

President's Message (cont'd)

ing forward many of the Associations most important projects such as the Athletic Field Managers Guide for Construction and Maintenance, and a Three (3) volume turf management videotapes on Grass Selection, Cultural Practices, and Weed control. These books and videotapes have become well accepted within the turf industry and various horticultural institutions.

Another momentous event was the decision to join other turf organizations in coming together to develop the Ontario Turfgrass Symposium. Since its inception the STA has been a large contributor and supporter of this turf conference which has become one of the finest of its kind.

Throughout the first 10 years the STA has taken the opportunity to recognize the contributions of people to not only the Association, but the turf industry. We have presented 3 Honourary Life Memberships: Jim Boyce, Norman Rothwell and Clay Switzer. Each of these distinguished gentlemen have made enormous contributions to the turf industry and demonstrated tremendous support for the STA and our goals.

In October 1993 the STA officially recognized the need to institute an educational scholarship program in the amount of \$200 which is awarded annually to the student with the highest proficiency in sports turf related courses at the U. of Guelph Turf managers Short Course. As we embark on our second decade, the STA has announced it will further offer another educational scholarship to the student with the highest overall mark in the turf management option of the Ontario Diploma in Horticulture program.

In January 1994 the STA took a large step forward and moved its office into the Guelph Turfgrass Institute which allowed the Association to reside at the centre of turf research in Ontario for the benefit of our members and demonstrate our support for the GTI. January 1995 witnessed the hiring of our second Executive Secretary Sonja Schneider who has greatly enhanced the day to day operation of the Association.

The STA has always shown a commitment to disseminating information re-

lated to the practical aspects of the care and improvement of athletic fields. We have remained focused on trying to convey hands-on information to front-line people. We have always tried to reach the person on the tractor operating the top-dresser, overseeder or core aerifier. We have to ensure our information gets to the lead hands, equipment operators, and out of the Directors in-basket.

It has been quite a journey as we enter our 10th year of service. We have serious challenges and cannot rest on our laurels for a single minute. Our Directors are finding it an increasing challenge to strike a balance in spending time on Association business and facing additional pressures at their places of employment and family responsibilities. We need to strive for good representation from across the industry on our Board. How will municipal amalgamation affect the Association? Our strategic plan Toward 2000, as well as our Field Managers Guide and videotape series require updating. We need to continue spreading the words of better, safer sports turf. Finally we must continue to ensure the person paying the annual membership dues feels he/she is receiving value for their investment.

A large vote of thanks is extended to all our past Presidents, and members of the Executive. Thank you for your hard work and leadership.

Last but not least a huge thank you to our industry representatives who have been big supporters of the STA from its inception. Space does not permit listing all of them, but they know who they are. Our industry colleagues have always been there for us and assisted in field days, conferences, our newsletter and participated as members of the Executive. They are a valued and integral part of our Association and the turf industry. To all of them we owe a large amount of gratitude.

We have enjoyed a wonderful 10 years and the future is bright. The opportunities and possibilities for this Association are great, and I am confident that together we will face the challenges head-on for the benefit of our members and the turf industry.

Wishing you better, safer sports turf

Christopher Mark



STA President Chris Mark, left, presents a \$200 Scholarship to Stuart Roberts of Etobicoke Parks.

STA Announces Scholarship Winners

The Sports Turf Association is pleased to announce the 1996 educational scholarships have been awarded to Stuart Roberts and Kim Nihls. Each year the STA makes available a \$200 scholarship, and 1 year free membership to the student who achieves the highest proficiency in sports turf related courses at the Turf Managers Short Course held each February at the University of Guelph. The award is based on the students' standing in three of the courses, Soils and Nutrition, Turf Management, and Herbicides. STA President Chris Mark was honoured to make the presentation at the 10th Anniversary Dinner on January 7, 1997. In 1996 two Turf Managers' Short Courses were held, hence the STA awarded two scholarships.

The Sports Turf Association congratulates both these gentlemen on their outstanding achievements and wish them much success in all future endeavours.

STA Furthers Commitment to Education

The Sports Turf Association has extended its commitment to education by announcing that beginning in 1997, the STA will award a \$200 scholarship, along with 1 year paid membership to the student achieving the highest overall mark in the Ontario Diploma in Horticulture (ODH) Turf Management option. Approval of the scholarship award occurred at the November 14, 1996 Board of Directors meeting.

Graduates exiting the program are, for the most part already employed in their field of study. Some students study a different field to broaden the scope of their knowledge, while others gain more in-depth knowledge in their particular area of expertise. The ODH program is certainly well respected in the turf industry and the STA is pleased to assist students participating in the program which is offered through correspondence from the University of Guelph.

EDITORIAL



Forgetfulness, disinterestedness, procrastination, budget uncertainty; there are many reasons given why dues to an organization are not paid on time. Failure to pay dues on time adds to the operating costs of the organization through repeated invoices, phone calls and in some cases the need for short term loans.

The added costs may result in increased dues, so the delinquent member starts a cycle which affects all members of the organization.

Although the fiscal year of the Sports Turf Association commences January 1 of the calendar year, the executive realizes many members are employees of institutions where the fiscal year begins April 1. Thus you will shortly be receiving your first invoice. When you receive your invoice, think of the following verse:

*O blest is he who does not fuss
When he receives a bill from us
But promptly sends in the amount
Wherein to balance his account.
But doubly blest is that good friend
Who waits not 'til a bill we send,
But knowing well his dues are due,
Sends in his money to renew.*

- Bob Sheard

STA Welcomes Andrew Gaydon to Board of Directors

It is with sincere pleasure the Sports Turf Association welcomes Mr. Andrew Gaydon to the Board of Directors. Andrew brings to the Association a wealth of knowledge and experience, particularly in the area of irrigation. Watch for a profile on Andrew in our June issue of *Sports Turf Manager*.

GUEST EDITORIAL

Congratulations on the 10th anniversary of the Sports Turf Association

Congratulations on the 10th anniversary of the Sports Turf Association. It is also the 10th anniversary for OMA-FRA turf extension services, and I have enjoyed reminiscing about the activities that have been undertaken in partnership with the Sports Turf Association (STA).

To all the dedicated members and directors who were involved in the formation and evolution of the STA this is a very significant milestone. The STA has become recognized in Ontario and elsewhere for promoting better, safer sports turf. As my son will soon be old enough to play soccer I now also have a personal appreciation for that fact!

In the early years of the STA there were some fairly typical challenges of getting an organization off the ground. I still have flashbacks about the long discussions on by-laws and constitutions! Had it not been for the diligence of its founders, it is doubtful that the idea of an association would have taken hold.

The success of the Sports Turf Association has been impressive. The annual Field Day has provided an opportunity for sports turf managers from across the province to deal with the practical aspects of maintaining sports turf. The newsletter provides quality information unique to the interests of this sector of the turf industry. As a founding sponsor of the Ontario Turfgrass Symposium, the Association has made a significant contribution to an educational program tailored to the specific needs and issues of municipalities, universities and schools. Much of this has happened due to the passion of Dr. Bob Sheard, and the dedication of the Board of Directors past and present.

In an age when information comes to us from so many sources, cynics may question the need for associations. I would propose however, that now more than ever there is a critical need for organizations such as the STA. It is not just the amount of information, but finding the most appropriate information for Ontario conditions. When issues surface that affect all sports turf managers it is invaluable to have an advocate that helps provide representation on behalf of the entire industry either as a single organization or in conjunction with other partner organizations. The opportunities to fund research, scholarships and promote the overall profile of the industry are also positive objectives of this association.

Where will the Sports Turf Association be in the next ten years? It is difficult to predict. However, I would anticipate that in the not too distant future, there will be an interest in seeing sports turf information on the Internet. Can't you picture it - the "virtual sports field".....

The STA has not only helped build a better knowledge base, but has also contributed to developing the leadership skills of the many people that have been involved in the association for the past decade.

Certainly one challenge for the STA as for most organizations will be to continue to build the leadership skills within its membership and maintain the involvement of members.

Spend a few minutes today thinking about what you have learned in the last 10 years about turf management. It is likely that in some way the STA has helped you somewhere along the way.

Best wishes to the association and keep up the great work in promoting better, safer sports turf.

Sincerely,

Annette Anderson

Program Manager,
Greenhouse, Agroforestry & Specialty Crops
Ontario Ministry of Agriculture, Food & Rural Affairs

*People who cannot find time for recreation
are obliged sooner or later to find time for
illness.*

- John Wanamaker

DID YOU KNOW?

Blind Lawn Bowling

(From *The Record*, Feb. 7, 1997)

The lawn bowling that Norm Green took up to 'get him out of the house' is about to take him and his coach half-way around the world. Green, a lifelong sportsman, whose balance and delivery made him a Canadian champion blind lawn bowler, and Hackbart, a volunteer coach with the eyes and strategy to make things happen, are leaving for New Zealand Feb. 26 for the World Championships. Green and Hackbart combined to win a gold medal in Moncton, NB, in the rain-soaked Canadian Championships in September to qualify for the team that will represent Canada in the World Championships in Hamilton, New Zealand, in round robin competition against nine bowlers from March 3-14, 1997. "I took up lawn bowling to get out of the house", Green said in an interview while training at the Manulife Soccer and Sports Centre in Waterloo's Bechtel Park. At the time, he needed to find new activities after the injuries he sustained in an 18-foot fall from a catwalk at Seagram's Distilleries left him totally blind in his left eye and with just 5 percent vision in his right eye. Blind lawn bowling is a game in which the bowler is guided not by sound, but by the advice of a sighted coach standing behind him. And Green, a 52-year old former millright, who lives in St. Clements and plays in Elmira, has Hackbart, a 68-year old retired insurance adjuster from Kitchener, reading the lie of the greens and looking for weaknesses in the opposition. "We are a team", Green said. "He'll tell me what to do, it's up to me to fulfill it". Hackbart's work as a volunteer with the blind goes back 40 years. His wife Margaret, has been partially blind all her life. "I am glad to have Clayt as a coach", said Green, who adds, "Whatever handicap you have, there are activities out there for you". Expenses for their trip to New Zealand are expected to reach \$7000.



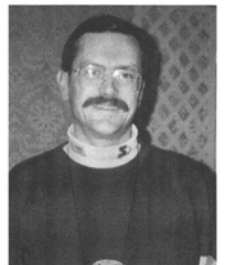
STA Board Members met at the Ontario Turf Grass Symposium in January. Standing left to right are Andrew Gaydon, Dave Smith, Jane Arnett-Rivers, Everett Nieuwkoop, Harold Van Gool and Don Bridgman. Seated are Sonja Schneider, STA Executive Secretary and Chris Mark, President.



The Sports Turf Association display at the Ontario Turf Grass Symposium.



Dr. Steve Baker (left), of the Sports Turf Research Institute in England was a guest speaker at the Ontario Turfgrass Symposium. He is seen here with Rob Witherspoon, Director of the Guelph Turfgrass Institute.



Guest Speakers at the Turfgrass Symposium included (top to bottom): Sean Gault, Grounds Superintendent of Woodbine Race Track; Dwayne McCallister of Oakville Parks and Ken Mrock, Grounds Supt. for the Chicago Bears.

Ontario Turf Grass Symposium 1997 Highlights

Where else in Canada can you listen to Ron McLean, Ken Mrock, Pam Charbonneau, Dr. Steve Bowley, Dr. Jack Eggens, Peter Barrow, Dr. Steve Baker for only \$200.00. Where else for \$200.00 can you see all the equipment you would want to, hear all the Don Cherry jokes you would want to, learn to diagnose those cryptic turf problems, hear how a soccer ball should bounce when dropped from 3 metres, how to organise and service your customers better, the best base for Woodbine race track, and how to infuse money into the 'Special Events Budget'.

It was three days full of networking and education. As a supervisor I am delighted when staff attends. I know our department will gain from what they learned, heard, and overheard. In 6 years of attending the Symposium I have learned so much. Whether they're someone else's tricks of the trade, or new ways to squeeze more out of the Nitrogen, simply by altering the application date, it was another outstanding Symposium. Here are a few of my highlights:

Not being a hockey fan, I thoroughly enjoyed Ron McLean's address. He was very gracious when he acknowledged the gathering of speakers, and the success of the Guelph Turfgrass Institute (GTI). Not only was he entertaining but also started the Symposium on a very upbeat and dynamic note.

"Innovative Sports Turf Tips" was a fabulous session.

Both Mike Regan and Dwayne McAllister threw out tips I wish I had known 5 years ago. Dwayne's talk was directed at

attaining a professional sports field or diamond whatever equipment you have available.

Mike Regan handed out copies of *The Progressive Groundskeeper* by Floyd Perry Jr.

Instead of maintaining problems, correct them. If drainage in a certain area of a surface is haunting you, and you can't have drainage tile installed there are inexpensive quick fixes. Auger a 6" hole down 2' (or below the hard pan) and fill with sand. This will drain a small area. An even quicker fix is Turface. But don't broom it, you'll spread the water and possibly create a lip, rake it instead.

If you're not getting the maximum tine penetration when aerating, let some air out of the tires on your aerator which lowers the entire unit. Mow your lines a quarter inch shorter than the rest of the field, it will extend their life a few extra days.

Use a sod cutter, or hand edger to keep turf edges neat, and weeds off ball diamonds and warning tracks.

Are lips on ball diamonds making you work too hard in the fall? Try these two tips: Use a broom attachment every second week at the edge of the infield to brush back the infield mix. Mike Regan also suggested pinching a copper nozzle to increase water pressure and hose back the infield mix from the turf. If you still have a lip in the fall, and your turf is worth saving, lift it with a sod cutter, lower the grade as far back as necessary, and replace the sod. Mike uses poly tarps in the front of his batting cage. Mentioned that Turface is \$67.00/40 lb bag - so use sparingly. When topdressing use the existing soil.

Sean Gault: Woodbine Race Track - One Year After

This was a fascinating lecture about the redesign of Woodbine Race Track. 3 tracks of different lengths were finally built - one for standardbreds, and two for thoroughbreds. Three people were involved with the consulting: Dr. Bob Sheard, Dr. Jack Eggens and Engineer Peter McCallery. A test area was built, two different sands were used plus simulated rainfall. The track had to be stable enough to support a 14-stall gate weighing 10 tons. The impact on the horses leg is explicit to the bulk density of the mate-

rial. Lastly the turf has to have a reasonable resistance to shearing from the horses hooves.

All the construction was completed in eight months including relocation of irrigation systems, drainage systems, tunnels and removal of the apron in front of the grandstand. (All water is reclaimed from the stables for irrigation). See the article in March 1995, *Sports Turf Manager* 'Turf for the Sport of Kings' by Dr. R.W. Sheard, for more technical information.

Ken Mrock and the Chicago Bears Football Field

Ken Mrock (Grounds Superintendent, Chicago Bears), was full of stories, which to most in the room were dreams come true. How about having a heated football field? He revealed some of the tricks he keeps up his sleeve that keep coaches and himself smiling.

One of the biggest challenges Ken has, as do we all, is keeping the players off the field as much as possible. He keeps a grid pattern painted for the linemen so they can practise - off the field. He has mobile posts that can be set up anywhere. They are also smaller, requested that way by the coaches. Again this keeps practises off the field. He paints a second field perpendicular to the main, to minimise consistent wear on hash marks. Keeping a second set of lines, painted in orange, three feet inside the official white lines enables receivers to practise sideline catches, and saves the sideline turf. So starting at 'what could Ken's job possibly have in common with mine' ended up at 'what a great idea, I'll try it next year', and throw in my own variations.

Adding Competitive Value with Effective Customer Relations was a very informative session

Peter Barrow shared experiences and view points on how to improve your service, whatever it is. It's interesting to note that the audience represented all segments of the turf industry.

Value can mean many different things, whether it's holding the price (taxes?) and increasing the benefits, or holding the benefits and decreasing the price (everyone's' budgets). How about increasing the benefits and the price (worthwhile for some customers) or decreasing the benefits and the price (desirable for others).

The option we all strive for is to increase the benefits and decrease the price. Service seemed to be the common analogy through all, know your customer, so you can serve them.

Turn unknown prospects into known. Change creativity driven to response driven. Concentrate on filling each niche as opposed to 'steam rolling' the market with advertising. Involve your customers in the decisions. They are not necessarily passive, dialogue will beat out advertising monologue every time. Peter referred to it as 'The Great Marketing Turnaround'.

To service the customer you must know the customer. Know the mind is not fooled by 'fly-by-nights'. The eyes are always looking for a better deal. They see your logo, uniforms, signage, dirty vehicles. The mouth spreads your reputation. The heart looks for a service relationship. The guts hold true feelings and the hands count the numbers and the reasons for returning. Most importantly, the feet will walk quickly for a better deal.

Organise your customers on the loyalty ladder, suspects to prospects to customers. Then organise customers (once in a while service) or clients (consistent service) and advocates/champions (the ones which are clients and give referrals). Recognise the categories, and move persons up systematically.

Word of mouth marketing - what we - say, what we - do, what other - say, what others - do.

The 3 'A's of marketing are:

1. Anticipate customers needs.
2. Stay Ahead of customer.
3. Act. 3-33 Rule: For every three who say something good about your business, 33 others may not say anything at all. Work on the 33.

On Wednesday afternoon, it was a discussion on Special Events — Everyone's turf horror.

To quote Peter Booker, 'I'd rather have grubs than a festival on my turf'. He and Lynn Powell devised a manual to guide both event organisers and Municipal Departments through the budget, staff, and repair challenges. Often organisers don't realise what they are up against — permits which cover departments from Transit to Building to By-Law to Parking to Ontario Hydro to Health Departments. There are

'I'd rather have grubs than a festival on my turf.'

- Peter Booker

liabilities, rentals, and an organiser who always wants it all for free.

In these times of fiscal restraint, few have the monetary flexibility to absorb the heavy costs of major events. Develop one application form for all events, neighbourhood gatherings requiring picnic tables or festivals with expectations of 35000 persons. Institute criteria to recover relevant costs of services and ensure proper liability coverage. Prepare recommendations for Committee and Council approvals. Review and assess each post-event to determine if standards were adhered to, what the impact was on the community and suggestions for improvements. Agreements should be site specific. Requirements for one park will be different than another.

Dr. Steve Baker spoke on Concepts of Playing Quality: Criteria and Measurements.

This lecture was very technical. He stated to make sure the surface is safe and enjoyable to play on. In the 1980's with artificial turf we wanted to measure height of ball bounce on an unyielding surface. Rolling resistance - which affects the playing quality for soccer. Head injuries in the event of a fall - has to be energy absorbing. Ball bounce measured using a 3 metre pole. Bounce height at 1.5 metres means 50% ball bounce. Ball roll was measured using a metal frame built on a 45 degree angle, 1 metre high - ball is released. Measure acceleration and deceleration, wind will also slow the ball. Static versus dynamic tests - moving, turning, friction versus traction tests. Check hardness using first a heel test, then penetrometer for surface deflection. Deceleration of a falling mass (using a hollowed out bowling ball - same weight). Hard to measure top of grass, especially if there is a thatch layer. Also use of a Clegg impact tester.

Other criteria are surface trueness. Grasscover and sports cultivars, water infiltration rates - how quickly water disappears. Appropriate questionnaires to players measured before and after the game. The work of the Sports Turf Research Institute is excellent.

Solving Turf Management Problems

No symposium would be complete with out attending one session with Dr. Jack Eggens. His entertaining way of relaying and making his knowledge easy to absorb is always one of my favourites. He spoke on Solving Turf Management Problems. Numerous times he stressed, work with someone else. State the obvious, don't always look for something complicated or rare.

When you have a turf problem, develop a diagnostic technique for problem solving. The panic sets in when your mind goes blank, you feel you do not have the knowledge to solve the problem. If you decide on an answer then you don't always have the confidence it's the correct one. Dr. Eggens' advice? Poke around and never forget common sense is a powerful tool.

Dr. Eggens walked the group through case studies, with the usual humorous anecdotes. Take pictures, find out the last thing done to the turf. Perhaps a dormant application of fertiliser, or a drainage problem? Do a 'tug test'. Rough Kentucky Blue pulls out easily, Bent is rolled at the bud shoot and gives more resistance when tugged. Look around, how are the surrounding trees and shrubs? How healthy is their growth? How long has the problem existed? Look at weed growth, has there been any pesticide applications recently? Is it a newly developed area? Compaction can take 3 to 5 years to show up. Is there heavy thatch? Thatch can impede pesticide and fertiliser applications, as well as cause patchy drought areas. Are there dogs in the area? Is the irrigating administered properly, frequent light waterings instead of deep? Is the area recently sodded, at which time of the year was it done? How thick was the soil layer from the sod nursery. You couldn't sit through this session without picking something up.

Maintaining services after Budget Cuts ... is safety compromised?

On the final afternoon was a panel discussion which addressed 'Maintaining services after Budget Cuts ... is safety compromised'. The format consisted of a facilitator, Hilary Sadler who refereed a lively discussion given a current situation of 1) less operational dollars, 2) more influence from the Province (more cuts to come), 3) staff cuts, supply, services for parks, shifting people to other areas. Sports fields suffer wear and tear, maintenance is ongoing. If less dollars - turf is uneven - is it safe? Who should pay? And how much? Increase in demand from user groups for playing time/field. Fields are

overscheduled. Less money, none for new facilities, land costs very high. No one felt safety of playing surfaces had been compromised. All agreed that school fields were in the worst condition. There was interest on both sides to look into corporate sponsorship. That's where the discussion became divided.

User group representatives from soccer, Football Ontario and Slowpitch Ontario all would like input on the spending of funds created by user fees. They felt the monies should be used on their fields. They would like to see the funds put in a perpetual account, with small amounts withdrawn to upgrade facilities, (lighting or score boards) or capital expenditures, (irrigation or bleachers). Municipal Rep-

resentatives responded that the infusion of funds is to maintain current standards of fields, lessening the impact of Provincial cuts.

It was an interesting discussion that filled the hour and a half. Two sides with the same goal, giving their perspectives. It did not take long for the room to polarise, Municipal versus User Group, both feeling slighted. The only thing missing was a Representative from a School Board. It was an astute move to have a facilitator. Hilary Sadler did a fine job.

1998 is just around the corner, I wonder what we are in for next year?

- Jane Arnett-Rivers
Oakville Parks



Vanden Bussche Irrigation & Equipment Limited
R.R. #4, Milton Ontario L9T 2X8
Metro Toronto: (416) 798-4745
Milton: (905) 875-4545
1-800-263-4112
Fax: (905) 878-4501



A Member Of
CANADIAN IRRIGATION ASSOCIATION



DOL TURF RESTORATION
SPORTS TURF SPECIALISTS
RR2 BEETON, ONT. L0G 1A0

GORD DOL
President

Tel. (905) 729-2012
Fax (905) 729-2364
Mobile (905) 713-5433

Member S.T.A., O.G.S.A., O.P.A.



ZANDER SOD CO. LIMITED
QUALITY BENT, BLUE AND SHADE GRASSES,
PICK-UP OR DELIVERY


17525 Jane St.
R.R. #1 Kettleby
Ontario L0G 1J0

Toronto (416) 364-5700
Aurora (905) 727-2100
Fax (905) 727-8546




- Turface MVP, Moundmaster
- Turf & Tree Fertilizers
- Pest Control Products

Plant Products Co. Ltd., Brampton
(905) 793-7000 or (800) 387-2449
FAX (905) 793-9157



Box 171
Harriston, Ontario
N0G 1Z0
Phone (519) 338-3840
Fax (519) 338-2510

J. Robert Dippel

SEEDS

Equipment for professional turf management

Bannerman 41 Kelfield Street,
Rexdale, Ontario M9W 5A3

The home of Sportsturf Magic

George Bannerman

Golf Courses and Sportsfields
Parks and Playgrounds
Commercial Landscaping

Telephone 416-247-7875 • Fax 416-247-6540

Winter Maintenance of Mowers

Sharpening:

The reel type cutting unit cuts grass using the principles of shears. It is important therefore that the cutting edges of the reel and bedknife are sharp. This will give a clean cut and will help to eliminate the discolouration one sees if tearing occurs because a dull mower has been used. The process of sharpening is that of reshaping the cutting edge of the bedknife and the reel by grinding or lapping. When the blade becomes rounded the grass is pinched off instead of being cut cleanly. Sharpening is also required when the grass is not being cut across the width of the reel. This may be caused by nicks or uneven wear, improper adjustment on the reel or bedknife. Depending on the severity of the condition, lapping maybe all that is required to remedy the problem.

On any fine bladed reel mower the bedknife does five times the work because the reel blades all have to cut against it. So the bedknife is the major cutting component and made therefore of heavier and harder steels. If the shearing edges of the reels are in reasonably good shape it maybe necessary to just sharpen the bedknife. The mowing unit in question should always be checked thoroughly to determine the reason for its unsatisfactory condition. Often a minor adjustment is all that is required, that or perhaps lapping maybe sufficient. For a mower to run easily and cut properly as well, a proper relief angle or bevel must be ground on the bedknife cutting edge as well as the reel blade cutting edge. This will give room behind the contacting edges and reduces drag and friction as well. Too little bevel would let more metal make contact, hence cause the reel to run hard. Too much clearance would weaken the cutting edges so they would tend to nick more easily and would not stay in adjustment.

Condition Checklist:

Any piece of equipment when brought in at season's end should have its condition checked against a list particularly when the equipment in question is being put away for the winter. In this way problems can be found and rectified prior to next season.

- 1) Check rollers, bearings, sleeves, roller hangers, for excessive wear or breakage.
- 2) Pinions and pawls - Check by turning wheels quickly to see if reel is positively driven. If you experience slippage new pinions gears and pawls maybe required.
- 3) Frame - check frame to make sure it is not loose, also that the front spacer bar and bedknife are tight. Check alignment if frame is loose. Sight along the front spacer bar using the reel axle shaft as a reference to tell if there two are running parallel with each other. If they are not the mower has to be twisted by loosening one end of the spacer bar and one end of the bed knife assembly and then twist the mower frame until all is aligned Exercise care when re-tightening the spacing bar so that the mower is not spread further apart, because this will cause problems with the reel bearing adjustment. Check the

side plates for cracking and check the bed knife adjusting screws for stripped threads.

- 4) Check and see if there is enough metal left to grind. Some knives will last two years others may be turned and used longer. Also check general condition of cast back and pivot points.
- 5) Reel - Test the reel for proper rotation on its axis (bearing races) examine the blades on the reels for nicks. This will tell you if your reel has a twist or a sprung spider. Make sure the reel blades are fastened to the spiders and that the spiders are securely attached to the reel shaft.
- 6) Reel bearings - Test for vertical or end play of the reel which may be due to wear or improper adjustment of the reel bearings or pitted cups or cones. Bearings of the non-adjustable type if worn or loose will need to be replaced.

Points to Consider for Sprayer End of Season Storage

1. Completely clean the sprayer's exterior surfaces using steam or high pressure. Flush the tank and all lines with a detergent solution. Coat the interior of the tank with an oil spray or grease to prevent scale build-up. Caution: When working inside the tank, stand on a sack or mat to prevent damaging the protective coating of the tank's interior and observe all safety precautions.
2. Remove all nozzles from the boom; soak in gasoline; then clean using a small brush and compressed-air. Store nozzles in a closed container to keep them free of dirt and foreign particles.
3. Remove and drain the pump assembly. Gear and piston pumps should be flushed with a new lightweight engine oil. Do not use old engine oil as it may contain acids expelled from the combustion process. These would adversely affect the pump's components. Cast iron gear, vane or nylon roller pumps can be stored for prolonged periods in oil. Do not use oil in pumps having rubber fins.
4. Drain the boom and store it inside off the ground and away from dirt.
5. Remove the gun and coat inside parts with lightweight oil. Leave gun in open position and store in dry area.
6. Remove pressure regulator and drain. Water left inside the gauge could freeze and distort the instrument.
7. Remove, drain and inspect sprayer hoses for cracks and deterioration. Coil and store in a cool dry area.
8. Touch up rust spots on trailer, boom, brackets, etc., to prevent rust or deterioration.
9. Lubricate wheel bearing, u-joints and pto shaft as required.
10. On engine driven sprayers, prepare the engine for storage.
11. If possible, park your sprayers indoors throughout the off-season.

GRASS SEEDS

- Available from the major seed companies in Ontario

The Sports Turf Association strongly recommends to athletic field managers that they use only improved cultivars that have been tested and found superior under local conditions.

SPECIES	SUPPLIER								
	Bishop	Pickseed	Ontario		Oseco	Rothwell	Speare		
Kentucky Blue	Aldelphi Baron Barzan Liberty Limousine Lofts 1757 Ram II Regent Shamrock	Alpine America Banff Bronco Cheri Crest Fylking Indigo Nugget Regent Touchdown	Argyle Baron Barzan Classic Eclipse Limousine Liberty Regent Dellwood		Aspen Baron Classic Gnome Haga Nublu Nugget Midnight Opal Regent Nustar Jefferson Sydsport Chateau	Adelphi Ampellia Argyle Asset Buckingham Broadway Challenger Chateau Classic Conni Cynthia Eclipse Estate Glade Harmony Ram I	Huntsville Julia Midnight Monopoly Nustar Platini Ram II Raven Regent S21 SR2000 SR2100 Sabre Scenic Sophia Suffolk Welcome	Baron Eclipse Georgetown Liberty Limousine Lofts 1757 Nassau Ram I Regent Shamrock	
Ryegrass	Competitor Elf Envy Omega II Palmer II Prizm Spectacular Yorktown III	Blazer II Cutter Dasher II Edge Express Fiesta II Futura 3000 Lowgrow	Elite Envy Palmer II Pinnacle Repell Seville Yorktown III Lowgrow	Nighthawk Riviera Calypso	Affinity APM Pinnacle Stallion Select Wizard Gettysberg	All Star Brenda Elegance Imagine Mondial Pebble Beach Seville Pegasus	SR4000 SR4100 SR4200 Stallion Surprise Boardwalk Manhattan II Yorktown III	Competitor Elf Envy Omega II Palmer II Prizm Saturn	Sovereign Seville Yorktown III
Fescue: Creeping Red	Franklin Vista	Jasper	Franklin Salem Vista	Jasper	Herald Marker Shademaster	Dawson Flyer Finelawn I	Ensylva	Franklin Vista	
Fescue: Chewings	Jamestown Koket Treasure	Victory	Bridgeport Jamestown Koket Jamestown II Victory		Banner Bridgeport Centre Rudax Wilma	Barfalla Luster SR5000 SR5100 Dignity	Jamestown Koket Treasure		
Fescue: Hard	Serra Nordic	Spartan	Reliant Serra Warwick		Biljart Serra	Scaldis Silvana SR3000 SR3100	Saxon	Reliant Serra Nordic	
Fescue: Sheeps	MX86		MX86 Evergreen		MX86 Quatro			MX86 Azure	
Fescue: Tall	Emperor Jaguar II Rebel II Shenandoah	Crossfire Mini Mustang Mustang II Team Jr. Shortstop Mustang	Jaguar II Rebel Jr. Williamette		Bonsal Lexus Pixie Twilight Vegas Watersaver	Arid Shenandoah Minx Palisade		Emperor Jaguar II Rebel Jr. Tribute Shenandoah	
Bentgrass Colonial	Highland	Exeter Higland			Boral Tracenta	Bardo Tracenta			
Bentgrass Creeping	Emerald Penncross Pennlink Pennway Southshore	Cato, Agressor National Penncross Pennlink Penneagle Pennway Seaside	18 Green Penncross Pennlink Penneagle Seaside SR1020 National	Cato Southshore Providence	Cobra Emerald Penncross Pennlink Penneagle Putter	18th Green Penncross Pennlink Penneagle Prominent Providence SR1020	Seaside	Crenshaw Penncross Pennlink Penneagle Pennway Southshore 18th Green	
Poa trivialis	Sabre	Colt	Laser Sabre	Snowbird	Cypress Polder	Sabre		Sabre	
Poa supina					Supranova				
Poa compressa	Canada Blue	Canon Canada Blue	Canada Blue			Canada Blue			
Weeping alkali	Fults	Fults	Salty		Fults	Fults		Salty	
Agrostis alba (red top)		Reten							

News Releases

Products and information for Sports Turf Managers

Rothwell Seeds International

Ron Kowalski will be the incoming president of Rothwell Seeds International. His first order of business will be to oversee Rothwell's evolution from distribution house to marketer of its own products. A new corporate partnership with Oregon's Olsen Fennel Seeds, Inc.(OFI) last fall provides Rothwell with a highly desirable research and development arm, as well as access to OFI's vast lineup of proprietary cool-season grass varieties and blends. Rothwell Seeds is an expanding company which is looking toward the future, and which still prides itself on the same high values and traditions it has upheld for the past 25 years.

Rittenhouse Sprayers introduces the Treegator Portable Drip Irrigator

An excellent product for watering B&B or boxed trees during storage, preparing nursery stock for digging, or any tree irrigation appli-



cation. It can be adjusted to last between 1 and 16 hours between fills. Simply zip it around a tree trunk and fill with water. Advantages include: run-off and evaporation are eliminated, irrigation water requirements are reduced, watering frequency is reduced (saves labour), and transplant shock is dramatically reduced. Priced at \$28.00 each, one treegator (20 gal.) is suitable for 1" - 3", two treegators (50 gal.) for 4"-12", and three treegators (75 gal.) for 13-24" caliper trees.

Beach Volleyball Courts

Since the bronze medal success of Canada's team at the '96 summer Olympics, all of Canada is talking about Beach Volleyball. The fast pace and daring action of this colourful sport has made it an instant hit with fans and players alike. As a venue at the upcoming PanAm Games, and Canada Games 2001, a

movement is taking place to teach the sport to our youth and prepare teams for these future events. Closer to home, parks and recreation departments, schools, summer camps, and private indoor and outdoor ventures are incorporating Beach Volleyball Courts into their facilities.

Hutcheson Sand & Mixes has developed a sand that is perfect for Beach Volleyball. The particle size, colour, and cleanliness of this non-calcareous product is getting rave reviews from both amateur and professional players. Hutcheson has also designed a professional court and supplies the material and installation as a turnkey package. For more information contact Todd or Jim at Hutcheson Sand & Mixes, 8 West Street South, Huntsville, Ont. P1H 1P2. Toll free 1-800-461-5521; Local 705-789-4457.

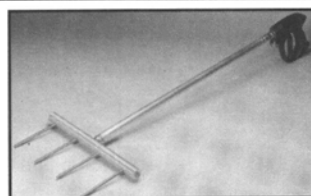
New Rotary Mower

Ransomes America Corp. is pleased to introduce the new 4-wheel drive outfront rotary mower. The model 728 is equipped with a Perkins 28 h.p. diesel engine. Both the 60" and 72" side and rear discharge cutting decks are hydraulically operated. The hydraulic drive provides very smooth operation of the cutting deck and eliminates vibration and repairs to conventional PTO's and gear boxes. If you are



BOB BUCKTON
Vice-President Marketing

P.O. Box 511 Tel.: 705-324-9591
163 St. David St. Fax: 705-324-0882
Lindsay, ON Cellular: 705-878-6153
K9V 4S5 Toll Free: 1-888-ROTHWELL (768-4935)



HYDRAULIC TURF AERATOR/WATERER

- ideal for areas sensitive to compaction such as tees and greens
- provides effective aeration and watering of turf
- 6" lances provide deep penetration
- use irrigation system or sprayer as a water source
- \$295.00

Rittenhouse
SPRAYERS

St. Catharines, Ontario
Call 1-800-461-1041 now to get our '97 catalog

Office: 705-789-4457
Watts: 1-800-461-5521

Mobile: 705-788-6562
Fax: 705-789-1049

Todd Knapton

HUTCHESON

8 West Street South, Huntsville, Ontario P1H 1P2



NU-GRO CORPORATION



PROFESSIONAL TURF PRODUCTS

Rob Field

Ontario Sales Manager - PTP

Tel: (905)541-8872 Fax: (905)632-2158

P.O. Box 1148, Hwy. #59 S., Woodstock, Ontario N4S 8P6
Customer Service 1-800-268-2806