

SPORTS TURF MANAGER

... for better, safer Sports Turf

SEPTEMBER 1999

12th Annual Field Day

The Field Day began with chair Paul Turner introducing STA President Chris Mark. Chris thanked the organizers of the event and made special reference to Dave Dick of The Scotts Company for sponsoring part of the day. Unfortunately, Dave was unable to attend. Chris then thanked all other suppliers and distributors for their generous support. Lastly, he announced the two STA scholarship winners, Gordon Bruce and Howie Kumagai (see June 1999 STM). Chris stated that each scholarship consists of \$200 plus a one year membership in the STA, which includes four issues of the *Sports Turf Manager*.

Rob Witherspoon then spoke as the newly confirmed Director of the Turfgrass Institute. He thanked delegates for coming and the Association for choosing the Institute for their Field Day as continuing education was one of the main reasons for the building being established. He also encouraged delegates to attend the Research Field Day to be held at the GTI on August 31, 1999.

Our keynote speaker was then presented. Dan Ferrone is a former captain of the Toronto Argonauts. He is currently president of the CFL Players' Association



A Harley rock picker in action at the Compact Sod Farm.

(CFLPA) and chair and CEO for a union-sponsored venture capital fund called "Sportfund." He and his wife also own a fitness centre in Oakville, Ontario. Dan related many anecdotes about his career and fans.

As president of the CFLPA, his main responsibility is negotiating with team owners; however, his primary concern is for the safety and welfare of all players in the league. A major issue he faces currently is the war between artificial turf and natural grass. It is mostly the owners who want artificial turf. There is only one natural grass field in the CFL, Commonwealth Stadium. The rationale is that artificial fields are playable in almost any weather, have no potholes, and keep uniforms clean for TV. The players, however, prefer natu-

ral turf as it is more forgiving (please see the editorial on page 2).

Although improvements have been made over the years, there is a much higher incidence of injury on artificial turf. There are more concussions due to the sudden jolt that occurs from falling on the back or shoulders. Burns are common and usually severe. Mike Pringle of the Montreal Alouettes lost his helmet during a game last year and burned off the tip of

his nose. Injuries are costing \$700,000 a year and the CFL is not allowed Workmen's Compensation (whereas the NFL is). There have been two cases of paralysis, the most recent one just four years ago.

Due in part to the wear and tear, many players will last only three years in the league. It is believed that because of the turf field in Edmonton and the fact the Eskimos practice on grass, their injuries are far less by the end of the season than any other team in the CFL. Dan further stated that there are no standards for fields—the only standards are the distances between hash marks and lines, the colour of the paint, and the width of the lines. Dan closed by saying that both he and the players strongly advocate natural grass playing fields. *continued on page 8*

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Editorial

ARTIFICIAL VS. NATURAL TURF

Isn't it interesting that yet another CFL team has opted to renew their artificial surface rather than listen to athletes and sports field managers. We are told that athletes as a whole would prefer to play on natural grass. They practice on natural grass! There are some excellent turfgrass managers out there who would be very pleased to have the opportunity to maintain a professional football/baseball field in Canada. Only recently, Darren Flutie of the Hamilton Tiger Cats, on arrival at Commonwealth Stadium in Edmonton, said how nice it is to be able to play on real turf. Meanwhile, just down the road, the Calgary Stampeders redid McMahon Stadium with artificial turf at a cost of \$1.7 million.

In the U.S.A., more and more artificial fields are being removed and replaced with natural turf. For approximately one-third the cost of McMahon Stadium, owners could build a state-of-the-art natural grass field. Are owners afraid the field will not be playable at game time? While it may be true that more games can be scheduled on artificial fields, false economy will prevail as overuse will only shorten the field life and result in early replacement of the material!

Synthetic surfaces have drawn increasing criticism from players and coaches. A recent survey of NFL players listed the 10 best and the five worst playing surfaces in the NFL. All of the ten best were natural turf—all of the five worst were synthetic, says Jim Pulhalla, president of Sportscape International, Inc.

How do we get the message of better, safer sports turf across to owners? Whether it is for a university, college, school, or professional facility, when will we start using more of the expertise of the many professionals who are available across this country? I'm talking about those who have graduated from turf-related courses and/or those who have many years of turf-related experience. As individuals or as groups, we can make things happen. Look at what the Rotary, Optimists, Lions, and Kinsmen have done in small communities to promote, build, and maintain ballfields where otherwise there might not be any. This is only one of the

many good works that these volunteer clubs do to improve our communities. Gamaliel Bailey said "Amid life's quests there seems but one worthy one, to do men good." That could well be our focus as we go about our sports turf business. To conclude, I leave you with another quote from Jim Puhalla and Associates from their new book *Sports Fields - a Manual for Design, Construction, and Maintenance*. "Predicting the future is a chancy thing—one that makes me as nervous as anyone. But tomorrow's developments grow out of today's trends. A wise manager makes plans for the future based on a hard look at what's happening each day." ♦

— Michael Bladon

Gavel Presentation



Jane Arnett-Rivers, STA Vice President, presents the President's gavel to Chris Mark at the May 18 board meeting.

"I believe a leaf of grass is no less than the journey-work of
★ ★ the stars." ★
Walt Whitman (1819-1892)



"Whoever could make ... two blades of grass where only one grew before, would deserve better of mankind, and do more essential service to his country, than the whole race of politicians put together."
Johnathan Swift (1667-1745)

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At other times, a message may be left on the voice mail system. Please include the vital information of name, telephone number with area code, and time of calling. The office may be reached at any time by faxing (519) 766-1704 or via e-mail.

Letters via E-Mail

Field Day Comments

I arrived home on Wednesday only to find your evaluation form in my back pocket. Sorry for being so tardy. After having a very entertaining and informative day, the least I can do is pass on my comments.



I thought the day was put together very well, right from the morning reception to Mike Bladon's closing comments and jokes on the returning bus ride. The speakers were very interesting and informative. I would have appreciated it if Dr. Chris Hall had stayed around as we didn't get a chance to ask him any questions.

Chris Mark and Paul Turner did an excellent job of hosting. They came across as being professional and not too formal. The lunch was a pleasant surprise—simple but good. I will certainly try to attend

in future years and I have a few suggestions for future topics:

I would like to see something on how to incorporate soil and tissue sampling into my turf program. How do I take such samples? Who do I send them to and how do I interpret the results and effectively implement them into my maintenance program?

Since I'm guessing that most of the field day participants are from municipalities and colleges, I think it would be beneficial to have a talk on liability. Are there some recent court cases regarding the use of sports fields? What can we do to ensure due diligence? How bad can it get before we close our fields?

How about something on how to manage in a unionized environment. How do you motivate employees in the new millennium?

Thanks again for a great day!

— John Wilson, Grounds and Vehicles
Supervisor, York University

Thanks, John, for taking the time to write!

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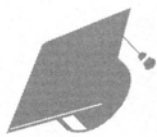
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For more information, contact Lee Huether at the STA office. Tel. (519) 763-9431, E-mail sta@gti.uoguelph.ca.

December issue content deadline:

OCTOBER 15, 1999



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PLEASE NOTE

The opinions expressed in articles published in *Sports Turf Manager* are those of the author and not necessarily those of the Sports Turf Association, unless otherwise indicated.

Meet New Board Member Rick Lane

Rick has been employed by the Town of Dundas as Director of Parks and Recreation since 1992. Prior to his employment with Dundas, he served as Director of Parks and Recreation for the municipality of Mount Forest and was previously employed in the same capacity for the municipalities of Swan River and Rossburn in the province of Manitoba. In total, Rick has 19 years experience in the parks field.

Rick has many outdoor leisure interests, such as fishing and hunting, but would consider golf his favourite recreation activity. He is honoured to be selected as a Director and is looking forward to the challenge of serving on the Board of Directors of the Sports Turf Association. ♦

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CHRISTOPHER MARK The President's Desk



Fall greetings to all members. I hope everyone enjoyed a safe and happy summer both at work and on vacation. I am sure with the extreme drought conditions faced by many of our members, it was a busy June, July, and August.

The STA Field Day held at the GTI on August 17 was a huge success. My thanks to all members and potential members who came out and shared the terrific day. An extra big thanks and appreciation to our suppliers and corporate members who greatly assisted by sponsoring so many of the day's associated costs. Everyone who attended was rewarded with an exceptional list of speakers, a great lunch, and loot bags filled with give-aways. I appreciate the efforts undertaken by Jane Arnett-Rivers, Paul Turner, Michael Bladon, and Lee Huether in planning and co-ordinating the entire day.

We have thorough coverage of the Field Day in this issue, so I'll add only a few comments. It was wonderful to hear keynote speaker Dan Ferrone, President of the Canadian Football

Players' Association, speak so eloquently and forcefully on the importance of promoting natural grass surfaces as opposed to artificial turf to reduce injuries and extend careers of athletes. Ken Mrock, Head Groundskeeper of the Chicago Bears, gave an excellent presentation on the new practice field and facilities he has developed for the NFL club just outside of Chicago. It was great to hear that in the near future Soldier Field will be replaced with a natural turf surface complete with an underground heating system. While we all would drool over Ken's annual maintenance budget, he highlighted many low cost and innovative techniques to improve sports turf. Special thanks to one of our Directors, Harold van Gool, and Plant Products Ltd., who were instrumental in assisting with bringing Ken up from Chicago for the Field Day.

As summer rolls into fall, thoughts turn to finalizing plans for the Ontario Turfgrass Symposium that will be held on January 4-6, 2000. All indications are that it will be another memorable event with yet another great effort by Pam Charbonneau to bring it altogether. Please remember that it is critical that you iden-

tify yourself as an STA member when registering for the OTS. Our Association derives a major portion of our annual revenue from the OTS, hence it is important to tick the box that identifies you as an STA member.

Over the last few months, the OGSA has been requesting a revenue sharing formula change that could adversely affect the STA and other partners of the OTS. I assure you that our voice at the Executive Committee (Dr. Bob Sheard) has clearly articulated our Association's concerns with any changes that will negatively impact the STA. In fact, the STA, through Bob Sheard, has proposed alternative solutions that we feel are fair and equitable for *all* OTS partners. However, we are only one vote around a table of many. Please do your part to assist us and identify yourself as an STA member when you register for the conference. Watch for the brochure coming in the next while and take advantage of the early bird special.

Have a great fall! Best of luck with fall renovation programs. Wishing you better, safer sports turf. ♦

— Christopher Mark



Are You Interested? Soccer Event Raises Thousands

The Owen Sound Minor Soccer Association's Fields of Dreams Walk-a-thon raised more than \$15,000 Saturday at Victoria Park. The money will go toward expanding Owen Sound's newest soccer complex, opened in 1995, from two fields to 11. The five year total is now more than \$60,000. Other activities at the event included a barbecue, a hardest shot contest, and a representative soccer game. ♦

— *The Sun Times, Owen Sound, ON, June 28, 1999*

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SPORTS TURF SPECIALISTS

Western Turf Industry Profile

ROY FORFAR, SPORTS TURF ASSOCIATION DIRECTOR

Identifying a need to heighten public awareness and develop a profile of its membership, the Western Canada Turfgrass Association (WCTA) responded by conducting a detailed industry survey and publishing a summary of its findings. The *British Columbia Turfgrass Industry Profile* is a detailed summary of their research study, intended to strengthen WCTA's public profile, provide a vehicle for sharing best practices, and assist turfgrass managers with strategic planning and decision-making initiatives.

Four focus groups and a cross-section of WCTA members were surveyed capturing responses from a variety of sectors including school districts, parks and recreation, sod producers, and industry-related suppliers.

One key finding that became apparent was the diversity of the industry, from farming to services to private and public sector recreation, all with one common denominator—the production and maintenance of turfgrass.

There also appeared to be a general consensus that there is little public aware-

ness of the industry itself and its challenges.

Although the published results focus on the British Columbia industry, there are ample opportunities to draw comparisons to the turfgrass profile here in Ontario. Specific topics such as management, stewardship, future trends, and community relations are typical to both provinces. The survey findings are a worthwhile read, if only for an understanding of the many components related to successful turfgrass management.

A brief summary and overview of the main survey categories includes:

Management: Over 90% of the respondents agreed that those connected with the industry are better qualified in turf management.

Stewardship: Findings indicate that there is considerable diversity with regards to operational practices and policies.

Membership: Members of the WCTA appear to be well perceived in the turf industry.

Benefits: There are many positive spin-offs provided by WCTA members includ-

ing a growing number of recreation/fitness facilities, the amount of green space being maintained and preserved for public and urban areas, and a number of natural areas being preserved for wildlife habitat.

The *British Columbia Turfgrass Industry Profile* is an easy read, full of beneficial and informative results, perceptions, issues, and challenges that currently affect our industry. Broken down into well-defined subheadings, the book allows readers to quickly identify their area of choice or to engage in findings from the "bigger picture," including member comments and focus group feedback. The book is a stable framework from which one can establish future directions and identify key components to improving and promoting a positive turfgrass management profile within the industry and beyond. ♦

Editor's note: The British Columbia Turfgrass Industry Profile is available from the Western Canada Turfgrass Association, telephone (604) 467-2564, E-mail wcta@dowco.com, for the purchase price of \$12 which includes taxes and shipping.



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SEEDS

Water, Roots, and Turfgrass

DR. BOB SHEARD, PHD, P. AG., CONSULTING AGRONOMIST, GUELPH TURFGRASS INSTITUTE

Research at the Guelph Turfgrass Institute with regard to water use by turfgrass suggests some new ideas about effective turfgrass rooting.

In the classic study "The Underground Organs of Herbage Grasses" by Arthur Troughton of the Welsh Plant Breeding Station, it is reported that the roots of bluegrass or bentgrass mowed at five cm seldom are found below 45 to 60 cm. Any reduction in the mowing height or increase in the frequency of irrigation tends to reduce the depth of rooting. Furthermore, he reports many studies have shown that the root system of grasses is concentrated in the 0 to 10 cm depth. Therefore it would be expected that after a heavy rain or irrigation, the soil would dry out more rapidly at the surface where the concentration of roots are than at lower depths.

This was not found to be the case in studies conducted on the U.S.G.A. designed research green at the GTI. Special moisture measuring devices were inserted at several depths in the sand root zone of the green to allow the moisture content to be measured at hourly and daily periods for 10 days following an irrigation which saturated the sand to the degree the tile lines were flowing. Laboratory measurements had indicated that the sand would stop draining when the retention tension on the water reached 20 mbars and moisture stress would be observed at a tension of 40 mbars.

An example of results obtained in 1996 and 1997 is illustrated in the adjacent figure. The first point to observe is that the free drainage of water had approached the 20 mbar point within 1.5 hours of turning off the irrigation system. Thus air return into the pore space is rapid in this sand system. Wilting was observed at Day 7 when the moisture content fell below the 40 mbar point.

The more significant point is that the water was withdrawn uniformly over the full 30 cm depth of the root zone from the first day onward. The uniformity of withdrawal continued for a 10 day period during which there was no rain or further irrigation. No significant drying of the surface 10 cm before the lower depths oc-

curred as would be expected due to the greater concentration of roots in that zone.

Examination of the root zone indicated that there were roots over the full 30 cm of the root zone. It could be argued that the fewer roots were very efficient in water withdrawal, but this is highly unlikely. The more plausible explanation is that the capillary flow of water in the sand is rapid enough to transmit water to the zone where the majority of roots are located to satisfy the daily water requirements of the grass.

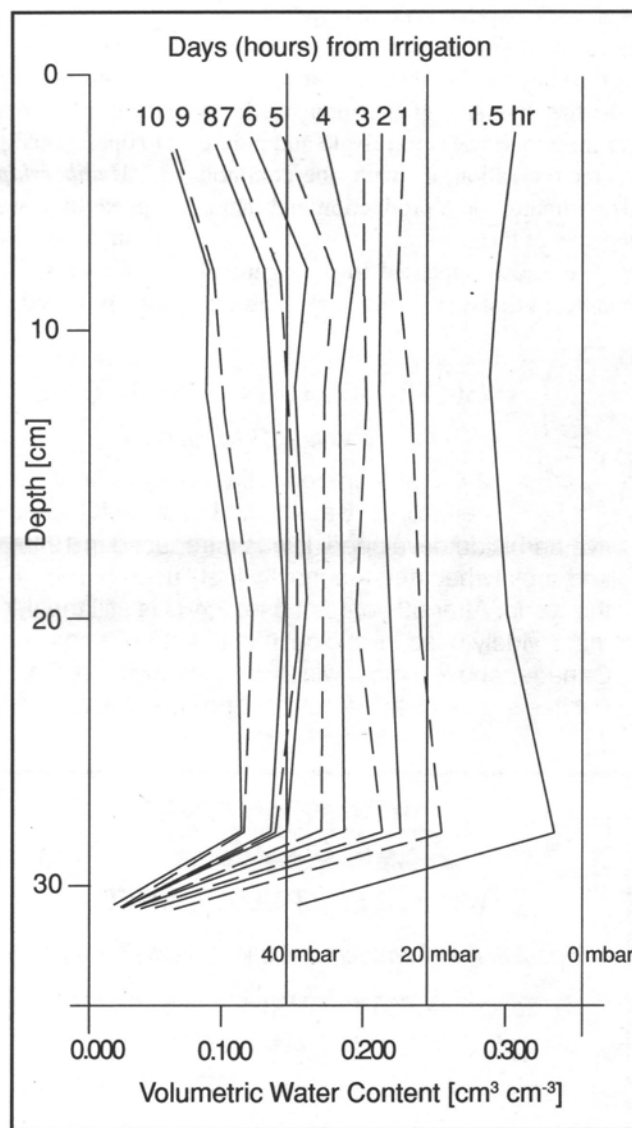
It is known that the nutrients required by the grass—nitrogen, phosphorus, potassium, etc.—must be dissolved in water prior to uptake by the grass. It therefore follows that the nutrients will also be moving upward with capillary flow of water from the lower depths where there are few roots to satisfy the requirements of the grass. Nitrate nitrogen, which can become an environmental hazard if it leaches to the ground water, must, therefore, also be extracted from the root zone in a uniform fashion.

Irrigation at frequent periods may be an erroneous practice. Allowing the profile to dry down to the level of incipient moisture stress may enhance the withdrawal, not only of water stored in the soil, but also of nitrates which may have been leached by frequent irrigation.

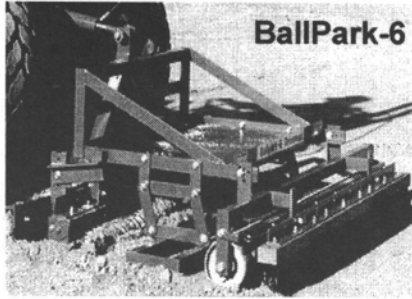
More recent studies on construction site soils (that is sites where the bulldozer has destroyed the normal soil profile) have indicated that water is being withdrawn from depths greater than expected on the basis of where the concentration

of roots are located. Irrigation scheduling based on a water budget procedure indicated moisture stress was not observed when 100% of the available water stored in the upper 15 cm had been consumed. It was only when the water storage in 30 cm of soil was considered that moisture stress was observable when the available water was used.

These studies indicate water movement by capillary flow to roots is an important part of water use by grass. While the root system may be relatively shallow, the zone of water withdrawal is much greater. Irrigation scheduling procedures which recognize this fact are needed to make water and nutrient use more efficient. ♦



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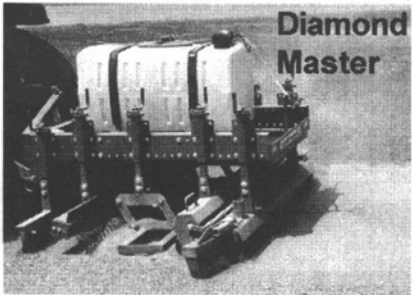


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12th Annual Field Day

MICHAEL BLADON

Cultural Practices for Weed Control

Dr. Chris Hall, a professor at the University of Guelph's Department of Environmental Biology and past Director of the Turfgrass Institute, was the next speaker on the program. Dr. Hall spoke on "Cultural Practices for Weed Control," and talked at length about changes in government thinking and philosophies as they relate to pesticides. Dr. Hall said that while there is not the same pressures for non-chemical weed control there were a few years ago, those same pressures will surface again. He suggested that we have to be pro-active in our dealings with pesticide issues.

First, Dr. Hall pointed out that maintenance is not a trivial task and it differs according to the sport or location. Soccer players want good footing, good ball bounce, and ball roll. Golf, on the other hand, is different. While golfers still require a good ball roll and playability, the course is very much a park-like setting. On highways—a completely different situation—grass performs functions such as cutting down on glare, and along with trees and shrubs, provides some noise reduction. It also helps prevent soil and wind erosion as well as slows runoff, has heat absorption qualities, and provides an area off the main thoroughfare for vehicles. No matter its use, grass recharges the ground water system and contributes to O₂ fixation and O₂ generation.

The key to good weed control is a dense healthy turf which is able to compete for light and temperature and suppress weed germination so they are slow to develop.



Dr. Hall indicated that the key to good weed control is a dense healthy turf which is able to compete for light and temperature and suppress weed germination so they are slow to develop. Negative effects of weeds include poor turf—too much



competition—and increased labour and equipment costs. Furthermore, poor quality turf affords a place for insect and disease organisms to flourish and a haven for weeds which affect allergy sufferers.

Switching to non-chemical weed control, Dr. Hall talked about factors such as competition, the type of weed, turfgrass susceptibility, and cultural methods. For example: Is the area wet? and Does it suffer from salt damage? Some preventatives are proper seed bed preparation and elimination of seed production—many weeds are annuals and one mowing will remove the problem of seed production. Another venue is to exhaust the propagation organs. In the case of quack grass, stolons must be removed in their entirety by raking out or constant cultivation practices of bringing rhizomes to the surface to die. As for proper seeding with the correct species, consult with a turf specialist in your area. (The seeding rate and clean seed are discussed in the June 1999 issue of *Sports Turf Manager*, "The Seed Label," page 12.) The time of seeding is also important, particularly if you do not have irrigation—mid-August to mid-September is best. Dr. Hall then mentioned the advantages and disadvantages of species of Kentucky blue and perennial rye (see the table on the opposite page).

Dr. Hall ended with some final pointers on weed control:

- 1) Sod management—fertilizing, mowing, and watering. It is important that you survey for weeds and avoid scalping.
- 2) Mechanical weed control can be ac-

complished by mowing, tillage, and physical removal.

3) Non-chemical weed control begins with careful selection of species and cultivars. For example, Kentucky Bluegrass is less susceptible to weed invasion. Remember that cultivars of the same species will respond the same. Lastly, improving nitrogen reduces weed invasion in all species.

ORFA Training Opportunities and Partnerships

Next on the program was Jay Kivell. Jay is presently Manager of Parks and Facilities for the City of Guelph. His subject was Ontario Recreational Facilities Association (ORFA) training opportunities and partnerships. Jay heads up the annual professional development program for them. Member services consist of district meetings and the *Facility Forum*, a bi-monthly magazine (soon to be changing to quarterly). They have a facilities library located in Toronto where you may go to do research for newsletter articles, reports, etc. There is also a job search service in place. Regional training in aquatics programs is available for those who maintain pools. Safety training in propane management is also offered. Even if you operate a propane barbecue at work, a certificate is required. An ice making manual is available, plus log books and other texts. If you have a minimum of 30 people, ORFA will hold a propane course at your place of work at a cost of \$60 per person.



ORFA has formed 34 partnerships with organizations such as Algonquin College, Seneca College, the NHL, and several provincial government departments. Each year, training is run at the University of Guelph, in partnership with the Office of Open Learning, in Parks Operations, Parks

Management, and Sports Turf Management and Operations. A new course offering is for Certified Park Technicians. Algonquin College is currently providing a Trainers and Adults Certificate for anyone who is interested in teaching the above courses. Jay invited the Sports Turf Association to be both a partner of the OFRA and to supply some instructors.

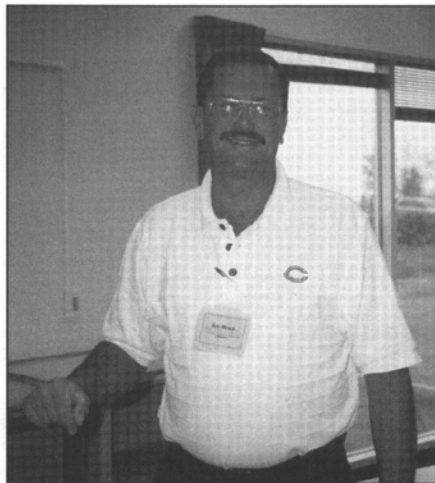
The Bear Facts

Ken Mrock, head groundskeeper for the Chicago Bears, gave both a humorous and informative talk on the difficulties of maintaining fields for football players. He has to contend with all kinds of weather while keeping in mind that many players weigh 300+ pounds and are worth US \$60,000,000 together as a team. Players today are bigger, faster, and stronger. Training camp begins with 90 players and is finally cut to 52. Ken looks forward to this because it means 38 less pairs of cleats chewing up his turf! His first slide showed the NFL logo which he said stands for "not for long" if you don't get the job done! In this business, a top job is expected, but appreciation is hard to come by.

Players today are bigger, faster, and stronger. Training camp begins with 90 players and is finally cut to 52.



Ken then talked about a farm the Bear ownership bought to make a practice facility and to house their headquarters and training facilities. Five acres were zoned for a practice facility. The first step was to remove the topsoil. Then 4" drainage tile was laid 15' apart and filled with



pea gravel to keep out the clay. Next, a well 450-500' deep was drilled into the lake aquifer to make sure they always had water. They used a greens mix of 80% sand, 10% PROFILE, and 10% peat moss (this was mixed off site). He had used this same mix when involved with golf course work and it withstood a terrific amount of wear—they would play 60,000 rounds a year! He also found this type of mix had less disease, greater water holding capacity, and fostered a dense turf. Then, they blended 14,000 yards of the mix and spread it on 6" of pea gravel. Ken felt afterwards that they could have used less growing medium. They also installed a polypropylene pipe to check on O₂ emissions. Results of the tests indicated zero. Following this, on two of the five acres, they installed tubing to heat the soil. Initially, he had set up a small test area suggested by the manufacturer from which he learned a great deal. Ken used this information to avoid what could have been costly mistakes.

They used 14 miles of rubber tubing which was laid on 1' reinforcing rods tied every 15" for stabilization. There were six

Advantages

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Kentucky Blue

- Has rhizomes
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- Low seeding rates

Disadvantages

Perennial Rye

- Variable winter hardiness
- Needs good drainage
- Requires higher seeding rates
- No stolons or rhizomes
- Difficult to mow.
- Susceptible to snow mould and dollar spot

Kentucky Blue

- Poor drought tolerance
- Thatch



stations where the heat was monitored. Starting in October, temperatures were kept at 55°F. Two boilers supplied heat from October to January 2nd. The supplier gave a 30 year guarantee on the tub-



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ing, and when tested, there was only one break, which they replaced. Tubing was filled with propylene/glycol and water to prevent freezing when the system was shut down. (After use in January, the temperature is lowered gradually.) Next, the medium was bridged out over the tubing to prevent damage and laser leveled. Ken then fine graded using a sand rake. He used a piece of Smithco equipment to dimple in the seed. Ken chose all Kentucky Bluegrass blends sown at 6 lbs per 1,000 square feet. The tubing was 8" down in the growing medium, so no problems arose with maintenance such as aeration.

Ken employs several ideas to reduce or change wear. He uses movable goal posts for kickers and puts in grid lines off the field for the linemen. Team practices are three hours, so he marks the fields enabling play to run in two different directions. Further, he talks to the coach to reduce potential communication problems. At Soldier Field, he pre-germinates seed in drums three days before a game, drains the drums on asphalt to let dry, and then spreads on the field prior to the game. Players' cleats then work the seed into the soil for good contact. After the game, he irrigates.

They also have an indoor practice field, erected at a cost of \$7 million, that has only been used four times. Cost of the entire facility to date is \$33 million. Finally, Ken mentioned that Soldier Field will be gutted and a new facility built. Everything will go except for the historical columns. The field itself will also be redone, with completion scheduled for September 2000. The new field will use big rolls of sod already ordered from the sod farm and will be grown on the growing medium mentioned earlier. Play, they hope, will be at either Notre Dame or Northwestern until completion.

Ken then fielded questions from the floor and also on the bus trip to the sod farm, so many more tips and ideas surfaced for the participants. It certainly was worthwhile to bring Ken to Canada again to share his considerable knowledge!

Trip to Compact Sod Farm

Prior to lunch, all suppliers were given a chance to introduce themselves and say something about the products they distribute. Following lunch, all delegates boarded

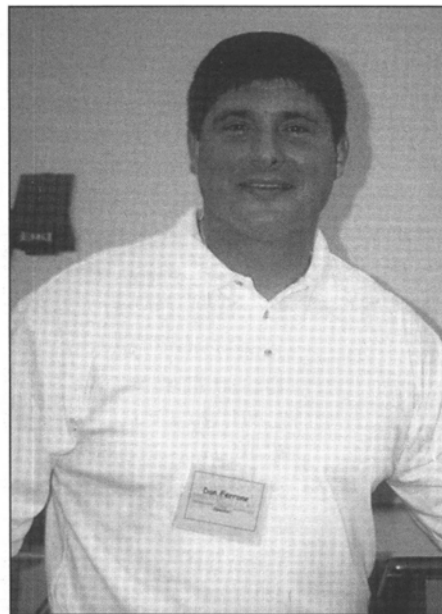


Top: George Bannerman (centre) explaining a new slicer/aerator his company has available.

Above: Ed Robertson of Toro (left) and Gord Dol, Dol Turf Restoration Services (right), displaying turf products:

Left: Keynote speaker Dan Ferrone, former captain of the Toronto Argonauts and current President of the CFL Players' Association.

Opposite page: Ron Schiedel, President of the Green Horizon's Group, welcomes participants to the Compact Sod Farm.



buses and cars to the Green Horizons Group of Farms Ltd., Compact Sod. Ron Schiedel, President, accompanied us and answered questions. At the farm, Ron explained the company business. They grow sod on 3,000 acres between Hamilton and Cambridge. The Green Horizons Group own 500 acres and the rest is leased under various agreements ranging from one to five or more years.

Green Horizons is a family business with a winter staff of 15-20 and approximately 50 seasonal employees. While their market is mostly to homeowners, they also grow corn and soybeans, sell grass seed, and blend their own fertilizers. Some of their sod is exported to New York and Michigan.

The basic operation employed by Green Horizons after a crop has been taken off is to spray with Roundup, plough, disc, rough and fine pick stones, and finally seed. They allow 24 months from seed to harvest and sell 1,000 acres a year which translates into 1 million rolls.

Mowing also is critical. Grass is cut three times a week by 10 staff members



who cut 100 acres per day. Grass is kept at a height of 2-1/2" except in summer when the cutting height is raised to 3". (Bentgrass is mowed at 3/8".) Last year they drilled a well down 450' in order to counteract previous droughts and used large travelling sprinklers which can water an acre at a time.

The company has 120 mowing reels,

15 large trucks, 5-6 smaller trucks for hauling sod, and all the allied farm equipment necessary. In winter, all equipment is refurbished. Bearings are replaced, reels sharpened, and MTC certification is performed on the trucks. The sod harvesters are overhauled.

To end, Ron shared one of the largest jobs he was involved with—removing top-

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The Schmeiser tiller and bedder used at Compact sod farms to cultivate and firm the land area prior to seeding.

soil that was in the way of a subdivision for the City of Cambridge. They used 300 triaxle trucks for two months to haul 5,000 metres of soil onto a 70 acre area and spread it one foot deep. He wanted to mix the clay soil with an existing sandy loam. Quite a project!

Sponsor and Exhibitor Demonstrations

After touring several farms to see various aspects of the sod operation, we listened to and viewed demonstrations by George Bannerman, Vanden Bussche Irrigation, Turf Care Products Canada, Dol Turf Restoration Ltd., and G.C. Duke Equipment. George Bannerman demonstrated a new piece of equipment called a Uni-drill, a slicer-aerator which looks very promising. Andrew Gaydon and his staff had an excellent working irrigation demonstration so delegates could see a complete system. He showed what can be expected from different nozzle sizes and the ease in which they can be interchanged depending on your requirements and water pressure. He also explained pop-ups and how they retract so they are safe on sports fields. He had a pressure gauge on the system and a small controller. It was an excellent hands-on display.

Ed Robertson of Turf Care gave us a run down on three different sized Toro mowing units, as well as introduced himself as one of their newer staff members. Gord Dol had a sample on the back of his truck of his newly acquired "Sportgrass"

(article in June 1999 STM). He has about 60,000 yards of it in stock and mentioned it is excellent for soccer goal mouths and bare centre field areas. Maintenance is the same as for most sports fields. Paul Turner demonstrated a weedkiller unit which uses boiling water. It is manufactured in New Zealand. He sprayed and indicated that the area would be dead in 24 hours. Finally he showed the two latest mowers on the market from Jacobsen with many safety attributes and helpful diagnostic features to aid the mechanic. The day ended with transportation back to the Guelph Turfgrass Institute.

Field Day Evaluation

Overall impression from all evaluations was positive. Topics participants would like to see addressed at future field days include: naturalization, problems and concerns of sports field maintenance at the municipal level, and more information on various seed plants. A number of participants suggested a tour of the University of Guelph campus including gardens, sports fields, and the arboretum. ♦



Mark your calendar now for OTS 2000, January 4-6 at the Regal Constellation Hotel, Toronto. Early bird registration details are on the following page.

Thank-You!

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Speaker Sponsorship

Ken Mrock, head groundskeeper for the Chicago Bears, was presented by PROFILE Products, LLC, Manufacturers of Turface, and PROFILE Soil Amendments & Plant Products Co. Ltd., Distributors.

The Sports Turf Association extends a sincere thank-you to all sponsors and exhibitors who assist in our mission of providing better, safer sports turf.



Rain a Pain for Grass Guru

ENGLISH WEATHER TOUGH ON WIMBLEDON KEEPER

London - Eddie Seaward twists his cheery face into a grimace when a racket is stabbed into Wimbledon's soft turf. And certain players always make the Englishman cringe. "Some are more heavy-footed than others. You've got people who drag their toes when they're serving, dragging little bits of turf from behind the baseline onto the court so it looks untidy."

But what really gets the keeper of the most famous grass in the world is, well, the English weather. "The biggest problem is still the rain," said Seaward, in his 10th year as the head groundsman at the All England Lawn Tennis and Croquet Club. "It's that wonderful thing we have a lot of in England. Rain is the bugbear all the way through the tournament. And the last few have been pretty bad."

Wimbledon is more than its famous Centre Court. It's a complex of 34 tennis lawns—20 for competition and 14 for practice. That's 3-1/4 hectares to cut, seed, and roll—and keep puddle free for two weeks. Seaward works out of a series of sheds and a machinery storehouse beside "Please Keep Off The Grass" signs nuz-

zled alongside Court 11. It's high tech versus the unpredictable English summer.

Lasers level the courts and a machine thumps away testing wear. The soil is scientifically uniform, seed research is ongoing, and the grass is mowed daily to an 8 mm cut. Wimbledon is the theatre and Seaward is the stage manager, working alongside the director—referee Alan Mills. He sports a blazer, gray flannel trousers, and a club tie, but he looks "more at home in waterproofs." He's tense on opening day, exhausted when it's finished, and ever mindful of the critics.

"I'm always glad when the first day is over," said Seaward, who directs a ground staff of 150 during the tournament. "At the end you feel dead. You're absolutely shattered. But while there's a lot of stress, there's also a lot of buzz about the place."

Former top-ranked woman Arantxa Sanchez-Vicario, winner of four tennis Grand Slams but never on grass at Wimbledon, offered a famous quote a decade ago that's been fodder ever since for losing players departing the slick, quick lawns. "Grass is for cows," she said.

Players a few years ago openly criti-

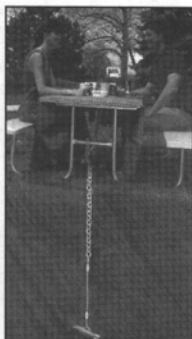
cized Centre Court, which was saturated by rain and smothered by a seemingly never disappearing cover. "You don't like to hear it, but you just get on with the job." Stiff upper lip? "I guess you could say that," Seaward said. Translucent rain covers were introduced a year ago, allowing the grass to be covered for three days with 97% of light still seeping through. Fans were sent to Centre Court and Court 1 to boost air circulation.

The weather may be English, but much of the grass comes from Dutch seed. Wimbledon changed its mix of grasses five years ago, going to 70% rye and 30% fescue and eliminating bent grasses. And the strains are always changing. Another 115 new grasses are being tested, sown in 1 m squares at the Turf Research Institute in northern England.

We want it looking nice and green, but we don't want a lush green grass," Seaward explained. "That would mean too much nitrogen. If we have it too lush, to an amateur gardener it looks very good, but to a professional tennis player it would be too slippery." ♦

—Associated Press, *The Record*, June 18, 1999

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Save more money on the registration fees of others from your facility/organization who are not members of the STA. Non-members registered **at the same time** as a member qualify for the same lower association rates. Send the registration in the same envelope, fax it at the same time, or make just one phone call to register.

Industry News

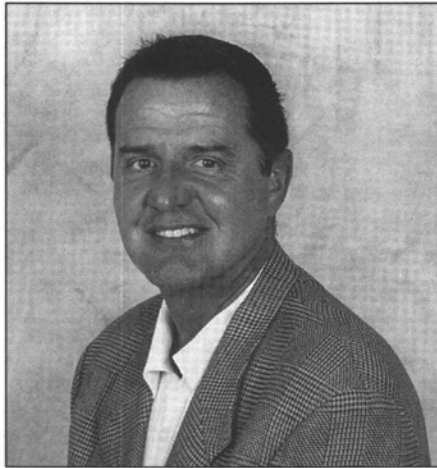
ABT Canada Announces New Appointment

AgriBio Tech, Inc. (ABT) wishes to announce the appointment of Ron Kowalski as General Manager of the combined forage and turf seed business of Rothwell Seeds International and Oseco Inc., which has integrated as a single entity, "ABT Canada."

Currently, Rothwell Seeds Int. and Oseco Inc. service the retail sector: sod growers, landscapers, city and municipal tenders, hydroseeders, golf courses, feed and seed distributors, farm centers, and farm dealers. The two companies distribute exclusively many of the top performing turf and forage varieties available on the market such as: L-93 Bentgrass, 1757 Kentucky Bluegrass, Preakness Kentucky Bluegrass, Raven Kentucky Bluegrass, Imagine Perennial Ryegrass, Palmer III Perennial Ryegrass, Starmaster Alfalfa, Proleaf Alfalfa, Carola Timothy, and Warrior Orchardgrass.

Ron has worked in the forage and turf seed industry for over 22 years and has a vast knowledge and understanding of the industry. Ron has served on a number of boards such as CSTA, ASTA, and Field Seed Institute.

"I am excited about what lies ahead and the challenges this new responsibility is going to bring. ABT Canada is and will



continue to be a major influence in the seed industry," says Ron.

AgriBio Tech, Inc. is a fully integrated, full service seed company specializing in the forage and turfgrass seed sector, complete with research and development of proprietary seed varieties, seed processing plants, and a national and international distribution and sales network. AgriBio-Tech's vision is to lead the turf and forage industry in discovering its value potential.

For additional information, call 1-888-768-4935 or 1-800-668-5080. ♦

Editor's note: Norman Rothwell is an honorary STA life member and OSECO Seed is a founding member of the STA.

Witherspoon New Director of the GTI

MESSAGE FROM DR. ROB McLAUGHLIN, DEAN, ONTARIO AGRICULTURAL COLLEGE

It is with pleasure that I am able to inform you that Mr. Rob Witherspoon has been offered and has accepted the position of Director of the GTI. Rob's appointment is effective July 1, 1999.

After serving as Acting Director of the GTI for several years, both Rob and I are

excited about the new stability, energy, and opportunities this regular full-time appointment will bring to the GTI.

I look forward to all of you working with the "new" Director, and trust that you join me in congratulating Rob on his new appointment. ♦

Did You Know?

The first official weather observation in Canada was taken on Christmas Day in Toronto in 1839 by the British Ordnance Survey. It consisted of two temperature readings at 9:00 a.m. and 3:00 p.m.

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Turf Tip on Backlapping

COURTESY OF JOHN DEERE TURF (WWW.DEERE.COM)

Backlapping is an often repeated maintenance procedure for service technicians. After experimenting with different ways to make the procedure as fast, easy, and efficient as possible, we've developed a simple technique that makes cleanup after backlapping much easier. We use water to wet down the reels and bedknife before applying the backlapping compound.

Despite today's water-based gel-type compounds, cleanup often is difficult. Even the slightest amount of compound that is left on the reels or bedknife can dull the blades that you've just spent time sharpening.

The machines can be washed down prior to backlapping and allowed to dry until just enough moisture remains or, better yet, use a hand sprayer to apply a 50-50 solution of water and ordinary dish soap directly to the reels and bedknife just prior to beginning the backlapping procedure. The water has no effect on the backlapping process itself, either positive or negative. But, once the procedure is completed, the backlapping compound is much easier to remove from the pre-dampened reels and bedknife during cleanup than it is from those that have not been wet down. This simple procedure will help increase reel sharpness and reel seal and bearing life. ♦

— Warren Savini, reprinted from the GTI Advisor,
Vol. 4, No. 10, July 19, 1999

STA New Members

- **Mark Ingwersen**, Manager of Parks, Town of Markham
- **Dru Chillingworth, Rod Norton & Bill Reinhart**
Parks Forepersons, Town of Markham
- **Cameron McKay**, Manager of Operations
Municipality of Leamington
- **Stephen Thuringer**, Groundskeeper
Upper Canada College
- **Kerry Carrothers**, Sales Representative
Dol Turf Restoration Ltd.
- **John Maradin**, C.E.T., Drainage Coordinator
Dol Turf Restoration Ltd.
- **Dwayne Mason**, Operations Coordinator
Dol Turf Restoration Ltd.
- **Mark Hillis**, Team Leader, City of Waterloo
- **Thomas Marshall**, Town of Newmarket
- **Peter Johnston**, Supervisor, Grounds Services
University of Toronto

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GRASS

Saves Your Environment

As world-wide urbanization continues at break-neck speed, man continues to build larger cities covering vast expanses of land. As a consequence, most science fiction foresees our future as a bleak place with barren grimy city streets. However, if you look around, you will find that some of us are working hard to green the concrete jungle.

Any urban architect will tell you that people flock to green spaces. The more green park areas there are in a city, the higher its livability is rated. Science tells us that green spaces aren't just restful and attractive; they also help counter environmental degradation.



The proliferation of concrete and paved areas in a city creates a vast heat island. Turf, along with trees and shrubs, help counter the heat island effect. Every urban grassy area is a vital self-contained ecosystem.

The proliferation of concrete and paved areas in a city creates a vast heat island. Turf, along with trees and shrubs, help counter the heat island effect. Natural grass reflects radiant energy and absorbs visible light helping rest the eyes. Every square foot of living grass releases oxygen during daylight hours, helping to purify the city air. Every grassy area is also a self-contained ecosystem far outweighing any other ecosystem found in the city.

It's not only in our cities that turfgrass is making a difference. Construction in environmentally sensitive areas is often aided by installation of turfgrass sod to halt soil erosion immediately on disturbed land. Turf eliminates water and wind erosion and is a natural filter for pollutants and dust. The beautiful green earth cover also aids in limiting runoff by passing water through the root zone to assist in water regeneration and to recharge our vital water resources. Grass is both a pleasure to look at and a soft, natural carpet to walk and play on. Grass is special. To baseball players, it symbolizes the true spirit of the game. And who can imagine a game of golf without enjoying the relaxing experience of walking on cool, springy natural turf? Whether you are enjoying the outdoors at home or in a park, it's easy to understand why mankind has a love affair with natural turf. ♦

— Manderley Report, Spring 1998

Coming Events

September 25

Ontario Agricultural College Heritage Banquet & Ball
Information: Carla Bradshaw (519) 824-4120 x 6657

November 7-9

The Irrigation Association International Irrigation Show
Orlando, FL, Information: (703) 573-3551

November 7-10

National Institute on Park and Grounds Management 29th Annual Educational Conference, Kansas City, MO, Information: (920) 733-2301

November 9-11

New York State Turfgrass Association Turf and Grounds Exposition
Syracuse, New York, Information: (800) 873-8873

January 4-6, 2000

Ontario Turfgrass Symposium *Tools for 2000*
Toronto, ON, Information: (519) 767-5000

January 4, 2000

Sports Turf Association Annual General Meeting (at OTS 2000)
Information: (519) 763-9431

January 11-13, 2000

Landscape Ontario Congress 2000
Canada's International Horticultural Trade Show & Conference
Toronto, ON, Information: (905) 875-1805

January 12-16, 2000

Sports Turf Managers' Association 11th Annual Conference & Exhibition
St. Louis, MO, Information: (800) 323-3875

January 31-February 25, 2000

University of Guelph - Office of Open Learning - Turf Managers' Short Course, Guelph, ON, Information: (519) 767-5000

February 1, 8, 15, 22 & March 7, 14, 2000

University of Guelph - Office of Open Learning
Pesticide Applicators Certification Exam Preparation Course
Guelph, ON, Information: (519) 767-5000

Visualization

"Almost all world-class athletes and other peak performers are visualizers. They see it; they feel it; they experience it before they actually do it. They begin with the end in mind."

— Stephen Covey

