

EVENTS CALENDAR

March 1-5 — The Canadian Society of Landscape Architects Annual Meeting. "Industry and the Environment. A Positive Approach." Hosted by the Alberta Association of Landscape Architects.

March 26-30 — The Nova Scotia Agricultural College is offering a five-day short course, "Weed and Pest Management for Landscapers". Sherry Carroll at (902) 895-1571, ext. 225

June 20 — 4th Annual Athletic Turf Field Day, Kitchener Auditorium

December 4 — S.T.A. Annual Conference, University of Guelph

Land-Pesticide Symposium
Landscape Ontario - Ontario Golf Superintendents' Association and Ontario Ministry of Environment:

TORONTO — March 12, 1990
Seneca College of Applied Arts and Technology
Minkler Auditorium
1750 Finch Avenue East, Toronto

LONDON — March 13, 1990
Centralia College of Agricultural Technology
Huron Park & Hwy. 4

OTTAWA — March 15, 1990
Recreation Association Centre,
(R.A. Centre)
Riverside Drive, Ottawa

PRESIDENT'S MESSAGE

As president for the next two years, my first task is to acknowledge and thank our immediate past president, Mike Bladon for being our ardent organizer, nurturer, supporter, ambassador and very professional and progressive leader.

It has been through him and his various committee's hard work and long hours that our organization has come so far in such a short time, but we cannot sit back on our laurels now. This Association has many goals and objectives still to accomplish. Some of these are:

1. to continue to increase our membership
2. establishment an executive secretary position
3. finding a permanent Association headquarters
4. increase our funding support for research
5. establishing & operating our bursaries and scholarships
6. Improve our main source of communication — our newsletter to provide more up to date and practical information.

I'm sure with the enthusiasm and dedication shown by our newly elected executive committee we can start to accomplish these goals, that in the end, will help us continue to serve our members better.

One other thing, I would like to personally thank Annette Anderson, OMAF, Turfgrass Extension Specialist for all her time and effort in helping us organize and operate our annual conference and field days.

Lastly, my sincere wishes to each of our members for a successful year.

Bruce Calhoun

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BALL DIAMONDS — Panel Discussion

This panel consisted of Bob Williams from City of Mississauga, Chris Mark from York University and Mike Regan from City of London, P.U.C.

Bob Williams has a big job on his hands. The park system is 4000 acres, has 92 baseball fields and, 170 soccer fields. In 1981 the Parks Dept. successfully changed sports group attitudes in the community. Each field is now rated in cooperation with the group in question. These groups consist of T-Ball, senior baseball, slow pitch and fastball. The City provides a maintenance program for senior baseball tapering to T-Ball. These groups help the city with the field maintenance. There are boxes with tools, markers, etc. at each location. Because of expectations by groups, the city did two things: 1) provided a standards manual — available soon by contacting Bob Williams, 2) produced a "Mississauga Sports Mix" — mixed for them to their specifications by a local gravel company. It is good because it has no sharp particles and brushes off an athlete easily.

Chris Mark at York University has 600 acres of heavy clay and 250 acres are grassed. Baseball and softball are not a big thing at York and football teams play at Esther Shiner Stadium in North York. Problems are over use and lack of funding. Badly infested with weeds for the last three years. He has a 250 gallon boom sprayer with anti-drift nozzles and sprays in early May and September. Also uses Weed-n-feed. Chris applies 4 lbs. of Nitrogen per season in five applications (16-4-4 June, July, August and September) plus a dormant application mid-November. Core cultivation is practiced before fertilizer is applied and the fields crossed in two directions. Grasses consist of 100% Palmer perennial rye and Yorktown II Kentucky blue. Operators have a good

understanding of maintenance practices, including height cut of two inches. And they cut a different way each week. Chris uses a CO₂ line marker with latex paint. He stopped using Roundup because of dished area which resulted, making an extra maintenance headache. Last purchase was a topdresser. Do very little dormant seeding because of poor results. York University, Chris stated, will be relocating their athletic fields in the 1990's. Right now ball diamonds are on the outer fringe away from any buildings.

Mike Regan operates Labatt Park, a beautiful facility which seats 5500 people, for the London Knights Baseball Club. Mike cuts his grass on a grid pattern (checkerboard) using a Turf King triplex mower and uses a Greensaire to do his core cultivation. Other maintenance practices include the use of moist clay for the pitcher's mound which he then covers with wet burlap; if it rains the mound is kept safe. Then burlap is removed before the game and the area topdressed with Turface. Mike showed slides of the home plate where a piece of square tubing attached to the bottom fits into a sleeve in the ground. By loosening material around the plate he can change same in less than five minutes. For batting circles he uses a steel hook which fits on the turf edger affixed to a steel pin in the centre of the circle. He uses Hollywood bases which are pebbled. These are scrubbed with water and brush then given a light coat of latex paint. The field has a 1% slope from home plate to centre field. Because his irrigation system is hand operated he waters continually. Lastly, material is brushed out of grassed infield back on to base paths daily. This means no ridge is left, hence better ball response. A groomer is used, part of which was designed by Mike and the P.U.C.

The 2nd Sports Turf Association Conference

Conference Proceedings

The second S.T.A. conference featured many fine speakers and another first. It was nice to see that another group, the Nursery Sod Growers Association along with the S.T.A. worked in co-operation with the CGSA to hold their own sessions at the Canadian Turfgrass Conference at the Toronto Convention Centre. We need to encourage more of these cooperative efforts with all sectors of the turf industry.

The trade show was excellent. Congratulations to the distributors for the amount of work they put into their exhibits. It should be mandatory that each delegate at a conference go through the exhibit area once.

Another highlight was the presentation of two honorary life memberships to Mr. James Boyce, turf consultant for some 57 years and to Mr. Norman Rothwell, Rothwell Seeds, both founding members of the S.T.A. Association.

At the S.T.A. Annual Meeting Bruce Calhoun of Bannerman was elected president, Peter Kleschnitzki, Town of Oakville vice-president, Bill Harding, City of North York moves to treasurer, Bob Allen, City of Toronto stays on as secretary, Geoffrey Corlett is 1990 Conference Chair and Michael Bladon, University of Guelph, takes on the newsletter, Chris Mark of York University was appointed a director and Stephen Bodsworth, Humber Arboretum, continues his term as director. S.T.A. members approved several amendments to the bylaws and the hiring of an executive secretary.

Mike Bladon, Past President

— 1989 Turfgrass Trial Report —

Now available from Oseco Inc.,
P.O. Box 219, Brampton, Ontario,
L6V 2L2. Facsimilie: (416) 846-6909.

NEWS RELEASE:

TURFGRASS CAMPAIGN OFF TO A FLYING START

The \$1.5 million fundraising campaign for the Guelph Turfgrass Institute, announced at a news conference in Toronto recently, is off to a flying start. George M. (Mac) Frost and his wife Beth, who have owned and operated golf courses in the Toronto area since 1946, have donated \$500,000 to the campaign.

"Such money that is raised by the campaign will provide the institute with a research and information centre that will serve as a focal point for the Canadian turf industry and the public," said Ron Craig, president of the Ontario Turfgrass Research Foundation. "The new centre will provide services to alleviate some of the pressures caused in recent years by the housing boom, increased demand for open park space and more outdoor leisure activities," he said.

Frost said that the donation "is the result of a long-term involvement in turf and greens maintenance and an appreciation of the importance of ecologically sound turf research and practices." Over the years, with the help of partners and his wife, Beth, Frost developed Brookwood Golf Course, Parkview Golf Club and Spring Lakes Golf Course, which was recently sold.

Established in 1987, the Guelph Turfgrass Institute conducts research and extension activities, and supplies information on turfgrass production and management to all sectors of the industry. The centre will house world-class facilities for research and education, policy development, conferences and for public access to publications and computer-reference material. A

computer will link the facility with turfgrass centres around the world.

"Most people take healthy lawns, sports fields and city parks for granted," says Chris Hall, director of the institute. "But environmental concerns about lawn-care chemicals, frequent watering restrictions and increased use of public playground areas demonstrate the need for continued research into new varieties of turfgrass, as well as new production and management techniques."

The Institute is a joint project of the Ontario Turfgrass Research Foundation, the Ontario Ministry of Agriculture and Food and the University of Guelph. Noting Guelph's expertise in the natural sciences and agricultural research, university president Brian Segal expresses satisfaction in "working cooperatively to enhance the turfgrass industry that is so important to our province and our country."

Bill Ingratta, OMAF's program manager for horticulture, says his ministry is pleased with the institute. "We believe we are building a centre of excellence in Canadian turfgrass education and extension."

Recent research carried out by the institute focuses on turfgrass management and renovation, weed control and growth regulation, pesticide residues, soil and nutrition and turfgrass seed production.

For more information contact Ron Craig at 416-836-0988 or Andrea Mudry Fawcett in media relations at Ext. 3839 at the University of Guelph, 519-824-4120.

WATER QUALITY Dr. Nick Christians

Conference Proceedings

Talked about water as being critical to many in the landscape industry. Major expense is the pump and the irrigation system. Poor quality water can be toxic to the soil and plant growth. Quality raises with use. Landscape industry first to be cut off with water bans, considered non-essential. Many areas spend large amounts of money to water every month.

We need to know the chemical and physical properties of soils including particle size, bulk density, porosity and infiltration rates. We need to know chemically the ratio of Phosphorus, Potash, Calcium and Magnesium. Mentioned Cation Exchange Capacity — the ability of soil to absorb cations. Cations are positively charged. The soil has to have the ability to absorb and hold a charge. Many soils require the incorporation of organic matter. Sodium sulphate and gypsum help to restore soils very slowly. Amount of sodium that will accumulate in the soil is dependant on soil type. Dr. Christians also talked about sewage effluent for watering. Costs involved are proximity of material and storage facilities. Often full of heavy metals and other contaminants such as lead, mercury, cadmium, copper and nickel. Boron can be a problem even 1-2 ppm. Turf can tolerate but trees and shrubs are affected at 355 ppm. Ensure adequate testing first and cost estimation before implementation.

Change of Address

Turf Care Products Limited
or
R.M.C. Equipment Limited

200 Pony Drive
Newmarket, Ontario, L3Y7B6
(416) 836-0988

PROPOSED SPORTS DEVELOPMENT CENTRE

King Campus
Dufferin Street North of King Side Road

In May, 1989, Seneca College received authorization from the Provincial Government to proceed with a plan for the development of a Sports Development Centre at the College's King Campus. The College's Board of Governors has authorized the dedication of a portion of this 710-acre campus for the creation of a most unique sports facility that will provide state-of-the-art "hands-on" learning laboratories for participants in many programs offered by the College or organizations that relate to the sports involved.

The College did not request any grant or tax dollars for this purpose but proposes to develop this facility through private sector funding. Because of the nature of the concept itself and the many advantages that will be there for organizations and sponsors involved, the College will proceed on a "partnership" basis.

The facilities are to be of international calibre in design and construction, open to the public and, most important of all, operate on a financial plan that would see the Centre become self-supporting from day one.

The King Campus has already been picked as the official site for Archery should Toronto be successful in its bid to host the 1996 Olympics, and the Sports Development Centre will add a further dimension to the

programs that can be offered at King.

The Centre will encompass the following activities: golf, cross-country skiing, cycling, equestrian activities, field sports including: soccer, field hockey, baseball and archery.

Of special interest is the fact that a consortium of Canadian and American golf course architects have agreed to participate in the design of the golf course itself which will provide students in our Golf Course Technician Program with the opportunity of exposure to a course that will contain elements of design and construction not found at any one site.

While the Centre will provide a teaching facility for students in courses such as Golf Course Technician, Outdoor Recreation Technician, Parks Operation, Recreation Facilities Management, Coaching, Applied Communications and related Business programs, it is also intended to provide a facility and service to the many organizations involved with the sporting activities encompassed in the Centre. Through meetings with virtually every association involved in these sports, training needs have been identified and the Centre, when completed, will endeavour to provide a most unique site for those groups wishing to participate.

NOTICE . . .

Effective January 1, 1990 Otto Pick & Sons Seeds Ltd. has made an official name change to PICKSEED CANADA INC.

This is purely a name change and not a change in ownership.

SORRY . . .

Last issue, we failed to note "Winter Turf Covers—Pros and Cons" courtesy of Turf Notes by Annette Anderson, Turf Extension Specialist, Ontario Ministry of Agriculture and Food.

CONFERENCE HIGHLIGHTS



Annette Anderson, Turf Extension Specialist, O.M.A.F.



Athletic Fields Panel: Bill Harding, Jim Galbraith, Dave Chapman



Dr. John Rogers



Norman Rothwell and wife Mavis



Dr. Nick Christians

Jim Boyce



Dr. Judith Brede



Baseball Fields Panel: Mike Regan, Chris Mark, Bob Williams

POSITION AVAILABLE

CITY OF PRINCE ALBERT

**GOLF COURSE
GREENSKEEPER /
SUPERINTENDENT**

**COOKE MUNICIPAL GOLF
COURSE**

Reporting directly to the Golf Professional/Manager, the golf Greenskeeper/Superintendent is responsible for managing the day-to-day operation of the Cooke Municipal Golf Course. Duties include planning, coordinating, supervising and performing work relating to the construction, maintenance, repair and upgrading of the Golf Course and includes such areas as turf and trees, internal roadways and paths, signage, irrigation systems and programs relating to herbicide, pesticide and fungicide spraying.

Additional responsibilities include the purchasing of supplies and materials used at the Golf Course and assisting in the preparation of annual Golf Course budgets.

Applicants must possess Grade XII, a valid Saskatchewan Driver's License, a valid Pesticide Applicators's Permit and have a minimum of five (5) years experience in the operation of a regulation grass green Golf Course. Preference will be given to candidates who possess a diploma in Horticulture from a two-year technological program at an approved Institute or a University degree in a related discipline.

This is a contract position with an annual employment term from March 15th to November 15th.

Please respond as soon as possible:

Director of Personnel
City of Prince Albert
1084 Central Avenue
Prince Albert, Sask.
S6V 7P3

TROUBLESHOOTING IRRIGATION VALVES

Courtesy of Turf & Recreation

There are many varieties of valves available today, but our discussion is confined to inline remote control valves. Most of these are the balanced-diaphragm type, meaning that valve operation relies on the pressure differential between the upper chamber and the inlet side of the valve. This valve type can be operated electrically or hydraulically.

Locating The Problem:

Valve won't open:

Is this the only valve that won't open? Have you verified that the water is on and that the valve has not been isolated from the mainline by a manual valve?

Have you verified that the system controller is supplying the correct output voltage to the valve? Is there a broken wire

Does the valve you are working on have a flow-adjust stem? Did you make sure the flow-adjust is not shut off? Verify that the flow-adjust stem has not been used to shut the valve off and then not reopened. Check the valve's solenoid area. Make sure to turn off the water supply before removing the solenoid.

Check the actuator (plunger) to verify that it moves freely in the solenoid barrel. Use a small diameter wire to verify that the exhaust fitting is clear. With brass valves, the problem encountered most often is that the male adapter (or nipple) has been over-tightened and has subsequently sealed the exhaust-fitting discharge-port. If this is the case, remove the cover and drill out the exhaust fitting hole in the valve body.

Remove the valve cover and inspect the diaphragm for damage. If it has been damaged, it must be replaced.

Before reassembling the valve, flush it to ensure there is nothing lodged in the inlet chamber. When reassembling, bring the cover bolts down snugly in a criss-cross pattern. Final torquing of the cover bolts must be done using a cross-bolt torque technique to avoid warping or bowing the cover and to clamp the diaphragm evenly.

Valve won't close:

Check the valve for leaks at the cover and solenoid. Will the valve close when the controller reaches the end of its irrigation cycle?

Are you using a master valve? Is the problem in the valve wiring? Either the valve wires are nicked, or the splice connections are bad. If the splice connections are bad, this can cause leakage current (a transmittal of current from one wire to another through the ground), causing the valves to hang on. Find out the short to ground and correct it.

Does the valve have a flow-adjust stem? If so turn the flow-adjust stem down until it contacts the diaphragm. Then turn the flow-adjust stem two more complete turns and stop. Give the valve 15 to 20 seconds to close. If the valve closes on its own at this time, you have cured the problem. What has happened is that the diaphragm has stretched enough so that it has sealed off flush against the cover and is not allowing water to get to the top of the diaphragm.

If the valve does not close within 30 seconds, continue to close the flow-adjust stem until the valve closes or the flow-adjust stem becomes hard to turn. Do not use a wrench on the flow-adjust stem because you will only damage the valve more than it already is damaged.

Check the solenoid area of the valve, making sure the water is turned off

before removing the solenoid. Then check the actuator (plunger) to ensure that it moves freely in the solenoid barrel. Also, check the actuator seat for any debris.

Next, check the exhaust fitting for wear or grooving in the area in which the actuator seats. If the seating area of the exhaust fitting is damaged, replace the fitting.

Next, check the diaphragm for damage. For forward-flow valves ported through the center of the diaphragm, check the screen at the port entry.

For valves that use metering pins, check them for a buildup of minerals or scale and remove any you find.

Flush the valve before reassembling, checking for debris on the inlet side of the valve that may be jamming the diaphragm open. When reassembling, again bring the cover bolts down snugly in a criss-cross pattern.

The troubleshooting steps listed above apply to both brass and plastic valves.

ONE INCH OF RAIN on an acre of ground amounts to 27,154 gallons of water. How is this determined? According to the Du Pont Company, one inch of rain on 43,560 square feet = 6,272,640 cubic inches of water or 3,630 cubic feet. A cubic foot of water weighs 62.4 pounds, so 3,630 cubic feet equals 226,615 pounds or 113¹/₄ short tons. The weight of one gallon of water is 8.3 pounds, so an inch of water equals 27,154 gallons.

SEED PRIMING

Judith Brede, Jacklin Seed gave a most interesting talk on her work with presoaking/priming of some of the grasses. Kentucky bluegrasses are the slowest to germinate and Annual rye the fastest. She stated that presoaking of seed is fine but is very susceptible to damage when planting. Has to be planted right away and into a damp seed bed.

Presoaking with hormone Gibberellic Acid 100 ppm at 77°F using aeration the seed germinates three days sooner.

Priming has long been used in the vegetable industry. It is a treatment where moisture is controlled allowing germination to occur to the seed radical emergence and no further. So the seed can be planted anytime and moisture applied. She has kept primed seed stored for a year. Her experiment involved 50 seeds soaked in Polyethylene Glycol at 60°F. The seed was then rinsed

thoroughly to remove salts then dried and tested for germination. They then tried light with 25% and subjected others to eight hours darkness.

Findings were that seed requires light and high oxygen requirements. Seeds excrete toxins that inhibit germination and standing water is no good either seed will go

***Presoaking of seed
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dormant. Higher germination with air and oxygen. Germination differs between species, varieties and seed lots. Priming advantage — invaded

by pathogens. Final stand much thicker. Glade, Adelphi and Ram I were slowest. Kentucky bluegrass emerged same day as perennial rye. Twice as much Kentucky bluegrass in plots that were primed after three months.

Primed seed was stored at 60°F or below for over one year. Ms. Brede stated that work toward commercialization of primed seed has begun and will include the following: • Laboratory investigation • A small prototype then a larger prototype • Field trials • Building of a large scale primulator capable of processing 10,000 lbs. per week • Field trials already indicate higher seed yields. Problems, however, with variable climate and lack of rain. Priming of seed is considered the most desirable, the idea being to keep the cost down to the consumer. Extremely useful in areas with a short growing season.

We Get Letters . . .

Dear Mike:

I regret that I didn't have more time to spend with you on Tuesday. As you know I had to get back to Ottawa for a trip to hospital on Wednesday. Everything is "A-OK". So I'm in the clear for another six months.

One always thinks of the things that he should have said after a more or less impromptu talk. I know you realize how very much I appreciated receiving the first Honorary Life Membership from S.T.A. but I failed to convey what should have been my most important message and that was my most sincere congratulations to you on the great success of your years as President of the Association and my best wishes for equal success by your successor in the position.

Anything that I can do at any time to help the S.T.A. I will most surely do to the best of my ability.

All the best,
Jim Boyce

P.S. Success seems to be the key word on this page. May you enjoy the best of it in all your endeavours.

Dear Sir,

Why does the association bring in so many speakers for the conference and field days that are from the U.S.? What is wrong with hearing from Canadians working with or under Canadian conditions?

George Hostetler
Hamiota, Man.

Dear George,

We try each time to get as much Canadian content as possible. However, we have to recognize that much of the expertise and research has been done outside Canada. Canada lags behind the U.S., Great Britain, the Netherlands and some of the Scandinavian countries with regard to athletic turf.

If you or any other members out there have suggestions for Canadian speakers please let us know. We would be pleased to contact them and thank you for your comments.

The Editor.

FOURTH ANNUAL ATHLETIC TURF FIELD DAY

JUNE 20, 1990

KITCHENER AUDITORIUM, OTTAWA ST.

- 8:15 – 8:45 a.m. **Registration**
(late registration \$45.00)
- 8:45 – 8:55 a.m. Mr. Bruce Calhoun
President, S.T.A.,
Opening Remarks
- 8:55 – 9:05 a.m. Mr. Fred Graham
Commissioner for Parks, Kitchener
Welcome
- 9:05 – 10:05 a.m. Judith Ferguson-Gockel
Topdressing
- 10:05 – 10:30 a.m. Coffee / Meet with distributors
- 10:30 – 10:45 a.m. Dr. Chris Hall — Guelph Turfgrass Institute
Update on Research 1990
- 10:45 – 12:00 noon Panel — Mr. Allan Downey, Town of Vaughan
Mr. Bob Reynolds, Landscape Planners Ltd.
Design/Construction of Athletic Fields
- 12:00 – 1:15 p.m. Lunch and Exhibits
- 1:15 – 2:05 p.m. **Equipment Show and Exhibits**
(One Piece Demo)
- 2:15 – 2:45 p.m. Dr. Michael Clarfield,
Athletic Injuries
Alan Eagleson Sports Centre
- 2:45 – 3:15 p.m. Judith Ferguson-Gockel
Parameters for Sports Fields
- 3:15 p.m. Coffee



Lundy's Law of Communication



Law Number One: At whatever level you are in an organization, you feel that you tell your subordinates everything they need to know — but you wish that your own supervisor would keep you better informed.

Law Number Two: In whichever department you work, you and your departmental associates wish that the people in other departments would communicate, cooperate, and collaborate with you more.

WELCOME NEW MEMBERS

Phil Lalande
Soil Enrichment Systems
Barrie, Ontario

Brian Sheridan
St. John, New Brunswick

David Huycke
Arnrior, Ontario

Bruce Atkinson
Parks and Recreation
Grimsby, Ontario

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PROPOSED PUBLICATION DATES – 1990

Submission	Publication
Jan. 14	Feb. 14
Mar. 31	Apr. 15
Aug. 17	Aug. 24
Oct. 16	Oct. 30

Production/Design Greg Elliott

