What Are You Doing About Water?

COMMENTS FROM EDITOR MICHAEL BLADON

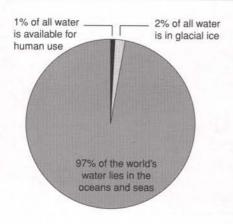
e need to begin immediately to educate people as to better use of our water resources. As populations multiply and the demand for more sports fields increases, the situation becomes more critical.

Researchers James Beard and R.L. Green wrote: "The main cause for excessive landscape water use in most situations is the human factor. The waste of water results from improper irrigation practices

and poor landscape designs, rather than any one major group of landscape plants."

We need then to start looking to the future and asking some questions about water as it relates to our sports fields. What is your municipality, university or school doing about water and water bans where your fields are concerned? These are outdoor classrooms. Shouldn't they be budgeted for in the same manner as building maintenance and repair?

What is your water source for irrigation purposes? Are you using recycled water? It is estimated less than 5% of water used for domestic, turf, agricultural, industrial and environmental purposes in the United States is recycled water. If there were statistics available, would Canada be any different? How much are you willing to pay for water for your fields? What about the safety of the players? Are your



survive with water shortages? The time is now to plan ahead for water. There is a need to develop deeper

turf facilities sand based? How will they

rooted, more drought tolerant species of grasses. In a letter to the editor of Irrigation Business and Technology magazine (July/August 2001) Lyman Dr. S. Willardson, Professor Emeritus, Utah Sate University, writes: "Don't be confused by the hope that increasing irrigation efficiency is going to generate

vast quantities of water for new uses. The only water available that we are not currently consuming is water running into the oceans on the coastlines of the world. We can change the way we use the water and the distribution of the water between users, but we cannot create more water by being more efficient. I think this situation is referred to as a zero sum game. What one water user gains must be given up by another."

In Water Everywhere, Dr. Marc Cathey states, "Water is the earth's primary chemical under its greatest challenge."

What are you doing about water? ♦

- Water Everywhere is the preface in Water Right: Conserving Our Water, Preserving Our Environment published by the International Turf Producers Foundation, telephone 847-705-9898, email Turf-Grass@msn.com.

World Water Facts

Human demand for water has risen at remarkable rates as a result of both increasing population and water use. Exacerbating the situation is the fact that the 1 percent of available water is being spoiled by various forms of pollution, thus reducing its use for our consumption. It's time to begin examining all of our various water uses.

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STA OFFICE HOURS

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Member News OPA ELECTS DON SADLER PRESIDENT

on Sadler is celebrating 50 in a big way this year. Personally, he is marking the half-century and professionally he is heading the Ontario Parks Association as it celebrates 50 years of professional work in the province.

On Thursday, July 19, Don Sadler, Director of Parks for the City of Windsor, was elected President of OPA during the 49th Annual General Meeting and Summer Conference in Timmins.

A member of Ontario Parks Association for more than 20 years, Don has been responsible for expanding and upgrading Windsor parks during the last eleven years. Don arrived from the City of Etobicoke in 1990 to oversee 165 parks – now expanded to over 180 with 2,400 acres of parkland. He is also responsible for major upgrades to community pools and sports fields. Last year, Don worked closely with the federal government to construct the temporary tent city for the Organization of American States General Assembly in Windsor.

A graduate of Humber College, Don began his career in the National Capitol Commission before moving to the City of Ottawa and then the City of Etobicoke. He is a member of Rotary Club 1918, an avid golfer and hockey player. The Ontario Parks Association provides training and education for its 800 members throughout Ontario. The Association's motto, *Protecting Tomorrow Today*, reflects its dedication to expanding and protecting the environment.

For more information, call: John Howard, Executive Director, Ontario Parks Association, 627 Main Street East, Hamilton, Ontario L8M 1J5. ♦

— OPA News Release, August 17, 2001

Congratulations, Don, from the STA!

STA NEWS CLIPS

All the lawns in the United States cover an area roughly equal to the state of Pennsylvania (approximately 45,333 square miles/117,412 square km).

- The Globe and Mail, August 27, 2001

DEADLINE: OCTOBER 14 Content for December issue

Please Note: Opinions expressed in articles published in *Sports Turf Manager* are those of the author and not necessarily those of the STA, unless otherwise indicated.



Scholarship Winners

Gerald Rees Saskatoon, SK STA Scholarship Recipient 2001 Ontario Diploma in Horticulture – Turf Option

John D'Ovidio City of Mississauga STA Scholarship Recipient 2001 Turf Managers' Short Course

We congratulate both our scholarship winners! Pictured above is Gerald Rees (left) with Dr. Bob Sheard, STA Director. Unfortunately, we were unable to obtain a photograph of John D'Ovidio by press time.



Drainage Techniques: Continued from Cover CHUCK WOLSBORN, GOLF COURSE SUPERINTENDENT, GRESHAM GOLF LINKS

Finding the Proper Grade

It did not take me long to learn running pipe at the proper grade was probably the most important part of the job. The use of a theodolite (transit) or builder's level can insure that your drainage will work when the job is complete. Placing the theodolite at the beginning of the line while trenching the ditch and checking grades can save a lot of handwork later.

The theodolite can be dialed to the exact grade you wish your pipe to run. I like to run main drain lines at a minimum 2% grade and laterals at a minimum of 1/2 of 1%. The main lines should be placed along the line of maximum slope terminating at the discharge area. Laterals can be laid at a maximum fall by using a herringbone pattern. Of course the site will probably dictate the use of herringbone, grid or random patterns. Running at flatter grades makes the use of the theodolite even more important. Spacing between laterals can be as little as 15-20 feet on sites with fine textured soils. Remember you will need to work between the trenches.

Trench Basics

I like the ditch to be twice the width of the inside diameter of the pipe being used. In the case of 4-inch pipe, we trench an 8inch ditch. This will allow the pipe to be completely encircled with rock. The depth of the trench should be based on the fall and that the pipe should have a minimum of 12-18 inches of cover. Generally 24 inches is the range we dig but deeper generally is better.

Efficient Clean-up

A labour saving technique that I credit to my crew is handling of the spoils. After the location of the line is marked, plywood is laid next to the ditch on the side that the trencher will deposit the major part of the spoils. This accomplishes two things: first, it protects the underlying turf and second, an operator on a loader can pick up a high percentage of the material thus reducing handwork.

Often the remaining material in the bottom of the ditch will turn to mud before it can be removed. If and when this happens, it is practically impossible to remove with a conventional shovel. For these cases we use a tool we designed in house called 'Can on a Stick.' This tool is composed of a 3 lb. coffee can generally attached to a discarded golf cart handle at about a 45 degree angle. This does an excellent job of getting the slop out of the ditch. We have no patent pending on this thingamajig!

Rock Bed Installation

Now that the ditch is clean, there is one final step prior to laying of the pipe. We use the theodolite to help as we lay a minimum one-inch rock bed in the bottom of the ditch to our final grade. This will be the second and final check of the grade.

Catch Basins

We like to locate catch basins in all low areas and/or at least every 100 ft. as cleanouts and inspection portals. Catch basins work great as clean outs in that they are generally easier to locate than a 4-inch piece of pipe, easy to see down, and easy to stick a hose down if flushing is in order.

My pipe of choice is ADS N-12. Although this pipe looks quite similar to the conventional corrugated slotted drainpipe we have used in the past, I think it is a substantially superior product. N-12 is a corrugated double wall pipe with a smooth inner wall. This pipe has significantly greater strength than conventional corrugated drainpipe and is less likely to be crushed through a shallow run. With the smooth inner wall, it is less likely to silt up as with corrugated pipe. In fact, I have seen engineers' drawings showing this pipe laid at as little as 1/3 of 1%. If silting does become a problem, the smooth inner wall is much easier to run a hose down during the flushing process. Since it is semi-rigid, it lays in the open ditch better and is easier to work with during the rocking stage. On the down side, N-12 costs twice as much as comparable single wall corrugated pipe. Depending on the depth of the trench and other variables, my drains cost me between \$4 and \$8 a lineal foot. Compare conventional slotted 4"

corrugated drain pipe at 35ϕ a foot to comparable N-12 at 70 ϕ , I think the pipe cost is nominal when compared to the benefits of this product, namely the superior strength and flow characteristics.

Backfilling

The rock we use as backfill is 1/4 to 3/8 inch round pea gravel. The shape is as important as the size in that if a rock that is too angular is used there will be insufficient voids between the individual stones to move water. We backfill to the surface of the trench with pea gravel and avoid using sand or fine soils on top which might contaminate the gravel or create a perched water table.

Rocking the Trench

For years, rocking the trench was a time consuming and labour intensive job. It often involved load after load of drain rock shoveled into the ditch by hand. This would often times result in a rock missing the ditch and require additional handwork. We have simplified this job with the use of a tractor-mounted back fill piece of equipment adapted from an old fertilizer spreader. The device is simple and can be assembled by merely removing a tractor mounted rotary spreaders' metering head, rotor and PTO. What remains is simply a rather large one-yard funnel mounted on the back of the tractor. To the bottom of hopper, attach a three-foot section of hose made from an automotive inner tube with a large hose clamp. With the hose (inner tube), one can control the flow of the back fill material into the trench while an operator drives the tractor over the trench. During filling and transport, the hose (inner tube) is wrapped around the frame and secured to prevent rock from leaking out.

I hope some of these techniques can be incorporated into your drainage projects. I would like to thank my predecessors, golf course architects, civil engineers and golf course superintendents who shared many of their ideas with me.

—Turfgrass Management in the Pacific Northwest, Volume 4, Issue 2, Spring 2001

Coming Events

Mark Your Calendar!

October 16-17 Landscape Ontario Garden Expo, Toronto, ON Information: 905-875-1805

October 28-30 National Institute on Park and Grounds Management 31st Educational Conference Milwaukee, WI Information: 920-733-2301

November 4-6

The Irrigation Association 22nd Annual International Irrigation Show and Technical Conference San Antonio, TX Information: 703-536-7080

November 13-15 New York State Turfgrass Association 26th Annual Turf and Grounds Exposition, Syracuse, NY Information: 518-783-1229

January 8-10, 2002 Landscape Ontario Congress 2002, Toronto, ON Information: 905-875-1805

January 22-24, 2002 Ontario Turfgrass Symposium Toronto, ON Information: 519-767-5000

February 2002; February 2003 University of Guelph, *Turf Managers Short Course*, Guelph, ON Info: 519-767-5000

February 24-27, 2002 Western Canada Turfgrass Association 39th Annual Conference & Show, Penticton, BC Information: 604-467-2564

March 2-5, 2002 CGSA and the Quebec Golf Superintendents Association 53rd Canadian International Turfgrass Conference & Trade Show, Quebec City, QC Information: 905-602-8873 x 225

Note New Dates for 2002!!

ONTARIO Turfgrass

Ontario Turfgrass Symposium

Education & Trade Show

January 22-24, 2002, Toronto, ON

Support your association and save money too! Early bird registration date: December 3!

When registering for the OTS, be sure to indicate you are a member of the Sports Turf Association, a sponsoring association of the symposium. On your registration form please Sports Turf Association to ensure your membership credit is directed to us!

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



The President's Desk

S eptember already! In Oakville we have survived quite a burn-off with irrigation systems proving to be essential once again. However, even that safety net was removed in Halton for two weeks as a water restriction was declared and systems had to be shut down. Luck-ily, exception was given to our two sand fields. We are having problems with *Poa annua* in one of them, so I was tempted to follow the ban to the letter, which would force us to strip and re-seed that field but decided budgets could be spent better elsewhere.

STA Field Day

I hope you had the chance to attend and enjoy our Field Day. Many thanks to the City of Waterloo for providing a tremendous venue and Mark Hillis and Karen Richter for assisting with the events. The venue was, for both morning and afternoon sessions, very well suited. The morning started out with Henry Waszczuk, host of Fins and Skins Classic Adventures, followed by the IAPA's Bob Deline with 'New Worker Orientation.' The afternoon was packed with equipment demos and supplier discussions. It is important to know that the day was made possible by the following sponsors who allowed us to present a cutting edge Field Day, lunch, refreshments and grab bags for under \$50 a person: AerWay, Bannerman, Dol Turf Restoration Ltd., G.C. Duke Equipment Ltd., Nu-Gro Corporation, Plant Products Co. Ltd., Turf Care Products Canada Limited, United Horticultural Supply and Vanden Bussche Irrigation & Equipment Ltd. The quality of information on hand was truly representative of their support. I wish to sincerely thank you, as always, for your support of the Sports Turf Association.

Turfgrass Conference

In July, Dr. Sheard, Lee Huether, Dwayne McAllister and I attended the International Turfgrass Research Conference. Thank you to Rob Witherspoon of the Guelph Turfgrass Institute for the invitation to participate. It was quite a day, listening to research papers on related topics from around the world. In speaking with delegates the event was reported to be a wonderful conference – full of information and sight seeing in southern Ontario. Congratulations to all involved. What a lot of work goes into turf before we start cutting it!

OTS Time Again

Hard to believe it is time again to publicize the Ontario Turfgrass Symposium. The dates have been changed to later in January allowing everyone to squeeze in those final days of the New Year's celebrations.

The Sports Turf Association has set up a preliminary program encompassing numerous areas of turf. Included will be a session on organics, defining them, discussing what is out there and a panel will be set up to answer questions. Certainly as pesticides have become a very hot topic, fertilizers will also.

Turf Jeopardy will take place for the 3rd year with 2001 defending champions, the southwestern Ontario team of Mark Hagen, Jeff Cunningham and Ross Tucker, ready to defend their title. Anyone wishing to contribute questions, or better yet participate in the challenge, please contact me at 905-845-6601 (x3352) or jrivers@town.oakville.on.ca. All are welcome and it really is a lot of fun for both spectators and participants.

On the second day of the conference a session has been set up discussing 'The New Sports Field.' Determining a site, funding, best construction, new products to incorporate into construction and ear marking funds for staffing and maintenance will be discussed. Any questions about OTS, please contact Lee Huether at



Henry Waszczuk, Keynote Speaker at the 14th Annual Field Day, with STA President Jane Arnett-Rivers.

the STA office, 519-763-9431 or email sta@gti.uoguelph.ca. Looking forward to seeing you there.

Book Success

Dr. Sheard's book, *Understanding Turf Management,* is now being used in the University of Guelph's Turf Managers Short Course, ORFA's Professional Development Program and at Lambton College. I strongly recommend this book as a 'desk top' or 'truck text.' Whether to retrieve a fast fact or look deeper into a turf issue, it is essential for the turf manager.

That's what's new with your Association. I hope you all survived the summer of students, drought, overuse, pesticide bans and whatever else came your way. If you have anything to share or questions about a new technique, a new machine, a new product, please contact Lee or myself. We would love to hear about it and of course share it with others. The spreading of information is how we all learn to manage better, safer sports turf.

Wishing you all the best. If not before, see you at OTS 2002! ♦

Unitario Turfgrass

Goal Post Safety Vital

RECENT DEATH DRAWS SPOTLIGHT

ontreal parks crews were busy securing soccer goals across the city this week as a teenager killed by a fallen soccer net was laid to rest.

An unanchored soccer goal weighing about 100 kilograms claimed the life of Shane Diabo, 14, Friday morning when it unexpectedly toppled.

Claudette Lalonde of the Montreal department of parks and green spaces said each of the more than 100 goals in Montreal parks would be fitted with extra anchors.

In nearby Kahnawake, about 50 classmates joined hundreds of mourners at the funeral service for Diabo. The students went to the service on the Mohawk reserve from the private school in Montreal that Diabo attended.

Diabo was at a Montreal park last Friday for a soccer game as part of his gym class. He was swinging on the crossbar of the soccer net when it tipped over, causing severe head injuries. The goal posts weren't anchored to the ground. A private Mohawk ceremony was held later for the teen.

- Canadian Press, The Record, September 12, 2001

GOAL POST SAFETY MAJOR ISSUE FOR GROUNDSTAFF



Mike VanAarsen Supervisor, Environmental Services, Operations, City of London, ON

Murray Cameron Manager of Parks, Town of Oakville, ON

Brian Adriaans Horticulture Technician, City of Burlington, ON

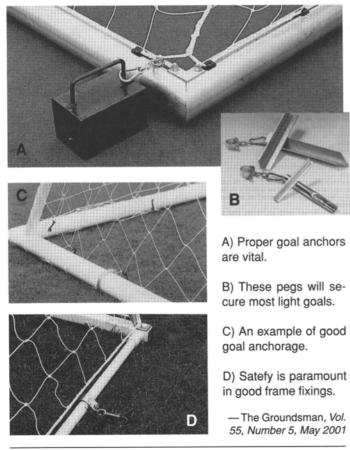
> Bill Soule Facility Maintenance Supervisor Molson Park, Barrie, ON

Glenn Guest Podolinsky Equipment Ltd., Petrolia, ON

Larry Fortier Acting Foreman, Town of Grimsby

Peter Coon Western Wholesale Division Manager Quality Seeds, Woodbridge, ON

Steve Marshall Halton Grounds Care Equipment, Milton, ON



For more info, see Vol. 12 (2), June 1999, Sports Turf Manager.



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International Turf Researchers Meet in Toronto

PAM CHARBONNEAU, OMAFRA TURFGRASS SPECIALIST

During the week of July 15-20, 2001, roughly 450 international turfgrass scientists convened in Toronto for the IXth International Turfgrass Research Conference. There were over 200 scientific presentations made over the four days. Your Association President, Jane Arnett-Rivers, and some of her staff volunteered their time and were able to take in some of the sessions.

Supina Bluegrass

There was some interesting technical information presented at the conference that has some relevance to Ontario sports turf managers. John Sorochan of Michigan State University presented his finding on the suitability of supina bluegrass (Poa supina) for irrigated sports fields. He looked at different seeding ratios of supina bluegrass and Kentucky bluegrass (0, 5, 10, 25, 50 and 100% Poa supina). He also imposed two fertility regimes on the species mixtures as well as plots that received wear and plots that did not receive wear treatments. The bottom line for all of this is that the supina bluegrass does very well under wear treatments and it increases in a species mix when wear is imposed. The results of the two different fertility regimes were inconclusive. In one year the supina bluegrass content decreased more significantly with the high fertility vs. the low fertility and in the following year the results were the opposite. His results indicate that on irrigated highly trafficked sports fields that a seeding mixture of 510% *Poa supina* with *Poa pratensis* is ideal. Considering the fact that the *Poa supina* seed is very expensive, a 5-10% mixture is affordable for this purpose.

Increasing Internet Use

Of particular note at this scientific conference were the dozen papers presented in an Education and Information

Technology Symposium. Most of these papers talked about using the internet as an education tool for turf managers. The topics included in this symposium included:

- a web-based turfgrass species selection tool
- a turfgrass soils laboratory designed for web delivery
- specialty instructional modules for turfgrass students and professionals
- Turf-Doctor: A web-based expert system for turfgrass problem solving
- an electronic journal for turfgrass science

The latter, an electronic journal for turfgrass science promises to be very interesting. The idea behind it is a journal that would take various subjects (such as soil fertility, soil compaction, stress physiology) and do an extensive, in-depth scientific literature review. It would also interpret the scientific literature. This is what I refer to as the bottom line of the research – what does it mean to me? This would include a practicum to relate scientific results to field practice, again, relate the scientific results to the real world that you as turf managers have to deal with. This journal would be a web-based electronic format journal. This idea sounds very promising and would be very good for sports turf managers, sports turf consultants and people like me who need to be able to transfer research results to the end users.

> I think that the abundance of information on web-based delivery of turfgrass courses, whether they be university courses or continuing education courses, shows how important the internet is becoming to us as turf

managers. It is greatly increasing the possibilities for formal learning, information gathering and trouble-shooting. The beauty of it all, is that we can educate ourselves without leaving our office or home. \blacklozenge

STA NEWS CLIPS

Young Pitchers: In a survey, a group of 28 US orthopedic surgeons and coaches recommended that 12year-old baseball pitchers be limited to 68 pitches per game, two games per week. They also advised that youngsters not be taught to throw curve balls until they are 15.

- The Globe and Mail, August 27, 2001





14th Annual STA Field Day Resounding Success

HELD WEDNESDAY, AUGUST 15 IN WATERLOO, ONTARIO

he 100 participants in the 14th Annual Sports Turf Association Field Day were blessed not only with good weather but also with excellent speakers. Suppliers and distributors displayed and demonstrated new equipment now available to sports turf managers. Our co-hosts did an admirable job of dispensing information on and off the buses as well as looking after our set up needs and audio visual requirements, and again, we extend our thanks. The Waterloo Rec-

reation Complex is an excellent facility to hold this type of meeting. Field Day Chair Paul Turner welcomed everyone, outlined the proceedings and agenda for the day and then introduced President Jane Arnett Rivers. Following is a summary of speaker sessions.

Henry Waszczuk

Keynote speaker this year was Henry Waszczuk. Henry is a CFL Hall of Fame inductee who spent 10 years with the Hamilton Tiger Cats starting in 1975. Henry also taught high school in Hamilton for seven years during his football career. After football he decided to stop teaching and started a new job as an outdoor enthusiast and fishing educator on television. He now has a new show on TSN entitled *Fins and Skins Classic Adventures* which can seen on Saturdays.

Henry's talk was highly entertaining and included anecdotes about football as well as fishing. He played in the days when artificial turf was in its infancy and the fields were very hard which in turn was incredibly tough on the body. Players were still sore from playing on artificial turf the week after their previous game. Burns were common from sliding or from tackling – especially on the painted logos.

Sometimes the artificial turf fields were so firm that it was not unusual to either



turn an ankle or to seriously injure a knee – especially for fullbacks. 'Turf Toe' was another frequent problem on artificial turf where players would stub their toe and have a very painful injury. Fields such as Landsdowne Park in Ottawa had extremely high centre crowns that were difficult to play on – especially for running backs.

Henry then spoke of his fishing adventures. He has fished with both Johnny Bower and Bobby Orr. According to statistics, 30% of the population play golf and 20% fish for entertainment. This was the impetus for his new *Fins and Skins* show. Points are earned for size of fish caught which are used for handicapping in the golf or skins part of the competition.

Henry has travelled all over the world to places like South Africa, Zimbabwe, Bermuda and has fished and played golf with Nick Price, Nick Faldo and Mike Bullard of TV fame. Henry finished his talk with a highly amusing video of he and Mike Bullard fishing for cod in the Maritimes.

New Worker Orientation

Bob Deline, Safety Consultant, Industrial Accident Prevention Association

Bob began his session by stating two vital points: 1) all new employees should

receive orientation and 2) always ensure you are doing what you say you are doing. He then asked who in the audience were 'supervisors' as the Health and Safety Act defines this as anyone who has charge of a workplace or authority over a worker in the workplace. If you have to tell an employee what to do, where to do it and how to do it and something goes wrong, you could be charged as a supervisor. Even though your title may not be supervisor, if you are

part of a group of people who are responsible for a work crew, you can be judged as a supervisor. And when there is an accident, the supervisor is always the first person charged.

Examining the Legislation

Under provincial law, in order to be a supervisor you have to be a competent person. Sixty-five percent of supervisors in this province do not meet basic competency requirements as outlined in the Health and Safety Act. Competency is a three part process: 1) to be qualified because of your knowledge, experience and training; 2) to be familiar with actual or potential hazards; and 3) to be familiar with the Health and Safety Act and the regulations. You do not have to memorize it, just be acquainted with it. Many supervisors are not considered competent because they are not familiar with Section 27 of the Act which outlines their responsibilities. Remember that when a worker is promoted to a supervisory position, he/ she needs a new orientation.

Orientation Benefits

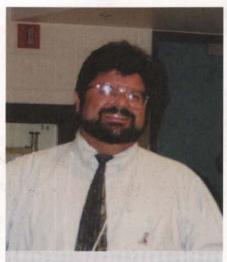
When you think of administering an orientation program, think of all the different areas other than work where this type of program would be beneficial. A benefit of a good orientation program is that it shows legitimate concern for the worker instead of promoting the belief that your company is only interested in the bottom line financially. It also shows a very positive attitude toward health and safety. More concrete benefits include reductions in sick days and on the job accidents. Orientation is a part of a multifaceted process to help the employee.

One of the challenges is to differentiate between what is orientation and what is on the job training. Orientation must be distinguished from normal job training as an extremely important area of information that protects both the employer and the employee. Legislation for supervisors states that from an employer perspective you are obligated to provide information, instruction and supervision to protect the health and safety of your workers. You must take every reasonable precaution. Should something go wrong and you are brought into a court of law, the only defense you have is a 'due diligence' one. That is to be able to prove beyond a shadow of a doubt that as an employer you took every precaution deemed reasonable.

A Need to Comply

The legislation under the Occupational Health and Safety Act is like no other, in that you are guilty until proven innocent. You are to ensure that workers work in a safe manner and use the protective devices required under the act or regulation. Ensure workers wear personal protective equipment. No matter what the standards you set as to work boots, gloves, etc., make sure the workers comply. It is not up to the Safety Committee, it is the supervisor's responsibility to advise workers about hazards. It is most difficult to build awareness of potential hazards - those that could happen. Because of this, repetitive strain injuries are the number one injury in the province. Why, because by the time you see the swelling, the damage is already done.

The legislation for workers is under Section 28 of the Act. Many orientation programs do not reveal that workers have legal responsibilities – but they should. If safety equipment is part of the job, it is a condition of employment that you have to let that individual know when they come in. It is the worker's responsibility to report any hazards or defective equipment. They do not know that unless you tell them it is their responsibility. They can not op-



WHO SHOULD GET ORIENTATION?

new/transferred employees

- returns from long-term disability
 - contractors supervisors

visitors • temporary workers

erate any equipment they have not been properly trained to use. Review of Section 28 is a must for any orientation program.

Designing a Program

An effective orientation program is much like selling safety or positive behaviour at home. For example, realize that you have been teaching your children to drive since they have been sitting in a car seat behind you. Watch your mannerisms, your attitude, the way you do it. You are setting the example. Most workers in the province are not aware of their responsibilities. The most difficult to sell is a positive attitude toward the Health and Safety Act. Some of the special challenges are orienting young workers. Defined as 14-25, these are the highest rate group in the province. One in five will be involved in a lost time accident before they reach age 25. You cannot make assumptions with young people where workplace safety is concerned because they think they are invincible!

In the development cycle of an orientation program you have to assess both the needs of the worker and the corporation. What do you want the program to accomplish? It is vital to set objectives. Then determine topics and organize materials. As dry as the topic may be, you need to talk about legislation and the workers' need to understand what their responsibilities are under the law. When setting your objectives, use the SMART acronym, make sure objectives are Specific, Measurable, Achievable, Relevant and Time related. Remember that the legal rights of workers are 1) the right to refuse; 2) the right to participate; and 3) the right to know. Talk about WHMIS. This training came into law in 1988 and even now the province is only 50% compliant.

Review lockout procedures or confined space entry depending on the group. Discuss chemical hazards - every workplace has them, some worse than others. Go over the general rules and the reasons for them. Make sure employees understand your company's Personal Protection Equipment (PPE) standards. An emergency plan should be included whether it is a fire or chemical evacuation or out in the field with a critical injury. When creating your orientation program checklist use the internet, it is a great source of information. There is a Department of Labour website, www.gov.on.ca/lab/ohs/ohse.htm and an IAPA website, www.iapa.on.ca, where you can pull down samples of orientation programs, checklists and accident investigation procedures.

Once you have determined your objectives, outline your methods of delivery. How much information are you going to cover orally versus providing detailed hand-outs? When someone is sitting in an orientation meeting, you have to keep in mind that participants are going to absorb less than 20% of the spoken word so it is important to use a combination of visual aids, written material and thorough explanations of critical areas.

Then you must evaluate your program. An orientation follow-up is necessary to see if employees understand the process. Compare your objectives with your results - are you meeting pre-determined goals? Keep in mind that some objectives are results-based. To be able to see a reasonable drop in lost time, accidents, and therefore a drop in lost time claims, you need a fairly lengthy review process. Bob cited an example of a grocery chain with 600 employees. The year before he worked there, there were 85 lost time claims where employees were hurt and had to stay off work. On analysis, it was found that 50 were people who had been with the com-