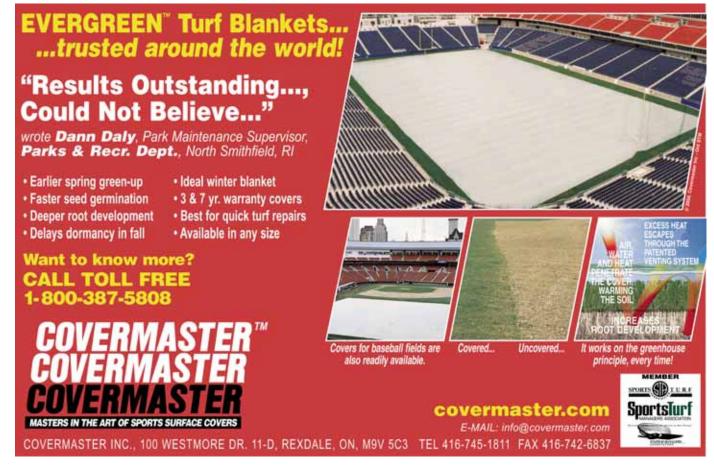
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SPORTS TURF MANAGER

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STA OFFICE HOURS

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The President's Desk

Spring is here, and it's time to get back to the business of sports turf management. After an extremely wet fall and a winter with very little snow cover, I'm sure you all have your work cut out for you over the next few months.

he Sports Turf Association is 20 years old in 2007. We celebrated at the Ontario Turfgrass Symposium with a retrospective presentation and the publication of 20 Years of Service by Mike Bladon which is included as an insert in this edition. During the OTS, the Guelph Turfgrass Institute also celebrated its 20th anniversary.

This year's OTS was again a great success with high attendance, a great venue and a first class slate of speakers. The OTS is, and continues to be, the premier turf education forum in Ontario. Many thanks to the OTS Committee for a job well done.

During the symposium, we also held our annual general meeting. As you may recall, over the past year we changed our scholarship program and revamped the scoring matrix. At the AGM, we also announced its renaming to the "Robert W. Sheard Scholarship" and Bob was presented with a plaque recognizing his contributions to our association and the sports turf industry. We did a good job of keeping this under wraps prior to the conference, however when Bob's lovely wife Gladys entered the room, he knew that we were up to something!

During the AGM, elections for board positions were also held. Many thanks for a job well done to Roy Forfar, Brian

Adriaans and Greg Snaith – all three have stepped down from our board. I would like to welcome Murray Cameron, Bill Clausen, Paul Cooper and Rob Field as directors. I look forward with great enthusiasm to the next year of my chair.

The STA currently has 262 members. The more members we have, the stronger our voice will be. I challenge each of you to encourage just one new person to join. It should be an easy sell as the benefits of a professional membership are multiple.

Finally, part of our mandate set out in our strategic plan is to encourage and support education and research. During the OTS, we made a donation to the Ontario Turfgrass Research Foundation. We have a great team of Ontario turf researchers (including many at the University of Guelph) and they need and deserve our support. Donations to the OTRF are appreciated. For more information on becoming an OTRF member or to donate to the future of turf research in Ontario, contact the OTRF office at 519-824-4120 (x56149) or email otrf@gti.uoguelph.ca.

— Gordon Dol. STA President

Above: STA President Gord Dol (left) presents Ron Schiedel, President of the Ontario Turfgrass Research Foundation, with a donation in support of turfgrass research.

EVENT CALENDAR

April/May (various dates)

Guelph Turfgrass Institute Pesticide Certification Preparatory Courses for MOE Exams Guelph, ON Info: (519) 824-4120 x 52501 www.uoguelph.ca/GTI

April 29 - May 3

Ontario Recreation Facilities Association Professional Development Program & Expo Guelph, ON Info: (416) 426-7062 www.orfa.com

September 2007

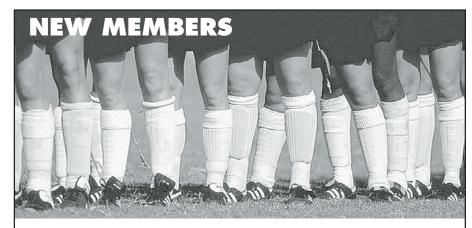
Sports Turf Association 20th Annual Field Day Watch for details! Info: (519) 763-9431 www.sportsturfassociation.com

November 1, 2007

Sports Turf Association Robert W. Sheard Scholarship **Application Deadline** Info: (519) 763-9431 www.sportsturfassociation.com

EMPLOYMENT ONLINE

Are you advertising a position or job searching? Visit us online at www.sportsturfassociation.com and click on "Turf Trades" for info. Cost to post an ad is only \$75 for STA members (2-month listing).



WELCOME TO THE STA!

Herman Krecker, Town of East Gwillimbury. Sharon, ON

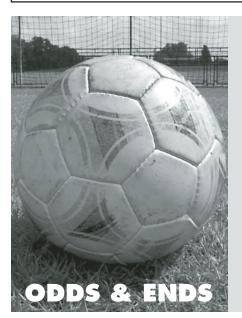
Steve Jemmett, NewRoads National Leasing, Richmond Hill, ON

Tom Mulvale, Town of Oakville, ON

Janis Olbina, Town of Oakville, ON

Frank Cain, University of Guelph, Department of Athletics, Guelph, ON

Harry Hakim, City of Windsor, ON



STA Membership Plaques

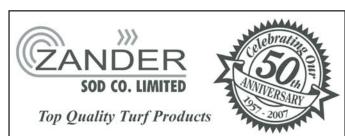
Display membership plaques are available in executive engraved walnut for \$50 plus S&H. To order, contact Lee at the STA office.

Summer 2007 Submissions

If you have something you'd like to submit for the next issue, please forward it to the STA office by May 18, 2007.

Editorial Content

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



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Turf Industry Press Releases

ZANDER CELEBRATES FIVE DECADES & DUKE RELEASES THE TRIWAVE 60 OVERSEEDER

Zander Sod Co. Limited Celebrates 50th Anniversary in 2007

In 1957, Fred Zander purchased his first truck and started Zander Sod Co. Limited as a sod delivery service. At that time, the sod was rolled and carried to the truck, loaded and unloaded, all by hand. How things have changed! We now grow over 3,000 acres. With many varieties of bluegrass, bentgrass and fescue, we are proud to be the choice for Ontario's toprated golf courses and construction projects.

Right from the beginning, Zander Sod has been dedicated to their customers and the sod industry. Our company is based on the foundation of supplying a quality product and great service at a competitive price. As much as technology has changed our business, our values have remained the same.

Just how much sod have we sold? By our estimates, Zander Sod has sold enough sod to cover over 13,000 average-sized soccer fields!

Our sod not only looks greener, it's healthier. Zander Sod prides itself on supplying the best turf and ensuring that the soil and environment stays healthy for generations to come. With the assistance of an agronomist, Zander Sod utilizes a complete soil management program that addresses the micro nutrient levels in both the soil and the plants. From seed bed preparation right through to harvest, we continuously monitor and adjust to produce only the highest quality grasses.

For many years, Zander Sod has been active members of a number of local and international associations which work to promote and better the turfgrass, land-scape and golf industries, as well as protect the environment.

Three Generations of Zander's Continue the Tradition

Fred's two sons pride themselves with continuing the family business and maintaining Zander Sod's industry reputation for excellent products and service. Claus Zander oversees operations as Vice-President and Mike Zander is the Manager of Bentgrass Production. For the last few years, the third generation, Mike's sons, have helped out in many departments. With over 70 employees during the busy season, Zander Sod has grown to be one of the largest sod-producers in Ontario and can be contacted at 905-727-2100, 1-877-727-2100, or www.zandersod.com.



New Overseeder from Duke

The TriWave 60 Overseeder is the latest innovation from Turfco set to revolutionize turf overseeding and interseeding practices. Each of the three independent floating heads have down pressure adjustment that adjust to varying turf conditions increasing germination by following the ground contours and creating more consistent slits. The combination of WaveBlade design and counter-rotating movement creates a clean, optimal square slit while minimizing turf disruption. A patent-pending seed delivery system places the seed directly into the slit reducing waste and creating increased seed-to-soil contact. For more information on this revolutionary new product, please contact:



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CONTRIBUTIONS WELCOME

Contact Lee Huether at the STA office if you are interested in contributing to the *Sports Turf Manager*. We appreciate feature-length articles, column ideas and newsworthy items. Updates on innovative research or equipment are also welcomed. This is a great way to both support your professional association and enhance your resume!



COVER STORY CONTINUED... FIELD ASSESSMENT

DR. ERIC LYONS, ASSISTANT PROFESSOR, TURFGRASS SCIENCE, UNIVERSITY OF GUELPH

... should be realistic and it is crucial to keep an open mind and try to use the information in a positive way.

Another procedural question that needs to be asked is who should perform the assessment? Should it be done internally or externally, through a consultant or a colleague from a neighbouring facility or municipality? Both options have their merits and downfalls. Internal assessment should be done continually by turfgrass managers but an overall assessment with specific goals can also be achieved internally. Internal assessments have the advantage of a greater historical knowledge of management and the construction of the fields, often allowing assessments to be more accurate. That knowledge is accompanied by preconceived ideas about what the problems may be. In order for assessment to be as valuable as possible, blinders must be taken off and everything must be looked at with an open mind. Alternatively an outside person could be brought in who is in a position to see more athletic fields and will come in with new ideas. This is also accompanied by a lack of knowledge of the history of construction and legacy of the fields. While generally this is viewed as a downside, the outside assessor is not clouded by "we tried that before," or "the politics won't allow that." This independence can be crucial in "telling it how it is" so that improvements can be made.

When assessing athletic fields the first thing that is done is a general safety assessment, looking for grass cover, potential tripping hazards or collision hazards. After that is completed, the general construction of the field can be assessed. Does the field have a proper crown, are there low lying areas where water can accumulate and is there a place for the water to go once it exits the field? One of the most important tools in a turfgrass managers kit is her/his soil probe. The probe will let you know the thatch accumulation of a field, it can identify areas of compaction,

and probably most importantly it can tell you about the soils used in the field's construction. One of the most common mistakes is to expect fields constructed very differently to perform the same under identical management regimes. For example, sand-based fields have greatly different moisture and fertility requirements than soil-based fields.

The management program can be assessed on paper for best management practices but it is essential to get out to the fields to see their condition and assess whether or not the management plan is realistic and implemented properly. Following are a few of the primary cultural practices and some of the common problems that can be uncovered through assessment.

Mowing

The management practice that is most crucial to providing safe athletic fields is also the one that can be the root of the most problems. Mowing needs to be done often and with good equipment. One of the most common problems with the implementation of a management plan occurs with targeted mowing frequencies that are not possible with the equipment or staff available. Another problem with mowing that may be uncovered is problems with proper maintenance of the mowers. Are the mowers cutting cleanly? Is there a consistent cut with no "mo-hawking"? Other problems that are commonly found during assessment are wear patterns being caused by mowers turning too tightly, or compacted areas along mowing patterns.

Fertility

The most common problem with fertility that can be uncovered is a lack of consistency of application, or evidence that fields are just not being fertilized due to inconvenient locality or other mitigating factors. Many fields have areas that consistently do not get fertilized. The only

way to tell if a field or area is fertile or has poor soil conditions is to get out the soil probe and test that soil. Another common problem that a program assessment can uncover is that the type of fertilizer is incorrect. Are the proper fertilizers being applied and are they being applied at the proper nitrogen rate for the prescribed mowing frequencies? As fertility increases, the need for mowing also increases. Many municipalities have responded by lowering their application of nitrogen throughout the season. The result is less growth and less expense for mowing, but this comes at the price of a lack of recovery and overall poor field quality, leading to unsafe playing conditions.

Adjacent Page: Severe compaction on corner of an athletic field caused by nearby construction. Right: Understanding the soil is crucial in determining management plans. A soil probe is an invaluable tool and can uncover many underlying causes of problems.





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Aeration, Topdressing, Overseeding

Aeration is a crucial aspect of any management program. It helps control thatch and organic matter build-up at the soil surface by mixing the soil in with the thatch allowing the microbes in the soil to break down the organic matter. Often aeration is not done aggressively resulting in thatch accumulation and layering if or-

Comprehensive sports field assessment goes beyond looking at the end product and analyzes how the entire management program including use management impacts field quality.

ganic topdressing is being used. If topdressing with compost or other organic material, it is essential that an aggressive aeration program is in place. This is essential to prevent a layer of organic mat-

ter from accumulating at the surface of the playing field, inhibiting healthy turfgrass growth. Assessment can help coordinate different management practices to maximize the effectiveness. Overseeding, a crucial part of any athletic field management plan, should be timed with aeration to maximize soil to seed contact and assure maximum benefit.

Classification Systems

Finally, assessments of the overall classification systems are essential. Often the classification systems are based on inputs and have implied quality for those added inputs with little to no regard for use patterns. Often the fields that are higher on the classification system are expected to be the premier fields yet they are scheduled for the most hours of use. Use patterns must be part of an overall athletic field management plan. While there are

always unscheduled uses from schools and kids playing in parks, it should be remembered that field quality and safety are often most correlated with use patterns.

It is essential that we continue to try to improve how we manage athletic fields and one way to see where we are and decide how to move forward is through comprehensive sports field assessment. This process goes beyond looking at the end product and analyzes how the entire management program including use management impacts field quality. This broad based assessment can lead to new ideas and continuation of successful practices and allows the turfgrass manager to move forward in an effective manner. •

Top Left: Special events can cause excessive wear and need to be accounted for in assessing use. Top Right: Field failure due to overuse and wet weather.



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THE IMPORTANCE OF PROPER FIELD MANAGEMENT

IAN FERGUSON, 2007 STA ROBERT W. SHEARD SCHOLARSHIP RECIPIENT

roper field management today goes beyond the traditional "mow and blow" concept of the past. The increased study of turf grass has lead to many new concepts on plant physiology and the advancement of technology has created a fleet of equipment which is greatly superior in terms of accuracy, consistency and quality.

With these advancements in turf management, we are now able to provide fields of unsurpassed quality which has lead to the progression of athlete's skills and the sports played on our fields. This has led to greater demands and expectations for our fields, which means that we, as educated turf managers, need to implement the skills and knowledge that we have acquired in order to meet the needs of the games.

These skills go beyond merely implementing an irrigation schedule, which is without a doubt a vital asset to turf managers, but rather to the more mechanical side of proper field management, such as fertility regimes, aerification, over-seeding and topdressing, spraying, and field renovations. Without the proper use and timing of these skills, turf managers may struggle to keep their fields performing at the same level as the sports being played on them, resulting in weakened and diseased fields, which are uneven and unsafe for play.

Fertilization

Perhaps the most utilized skill by turf managers today is the use of fertilizers. Whether they be organic or synthetic, fast or slow release, granular or liquid, the addition of essential nutrients into the soil profile is critical to turf health. Implementing a regime that best suits the needs of your turf will be crucial in maintaining a healthy stand of grass. There are several factors to consider when planning a fertility program: climate, turf type, irrigation scheduling, budget, and field use are five of the more common ones. By taking all factors into consideration, a program

can be built to best supply the turf with nutrients. The most recent concept is called "spoon-feeding" and in southern Ontario typically consists of a late fall nitrogen slow release and a late spring all-purpose slow release fertilizer to provide a base level of fertility throughout the year. Once base fertility is established, the "spoon-feeding" method is applied by using fast release liquid fertilizers biweekly to control growth rates, colour and disease pressures. This concept has thus far proven to be an effective fertility tool, and should be considered by all turf managers to implement on their fields.

Aerification

Aerification of fields may be the most important management practice for sports fields in terms of type and timing. The frequency of aeration is entirely dependant on the type of field and the amount of play it receives (thus the intensity of compaction). By using this theory of the relation between wear and aeration, a sports turf manager can decide when to aerate their fields. Clearly a football pitch would receive more wear and compaction than a baseball diamond, and the frequency of aeration practices should reflect that. A general recommendation for the aeration of high wear fields in the southwestern Ontario region is once per month, which works out to roughly six times per season. Some of this aeration should be solid tine, and some should be cored. When a turf manager chooses to do one or the other it is usually based on timing, budget and labour restrictions Coring usually requires more time and money, as the cores need to be crumbled or collected afterwards. Without aeration practices, fields become compacted, which affects the turf by preventing gas exchange, reducing drainage and inhibiting root growth. This creates weak turf with high probabilities of contracting disease, such as several types of fungal species. In addition, compaction also creates a hazardous playing surface by making the surface

soft and squishy, which is difficult to play on and increases risk of injury.

Topdressing & Overseeding

In conjunction with core aerating is a practice known as topdressing and overseeding. Typically, prior to core aerating, a sand-seed mixture is spread over the playing surface approximately 1/8" to 1/4" thick. The sand is used as a soil amendment to increase the drainage capacity of the field and the seed is mixed in to speed up recovery time from the damage of coring, to avoid weeds and disease from interrupting turf growth. The entire process will cause some stress to the field, but with proper practices, a turf manager will end up with a thicker, lusher field, which drains better and performs well even with high wear. This is typically done in the spring while fields are kept moist with frequent rainfall and as the temperature is increasing to aid with seed germination. Fields in southwestern Ontario are typically a blend of Kentucky bluegrass and perennial ryegrass, and so a seed blend which matches the content of the field is suggested. It should be noted that perennial ryegrass germinates faster than Kentucky bluegrass, but also that Kentucky bluegrass is more resilient to wear than perennial ryegrass.

Pesticides, Fungicides & IPM

On high end fields, having consistent uniform turf is an absolute necessity. To achieve such perfection usually requires the use of herbicides and fungicides to keep pests from growing in the fields where they are not wanted. Many municipalities are currently banning the use of most pesticides, but there is a need for them in certain circumstances which should be brought to the council's attention to appeal the bylaws to exempt high quality turf, such as sports fields, lawn bowling clubs and golf courses. Spraying sports turf with preventative herbicides, fungicides and pesticides is not entirely necessary. Post emergent treatments for

most pests are usually effective at alleviating the problem. A turf manager should be able to argue their point to a council by making the argument that only post-emergent spraying will be done, and it will be done by an IPM licensed professional in areas only where the disease, insects or weeds are seen. The application of chemicals to ensure uniformity in the playing fields is a cost effective way to maintain field quality and is vital to the maintenance of a field.

General Maintenance

There are other practices which also affect the quality of the game which are not directly related to the turf itself. Field repairs, such as back-stop patching, fence capping, goal net repairs and bleacher refinishing are other maintenance practices which affect the game and reflect the quality of the fields. Back-stops and fences and nets with holes in them allow balls to pass through, which is an issue both for safety and for consistency in the rules of the game. Fence capping and re-finished

bleachers are also crucial in keeping both players and spectators safe. It would be very unfortunate for a player to injure themselves on the top of a chain link fence or for a spectator to be seated on an unsafe bleacher stand and have an accident. Other repairs that occur directly on the field, such as the removal of lips, edging warning tracks and sodding goal creases are also vital in ensuring a safe playing surface. Fields need to be as smooth and consistent as possible, and all transition areas (such as clay to grass) need to be clean, smooth and level to avoid injuries from occurring. This type of maintenance practice is usually forgotten about on slightly lower quality fields, which at some times may be acceptable by the standards of the games being played on them, but for high quality fields with professional level sports being played on them, ignoring these repairs is intolerable.

Going beyond the management practices of the past is vital in providing fields for the future of sports. With the large increase in player skill comes a large demand for an increase in field quality. Today's new technology and knowledge of turf now allows us to meet and raise the standards for sports fields and sports facilities. By using these new resources, turf managers are now able to provide thicker, smoother, tougher fields to stand up to the increased level of play. These new practices don't come without their costs, but the benefits of properly implementing them on fields doesn't compare to the fields which don't receive them. It is becoming a struggle for turf managers today to keep up with player and game expectations; many facilities have already chosen to change their fields to synthetic turf to be rid of the complications of compaction, drainage and fertility, but the value and experience of having natural turf fields is an immeasurable quality which turf managers should strive to preserve.◆

Information gathered from: 1. Personal Knowledge 2. The Ohio State University: httn://ohioline.osu.edu/srt-fact/0002.htm1 (Oct. 25th, 2006).



