ber 1988 Volume 1 Issue 5

SPORTS TURF NEWSLETTER

PRESIDENT'S MESSAGE

This is our fifth newsletter to you, our members. We would enjoy hearing your comments: Is there a topic you would like to read about in future issues? Are the guidelines to field care useful? Have you a concern you wish to share with our readers? We will help you find a solution. That is what this forum is for!

In the provinces of Manitoba, Saskatchewan and Alberta try adding some of of those turf-type ryes to your mixtures of Kentucky bluegrass and red fescue. While we recognize the shorter growing season, cold winters and many sports fields on dry land conditions these ryes are worth a try. Trials in Manitoba and Saskatchewan indicate varieties such as Blazer All-star, Fiesta, Manhatten II and NK 200 from Northrup King in Minneapolis, have all exhibited good cold tolerance as far north as Edmonton. While somewhat stemmy they are wear tolerant for those heavily scheduled fields and are on a par with the tall fescues for drought tolerance (some varieties).

We need some pioneer sports field managers out there. To quote from the Royal Bank monthly letter entitled "Pioneers are still needed", it states "the key to pioneering and invention is in your hand when you ask, I wonder what would happen if..."

An interesting observation from Bruce Shank on the opinion page of Sports Turf Magazine. The state of Maryland financed a second turfgrass survey in 1987 by the Department of Agriculture which included athletic fields. The survey showed that athletic fields are second in acreage only to home lawns in that state. Ten percent of the maintained turf is athletic fields Golf courses comprise six percent of maintained turf, home lawns constitute 40 percent. Add to this maintenance of grounds around parks and school boards to athletic fields and golf courses you not that 30 percent of the maintained turf in Maryland is done by sports turf managers.

Mr. Shank concludes "we strongly believe that the sports turf manager that is responsible for this tremendous national asset should be well trained, well respected and well compensated" unquote.

We too need good solid numerical data to show the value of athletic fields in Canada. It will require a resourceful team to accomplish the feat. To do this they should heed the words of James Stillman, a former bank president. When asked what interested him most in life, he replied: "It is to plan some piece of work that everybody says cannot possibly be done, and then jump in with both feet and do it."

INSIDE THIS ISSUE

WELCOME!
To Our New Members

Neil Zachary
Superintendent of Grounds
St. Boniface, Manitoba

Bryan Brodie
John Deere Ltd.
Grimsby, Ontario

Ronald M. Craig
President,
RMC Equipment Ltd.

McGill University
P.D.L. Knox
Ste. Anne de Bellevue,
Quebec

Ernest Pecore
Dol Brothers Limited
Cookstown, Ontario

Doug Munn
Superintendent of Parks
Edson, Alberta

Town of Penetanguishene
Penetanguishene, Ontario

Hugh Logan
Director of Culture and Recreation
The Corporation of the City of Chatham

Gary McDonald
New Waterford,
Nova Scotia

Al McNivem
Director, Parks and Recreation
Vernon, B.C.

GENERAL RECOMMENDATIONS FOR WEED CONTROL IN TURFGRASS SWARDS

Dr. J. Christopher Hall
Department of Environmental Biology University of Guelph

1. CULTURAL METHODS FOR WEED CONTROL

In lawns throughout Ontario, the major species of broadleaf weeds are dandelion, plantain, black medick, chickweed, prostrate knotweed, mallow, henbit, ground-ivy, and white clover. The major grassy weeds are crab grass, annual blue grass, quack grass, orchard grass and bent grass. One of the primary ways that a weed-free lawn can be maintained easily, cheaply, and with a minimum of effort, is through an effective lawn maintenance strategy which takes advantage of the vigorous growth of a turfgrass, and therefore is the key to keeping lawn areas free of weeds. Most weeds cannot compete with a dense, healthy turf, so the maintenance of such a stand is of prime importance in producing a weed-free area. Practices that tend to encourage vigorous grass growth will discourage weed infestations. Such practices include proper irrigation and/or drainage, use of fertilizers, insect and disease control, and the use of the correct type of turfgrass for the situation.

Mowing is beneficial because it stimulates bud development and tillering, inducing the sod to become thick and dense. Commonly grown grasses such as the fescues, blue grasses, and turf-type perennial rye grasses should be cut at a height of 4 to 6 cm. If grasses are cut shorter than this, invasion by weeds may occur. Avoid scalping the turf when cutting around trees and flower beds and do not remove more than one-third of the leaf area when mowing. Mowing too often may reduce the carbohydrate reserves of the turf thereby reducing its competitiveness. Thatch can lead to poor grass growth and encroachment of weeds. Mowing can also be used to remove annual weeds and eliminate seed production thereby reducing or preventing the spread of weeds. Mowing can also be used to remove annual weeds and eliminate seed production thereby reducing or preventing the spread of weeds.

Fertilizer is particularly important in establishing a thick, dense and healthy turf sward. Too few nutrients applied to the sod will lead to increased susceptibility to disease and insects and the root system of the turf will not develop leading to an inability of the grass to withstand traffic and recover from injury. Too much fertilizer may lead to soft, weak grass that is prone to disease damage.

Watering is particularly important during periods of drought that may injure, kill or induce dormancy in the turf, thereby allowing weeds to establish. Irrigation should be carried out at weekly intervals with about 3 cm of water per application to help produce deep-rooted turf. Frequent light sprinkling will have the opposite effect on the grass roots. Light water applications encourage the germination and growth of shallow rooted species such as crab grass and creeping bent grass. Too much irrigation water will lead to infestations by yellow nutsedge and annual blue grass. Therefore, it is important to install adequate drainage to ensure that waterlogging does not occur. Remember to provide adequate watering near trees and hedges because they compete for available moisture.

Compaction brought about by excessive traffic will often result in invasion by knotweed and annual blue grass. Aeration practices will help in these situations but the best answer is to modify the area to reduce heavy traffic. Immediate resodding or reseeding of damaged areas will help to discourage weed infestations.

Use of the best turfgrass species for a given situation is very important. For example, fescues are tolerant to low light intensity in shaded areas under trees, whereas turf-type perennial rye grass varieties are quick to establish in newly seeded areas and will crowd out germinating weeds. Kentucky blue grass, although slow to establish, is

very competitive once established.

For further information on these cultural practices see OMAF PUBLICTION #448; LAWNS. If these cultural methods do not prevent weed infestations then herbicide use may be considered.

2. CHEMICAL METHODS FOR WEED CONTROL

Before spraying any herbicide product make sure that your sprayer is properly calibrated. Check the sprayer for proper nozzle and screen type, pressure, nozzle spacing, boom height and spray pattern. Once these things have been checked and set to the proper specifications you should run the sprayer as you would on your turf sward to make sure the correct amount of solution is being delivered per hectare. If you must make minor adjustments adjust the speed at which you spray first, the pressure at which the spray is being delivered secondly, and finally change nozzle type if the first two adjustments do not help. Nozzles should be changed frequently throughout the season since they will wear, especially if wettable powders are being used. The maximum area that can be sprayed before replacing a stainless steel and brass nozzle are only about 600 and 12 hectares, respectively.

Remember, before applying any herbicide read the label instruction carefully at least two times. The two biggest sources of error in achieving good weed control arise from the fact that sprayers are improperly calibrated and the label instructions on the herbicide product are not followed exactly.

Please refer to the Ontario Ministry of Agriculture and Food publications "Guide to Weed Control" (publication #75) and "Weed Control In Lawns and Gardens" (publication #529) for more details on the biology of turf-type weeds, sprayer calibration, and/or the type and doses of herbicides to be used.

2.1 Crabgrass and other annual grasses.

Crabgrass and other annual grass weeds (except annual bluegrass) such as barnyard grass, green foxtail and witch grass can be controlled with preemergence applications of bensulide (11.0 to 16.5 kg ai/ha) and chlorthal-dimethyl (11.6 to 20.3 kg ai/ha). These herbicides must be applied before the grasses germinate in early spring, or in the fall to established turf. Use the higher doses for fall application. Reseeding cannot be done for several months after application of these herbicides. Repeated applications of bensulide and chlorthal-dimethyl will provide annual bluegrass control. Preemergence application of siduron (9.0 to 13.5 kg ai/ha) can be used to control crabgrass. Crabgrass can be controlled in newly seeded areas with 6.8 kg ai/ha of siduron. This cheimcal must be applied after seeding but before emergence of the crabgrass only in early spring.

MSMA is the only herbicide registered for postemergence control of crabgrass. Follow the manufacturer's directions to avoid damage to turf grasses. Several new experimental postemergence herbicides are now being tested for crabgrass control in turf. These products include MON-15126 and fenoxaprop-ethyl (ACCLAIM). Neither of these products are registered for use at this time.

2.2 Broadleaf weed control.

The most common herbicides that are currently registered for use to control broadleaf weeds are 2,4-D, MCPA, mecoprop, and dicamba. Currently registered combinations of herbicides for broadleaf weed control are 2,4-D/mecoprop, 2,4-D/mecoprop/dicamba, 2,4-D/2,4-DP, and 2,4-D/dicamba. Currently, there is no registration that allows the mixing of MCPA with mecoprop, dicamba, or mecoprop and dicamba.

Dandelion, plantain and many other common weeds may be controlled by the application of 2,4-D and may be controlled by the application of 2,4-D amine at 1.12 kg ai/ha. Certain broadleaf weeds such as clover, chickweed, black medick and ground ivy are somewhat tolerant to 2,4-D and may be controlled by spraying mecoprop at 0.84 to 1.12 kg ai/ha. Mixtures of 2,4-D with mecoprop and/or dicamba as well as 2,4-D/2,4-DP are advantageous for broad-spectrum weed control in turf. Dicamba applied alone at 0.6 kg ai/

ha will give excellent control of most broadleaf weeds except plantain. The use of dicamba at such high doses is not recommended in any areas where drift or leaching may affect nearby shrubs, trees, and flowers. Dicamba is best when combined, at low doses, with 2,4-D and/or mecoprop.

In hot and humid weather 2,4-D may cause damage to bentgrass. Mecoprop (0.56 to 0.84 kg ai/ha) should generally be used on bentgrass. However, if mecoprop tolerant weeds have infested bentgrass mixtures of this herbicide with no more than 0.28 kg ai/ha of 2,4-D amine may be used.

MCPA often will provide as good control of dandelion, plantain and many of the weeds 2,4-D will control. There have been reports that MCPA is not quite as good as 2,4-D in controlling dandelion but this usually occurs only under hot and dry weather conditions. Generally if the MCPA dose is increased by 15 to 20% of the dose used to control dandelion with 2,4-D good results will be achieved.

TREASURER'S REPORT

FEES

Yes, a year has passed. Time for renewals fast approaches. Our Executive Committee has suggested renewal notices be circulated now to allow members the opportunity of paying their fees in 1988 fiscal year or delaying to 1989. Our fiscal year ends February 28th, therefore we require payment of this $100.00 prior to that date.

We look forward to your renewal application.

REVENUE

Over the first two years of our Association's existance we have been successful in receiving two grants from the Provincial government. These funds assisted us in our initial set-up, as well as offset costs for our 1st Annual Meeting and Educational Conference. Our application has been received and we understand soon-to-be-approved for funds to assist us in the costs of providing the high calibre speakers at our Field Day.

The Association is greatly appreciative of the Ministry of Tourism and Recreation for these funding opportunities.

THE FUTURE

Our bank balance is sufficient to allow our Association the opportunity of providing a service to our membership. At our last Executive Meeting we approved numerous educational ventures which may draw considerable money initially — as treasurer I trust that this up-front cost will be cost effective and result in future revenue.

My recommendation to the membership at our next Annual General Meeting will be requesting approval for a modest increase in our fee structure. I will report more on this in future issues.

Please do not hesitate to contact me at (416) 392-7261 if you have any questions or concerns regarding the finances of our Association.

Cheers

R.W. (Bob) Allen, Secretary/Treasurer

* * ADVANCE NOTICE **
SPORTS TURF ASSOCIATION CONFERENCE 1989
PLANS ARE IN PROGRESS FOR A DECEMBER 1989 CONFERENCE

SPORTS TURF ASSOCIATION — QUESTIONNAIRE

Over the past several months, we have distributed questionnaires at Field Days, other functions, and with Membership information.

To date we have received 48 completed forms (31 from Parks & Recreation Dept's, 15 from School Boards and Universities, and 2 from Industry and Suppliers to the turf industry). These have been submitted from across Canada and we publish the statistics for your information.

Of the 31 Parks and Recreation Dept's reporting, a total acreage of 27,570 acres is being maintained with 5361 acres of sports turf. This includes 8 stadiums, 2 golf courses, 1 cemetary, 3 lawn bowling facilities, 6 school properties, with the balance being parks, open spaces and boulevards. Total staff to maintain this acreage was reported as 1495 full and part time or 1 employee per 18.4 acres.

Of the 5361 acres of sports turf, 1440 acres were reported as irrigated, representing 27%. Primary types of turfgrass varieties were Kentucky bluegrass, creeping red fescues, perennial ryegrasses, some bentgrasses and some tall fescues utilized mainly in the western provinces. 23 of the 31 municipalities reporting carried out overseeding on sports fields on an annual basis. 28 reported a program of aerating and topdressing. Times fertilized per year ranged from once to as many as seven times, with the majority fertilizing twice a year. We feel this depends on the type of facility, its usage and the availability of funds.

The major problems in maintaining sports turf were listed as (1) overuse and overbooking; (2) use in wet conditions; (3) unauthorized use; (4) costs; (5) compaction; (6) drainage; (7) short growing season (Nfld.); (8) threat of withdrawal of broad leafed herbicides from the marketplace. 25 of the 31 municipalities have a spraying policy for herbicides in effect.

28 reported increased usage of facilities, one reported no increase and two reported decreased usage.

Of the 15 School Boards and Universities reporting (5 school boards, 10 Universities and Colleges) a total acreage of 4200 acres is being maintained with 1238 acres of sports turf. Total staff maintaining this acreage was 171 full and part time or 1 employee per 23.7 acres. 228 acres of the sports turf is irrigated, or 18.4%.

Grass types used are the same as those utilized by the municipalities.

12 of the 15 reporting indicated an overseeding program in effect, with 14 of the 15 aerating and topdressing. Fertilization annually ranged from once to five times with the majority fertilizing twice annually.

Management problems listed in order of importance (1) overuse and overbooking; (2) no irrigation; (3) costs; (4) weed control; (5) compaction; (6) availability of time to do the work.

13 of the 15 school boards and universities reported the use of herbicides.

13 reported increased usage with two staying the same.

* * NEW PUBLICATION * *

"Softball Field And Complex Specification Guide"

This fourth edition — 1988 publication is a guide which has been prepared by the Amateur Softball Association (ASA) Public/Private Complex Committee, with assistance from various organizations.

The purpose of the specification guide is to ensure standardization in the planning and construction of a softball playing field or complex.

With over thirty million participants in softball, it becomes more difficult to secure adequate playing fields that will accommodate this growing quantity.

This guide provides information to those interested in building a better softball playing field, including some of the following items; the playing facility, construction guidelines and a complete listing of essential items i.e. bleachers, backstop, dugouts, etc.

This 40 page booklet offers many suggestions and key components to develop and construct a softball facility and is supported throughout with many illustrations.

Although this booklet is written for the American market, it contains many of the basics which are applicable to our facilities.

Finally, of interest, it is an eye opener to realize that a large number of privately owned softball facilities are now established in America. Could this be a trend coming to Canada? We need only to look at the past development of privately owned indoor racquet facilities to see how lucrative a market this can be. With over thirty million participants, who could resist not developing such facilities? The fact that most municipalities are taking on the "business" approach to operations and maintenance only confirms that better maintained and well operated facilities are in demand by the public sector, to whom we are accountable.

Members interested in obtaining a copy of the above-noted publication can write to:

Amateur Softball Association
28001 N E 50th Street
Oklahoma City, OK 73111 (405) 424-526

Please note, there may be a $6.00 charge, so I suggest you call to confirm. Should you have any further questions pertaining to this information, please call me, Ron Dubyk at (416) 392-2550.

THE GUELPH TURFGRASS INSTITUTE

1st ANNUAL SYMPOSIUM ON TURFGRASS MANAGEMENT FOR PROFESSIONALS IN THE TURFGRASS INDUSTRY

UNIVERSITY OF GUELPH

WEDNESDAY, NOVEMBER 9, 1988 9:00 A.M. – 5:00 P.M.

The FIRST ANNUAL SYMPOSIUM ON TURFGRASS MANAGEMENT is a one-day forum for the exchange of concerns and ideas that will provide productive, cost-effective, practical solutions to the problems associated with the establishment and maintenance of turfgrass in lawns, parks, golf courses, sports fields and sod farms.

This seminar series is designed for golf course managers, lawncare operators, sports turf managers, municipal parks and recreation personnel, cemetary managers and others in the commercial turfgrass industry.

Participants may select two half-day seminar sessions from the eight concurrent sessions that will be offered by specialists from Canada and the United States:

- Developing a Turfgrass Fertility Program
- The Use and Misuse of Turfgrass Species and Varieties
- Construction and Management of Sports Fields
- Pesticide Safety and Handling
- Options for Turfgrass Site Establishment and Renovation
- Diagnosis and Management of Turfgrass Insect Pests
- Diagnosis and Management of Turfgrass Diseases
- Computers in the Turfgrass Industry

Registration Fee is $110.00* (includes two sessions, lunch and refreshments.

ENROLMENT IS LIMITED. EARLY REGISTRATION IS ENCOURAGED TO GUARANTEE ACCEPTANCE IN THE SESSION OF YOUR CHOICE.

For more information contact:

DIVISION OF CONTINUING EDUCATION
ROOM 160, JOHNSON HALL
UNIVERSITY OF GUELPH
GUELPH, ONTARIO, CANADA
(519) 824-4120 Ext. 3956

*Your registration fee includes a $50.00 donation to the Buildinng Fund for the Guelph Turfgrass Institute. A receipt in this amount will be issued by the Ontario Turfgrass Research Foundation.

Sponsored by The Guelph Turfgrass Institute, The Ontario Agricultural College and the Division of Continuing Education, University of Guelph, and the Ontario Ministry of Agriculture and Food.

The 1st Annual Symposium on Turfgrass Management

PROGRAM

(One Morning and One Afternoon Session to be Selected)

MORNING SESSIONS

09:00 - 12:00

1. **Developing a Turfgrass Fertility Program**
   Dr. D. Waddington, Professor of Soil Science, Penn State University.
   In this comprehensive session, discussion will focus upon such topics as the design of soil fertility programs to coincide with the growth and development of northern turfgrass, the pros and cons of dormant fertilization, and the interpretation of soil test reports.

2. **The Use and Misuse of Turfgrass Species and Varieties.**
   Dr. Richard Skogley, Professor of Turfgrass Management, University of Rhode Island.
   Consideration will be given to the strengths and weaknesses of the major species of northern turfgrasses,the importance of mixing species and blending varieties for use on golf courses, sports fields, parks and home lawns, and the influence of species selection and variety on the success of turf management practices such as overseeding.

3. **Construction and Management of Athletic Fields.**
   Dr. Lee Burpee, The Guelph Turfgrass Institute and Associate Professor of Plant Biology, University of Guelph.
   Consideration will be given to the building of a sports field from the "bottom up". Topics include material selection, construction costs, drainage, irrigation, the rootzone, turf establishment, and finally, the development of a turf management program for low, medium and high use sports fields.

4. **Computers in the Turfgrass Industry.**
   Annette Anderson, Turfgrass Extension Specialist, Ontario Ministry of Agriculture and Food.
   Computers are acquiring increasing importance in the turf industry, as management tools and in operations such as irrigation systems. This session is designed to acquaint participants with the benefits of and features of the most popular and up-to-date software and hardware available to the turf industry. Topics include cost and selection of systems and software. Participants will benefit from lectures and microcomputer demonstrations. (Limited enrolment.)

AFTERNOON SESSIONS

14:00 - 17:00

5. **Options for Turfgrass Site Establishment and Renovation.**
   Dr. Jack Eggens, The Guelph Turfgrass Institute and Professor of Turfgrass Management, University of Guelph.
   This session will provide an overview of the concepts and methods for turfgrass establishment or renovation projects on home lawns, golf courses, sod farms, parks and highways. Factors to be stressed include site preparation, seeding methods and timing.

6. **Diagnosis and Management of Turfgrass Insect Pests**
   Dr. Mark Sears, The Guelph Turfgrass Institute and Associate Professor of Entomology, University of Guelph.
   This is a practical session for turf managers in the lawn care and golf course industry. Topics include field diagnosis and control of common insect pests in northern turfgrasses, and the selection and timing of insecticide application.

7. **Diagnosis and Management of Turfgrass Diseases**
   Dr. Lee Burpee, The Guelph Turfgrass Institute and Associate Professor, Plant Biology, University of Guelph.
   Discussion will focus upon practical techniques for diagnosing turfgrass diseases under field conditions as well as methods for integrated disease management. Emphasis will be placed on import- and diseases facing lawn care specialists, golf course superintendents and sports turf managers.

8. **Pesticide Safety and Handling**
   Annette Anderson, Turfgrass Extension Specialist, Ontario Ministry of Agriculture and Food and Dr. Christopher Hall, The Guelph Turfgrass Institute and Assistant Professor of Weed Science, University of Guelph.
   This session is designed to teach the turfgrass manager how to deal with increased public concern over the use and misuse of pesticides through discussions and demonstration of pesticide products and equipment for the turf industry. Topics include toxicity, protective equipment, mixing and handling procedures, storage, sprayer and spreader calibration, emergency procedures and the development of a pesticide safety program.

PICKSEED FIELD DAY

This particular field day attracted 115 delegates to a worthwhile, educational experience. Many of the delegates in attendance represented school boards and various parks departments and were first addressed by Ernie Pecore of Dol Brothers concerning product information, plus the support service provided for sports field re-establishment and maintenance, in conjunction with Pickseed.

Ernie demonstrated, later on, the effects that aerification and overseeding have on sports turf.

Annette Anderson, Turf Specialist with O.M.A.F. and the Guelph Turfgrass Institute, presented a short talk on her role, plus drought problems experienced in certain areas of Ontario and how to deal with them.

Norm McCollum gave an enlightening talk on the turf grass evaluation he is doing at the Cambridge Research Station, also the biological control research on dandelions which has now been approved for use. Norm talked about some of the herbicides that Dr. Chris Hall has found useful, particularly those specific to different types of grasses. He also spoke about coping with drought-related stress on sports fields.

Dr. Gerry Pepin, Head of Research for Pickseed West, in Oregon gave a very informative presentation of on production and evaluation of turfgrasses he is currently working with. In particular, dwarf varieties of bluegrass are showing good colour and development potential. Dr. Pepin continued about the fine leaf fescues and the low nutrient requirements, especially under drought stress conditions.

The final speaker of the morning, Doug McMillan, Sales Manager, Turf Division for Pickseed, discussed the many different types of varieties available to the sports turf industry, park operations and some homeowner applications.

The afternoon session commenced with a tour of the Pheasant Run Golf Club to view the course under construction. The group then proceeded to look at one of the Smilsky Sod farms. It was a beautiful sight, to behold such a lush green stand of sod sown with four varieties of bluegrass last August. The high nutrient program, including winter application produced a pure, totally weed free turf. The sod harvesters were in operation — most impressive.

Lastly was a visit to Dol Brothers production plant where Verdyol mulch and "grow" blankets are fabricated.

The day concluded with an excellent meal at the Nottawasaga Inn. Much information was obtained during a panel discussion and Pickseed are to be commended on this outstanding presentation.

ROLES OF SPORTS TURF ASSOCIATION DIRECTORS

Chair, Finance and Fundraising — R. Allen

To develop and implement a long-range financial strategy.

Chair, Membership and Nominations — G. Corlett

To develop an annual recruitment and renewal plan.
To establish and operate a nomination process for the Board of Directors.

Chair, By-Laws — J. Watson

To provide sound and consistent organizational practices by assuring compliance to by-laws and preparing motions for amendments.

Chair, Informational Services — R. Dubyk

To develop and direct an information management system for collection and dissemination.

Chair, Education and Research — P. Kleschnitzki

To develop a program for promotion and facilitation of education and research.
To liaise with educational institutions and research projects.

Chair, Co-operative Initiatives — W. Harding

To ensure a policy of co-operation and to actively seek participation in mutually beneficial events and projects of other turf-related organizations.

President — M. Bladon

A Final Note:

We sincerely hope that you have enjoyed this issue of the Sports Turf Association Newsletter.

We invite comments and suggestions for future articles from all of our members.

Write to the following address:

Sports Turf Association
185 Edinburgh Road South
Guelph, Ontario
N1G 2H8

or call: Ron Dubyk — 392-2550