** Merryhill Golf Club, **Bruce Vollett,** Conestoga Golf Course, **John Treloar**, Trehaven Golf Club, **Carl Bennet,** Richview Golf Club, **Ted Ellis**, Greenwood Golf Course, **Hugh Moulton,** Windsor Park Golf Club, **Charles Eggleston**, Niagara Chemicals, **Neil Acton,** Green Acres Golf Club, **Brent McCafferey,** Carrying Place Golf Club, **Bob Labbett,** Beaverdale Golf Course and **John Woodhouse**, Pine Orchard Irrigation Ltd.

100 Superintendents, assistants, students and distributors attended the 9th Annual Management Symposium at North Halton Golf & Country Club. The speakers were **Doug Hoskins, George Garner, Bill Hynd, Bill Glashan, Barry Endicott, Jack Eggens, Fred Charman, Art Dodson, Blake McMaster, AI Shantz, Doug Suter, Geoff Perkins** and the chairmen were **Norm McCollum** and **Dave Moote**. Meetings were held at Oshawa Golf Club, **Rusty Warkman,** Whirlpool Golf Club, **Bill Glashan**, Thornhill Golf & Country Club, **Dave Gourlay**, and Weston Golf & Country Club, **Bob Brewster**.

Seventy people participated in the Galt Field Day and **Bill Bowen** won low gross at 71. The President, Greens Chairman, Superintendent Tournament was held on July 20th at Mississaugua Golf and Country Club with the Credit Valley Golf Club team of **Doug Suter, Jack McGregor** and **Jim Clelland** winning first prize.

The pro-superintendent day was held on August 13th at Victoria Park Golf Club. The low team was from Victoria Park with 149, the low superintendent was **Hugh Kirkpatrick** with 76 and the low pro was **Gary Maue** with 70.

The McClumpha Tournament was held at Glen Eagle Golf Club with **Hugh Kirkpatrick** shooting a 73 for low gross and **Bill Bowen** firing a 75 for 2nd low gross.

Glen Abbey Golf Club hosted the Canadian Open, Cataraqui Golf & Country Club hosted the Ontario Open, Summit Golf & Country Club hosted the Ontario Amateur, Brantford Golf & Country Club hosted the Canadian Amateur and The National Golf Club of Canada hosted the CPGA Classic.

The Ontario Turfgrass Research Foundation was founded with **Keith Nisbet** as president, **AI Beeney** as vice-president and **Paul Dermott** as secretary-treasurer.

Those dog-days in August

by Denny Lyon, Editor Rocky Mountain Reporter
Article Reprinted from 1979 Issue of Green is Beautiful

There are times I wonder why I ever got into this business, and the last two weeks in August (those dog-days) are one of the times when I wonder most.

I don't have to look at a calendar to know when the August dog-days are here, all I have to do is go to work. I know it's dog-days when there has been 40 to 50 90 degree plus days (mostly in a row), and there has been at least an inch of rain in the past 45 to 60 days, unfortunately it all came in five minutes. Also during dog-days greens tend to get a little firm on the mounds (it takes dynamite to set a cup) and a little soft (the greens mower needs pontoons) in the swails.

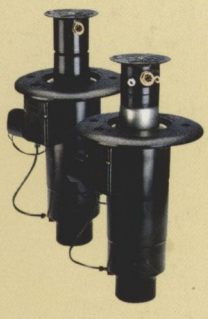
The low areas in the fairways also tend to get a little on the damp side. They team with water fowl, and possibly reptiles, plus there is speculation that a drag line should be employed to look for last year's men's club champion and his cart, believed somewhere on the back nine. Fortunately there are just as many dry areas in the fairways as wet. I figure that about the time these dry areas are too hard to drive in a 16 penny nail it's time to try and talk one of my employees into dragging a hose over and running a little extra water. That is assuming (1) I have water; (2) I have an employee.

Speaking of employees, they often highlight dog-days with items like – all the night watermen quitting the same week, all the intellectuals deciding they need to leave for school two weeks before it starts, and all the un-intellectuals caring less whether or not they get fired, as welfare and unemployment pay about the same; and don't try to hire anybody during dog-days, there isn't anybody.

The golfers are also happy to add their two cents to dog-days by pointing out little items that are out of line. You know those items, like greens which have been chewed up by thousands of golfers leaving their ball marks and dragging their feet; fairways which have been beaten into prairie roads by thousands of golf carts and tees that look like the Lowry Bombing Range thanks to these observant and helpful golfers.

Last but not least, are the dog-days equipment dulldrums. Dog-days are here the day the stunt driver you've been threatening to fire all summer wraps one cushman around a tree (he lives, the cushman and the tree are both killed) and the wiring harness burns up in another. Person unknown let the tee mower run out of oil and the engine freezes up, and a greensmower breaks a hydraulic line. But that's not all, it takes longer to get the rotaries started than it takes to mow, there are no new aerating tines in town, in fact there are no new parts for anything in town, the belts are broken on the top dresser, the roller bearings are shot in the fairway unit and the mechanic is gone to Iowa for his annual family reunion.

Yes, these August dog-days make me wonder if I might not be better off sorting mail at the bulk mail center, but then again with what the federal government pays, I wouldn't know what to do with the extra money.



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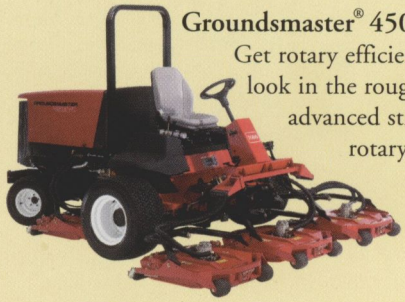

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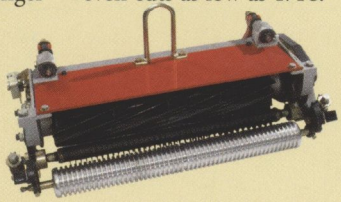

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