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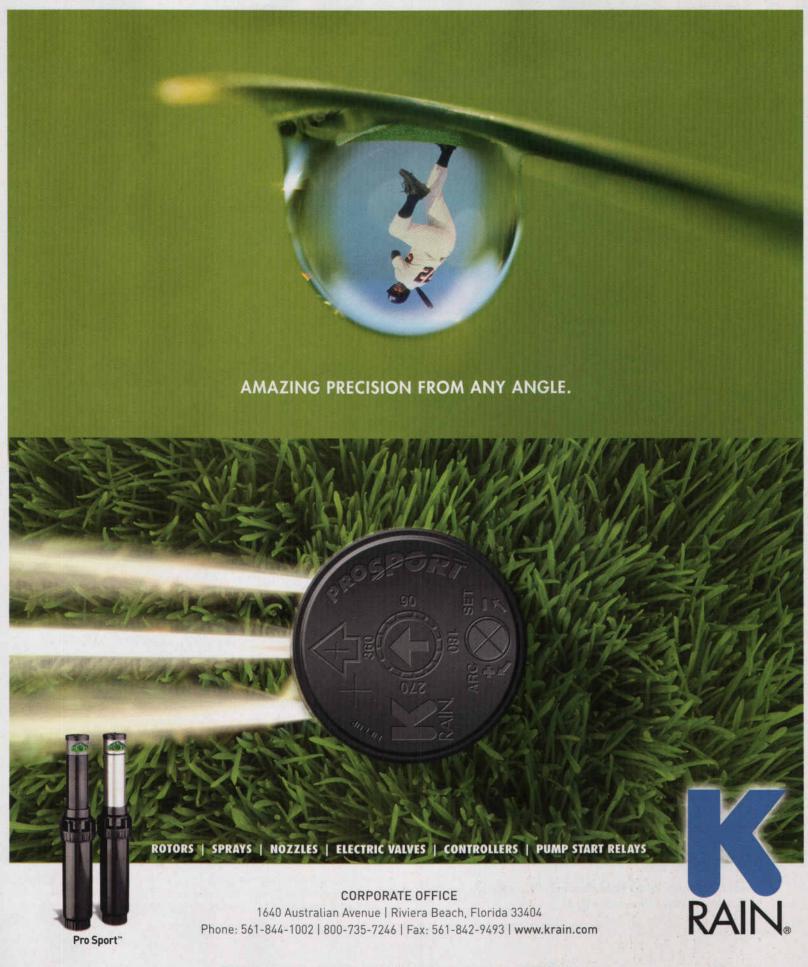
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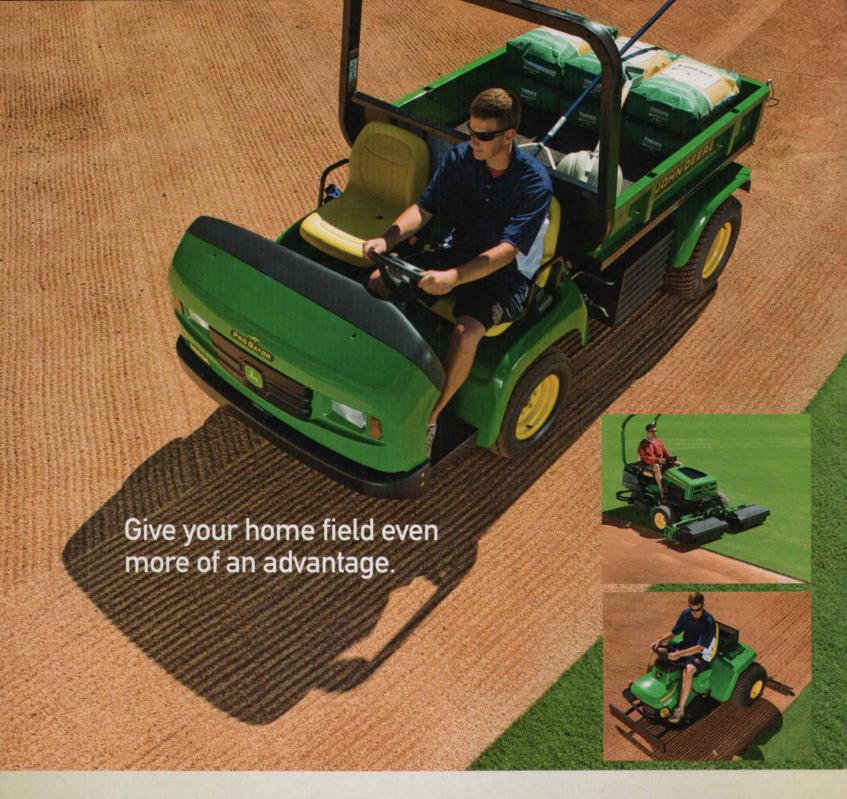
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42 Mary Rountree Evans Field, Baraboo, WI, is the Schools & Parks Baseball winner

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On the cover: Craig Schlender tamps the mound at Mary Rountree Evans Field, Baraboo, WI, the 2007 STMA Schools/Parks Baseball Field of the Year.



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From the Sidelines

More research, less hysteria needed



ERIC SCHRODER Editor

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717-805-4197 P.O. Box 280, Dauphin, PA 17018 'm sure there were at least a few patrons of this magazine who smiled upon reading headlines this spring such as "Sinatra Park shut down over lead." When the New Jersey Department of Health and Senior Services ordered several artificial fields closed after finding lead concentrations, there were certainly some folks in turf maintenance offices across the country thinking maybe now was the time to watch some heads get chopped off and rolled into a basket.

But that would be way premature. The turfgrass science industry has done little research in the area of synthetic turf, and what has been done is more about hardness, surface temperatures and MRSA. As for the synthetic manufacturers themselves, sales have been good and a large portion of the public seems to think these fields are better than natural turf. Why would these companies feel the need to conduct research that might find results that are less than favorable for them?

It's ironic that the same groups of concerned citizens that just a few years ago were crying (and still are) about use of herbicides and similar products on athletic fields, and welcomed the synthetics into their communities, are now fussing about the dangers of synthetic fields.

At a news conference May 6, AstroTurf general manager Lou Ziebold dramatically dumped bags of artificial turf fibers on the floor to illustrate how much a child would have to swallow before they would be at risk of lead poisoning. He said a 50-lb. child would have to swallow 23 lbs. of artificial turf to reach the federal cap for toys of 600 parts of lead per million. Michael Dennis, chairman of GeneralSports Venue (GSV), Astroturf's USA licensee, said, "Synthetic turf sports fields, including the nylon versions being brought into question, are completely safe and pose no risk to children or athletes."

Nevertheless, the U.S. Consumer Product Safety Commission and the EPA have begun a study that includes the newer infill systems so popular today. Jon Pritchett, GSV's CEO, said his company will participate fully in the federal investigation, and predicts they will find the same results as his company has, which include seven separate scientific conclusions. "We assembled the most qualified scientific and technical experts in the country to produce and analyze the best available data, and everything they told us confirmed our position," Pritchett said.

In today's society it only takes a hint that something might be harming the children to provoke action, so everyone in the sports turf industry should welcome as much research as possible, including the manufacturers themselves, who might be best served by funding these studies.

Jun Schusten

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The Official Publication Of The Sports Turf Managers Association



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SportsTurf (ISSN 1061-687X) (USPS 000-292) (Reg. U.S. Pat. & T.M. Off.) is published monthly by M2MEDIA360, a Bev-Al Communications company at 760 Market Street, suite 432, San Francisco, CA 94102. POSTMASTER: Send address changes to Sportsturf, P.O. Box 2120, Skokie IL 60076-7820. For subscription information and requests, call Subscription Services at (847) 763-9565. Subscription rates: 1 year, \$40 US & Poss.; 2 years, \$65 US & Poss.; 1 year, \$65 Canada/Foreign Surface, 1 year, \$130 Airmail. All subscriptions are payable in advance in US funds. Send payments to Sportsturf, P.O. Box 2120, Skokie, IL 60076-7820. Phone: (847) 763-9565. Fax: (847) 763-9569. Single copies or back issues, \$6 each US/Canada; \$9 Foreign. Periodicals postage paid at San Francisco, CA and additional mailing offices. COPYRIGHT 2007, SportsTurf. Material may not be reproduced or photocopied in any form without the written permission of the publisher.

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President's Message

Grown from

any of us were introduced to STMA through a local chapter. Most likely, we heard about a workshop or meeting where fellow professionals were gathering to share, network and learn. These opportunities proved extremely valuable for technical knowledge and making business contacts.

Soon after discovering my local chapter, I realized how valuable the national structure of STMA could become for me. As a journeyman sports field manager, I could not believe there was a national association that offered what it did (and still does) in tangible benefits, and seemed to really care about me becoming successful in the profession. A ballpark on an off day can be a very lonely place, but I certainly learned that this wasn't a lonely profession!

As has happened with many others, I was asked to be a board member after attending about two chapter meetings. My memory recalls that offer quickly being followed by the request to have a chapter workshop at the facility I managed. Who can say "no" at that point, right?! There are more people than you think laughing right now because I'm not the only one who's bitten on the "you'd make a great board member" bait!

But I can honestly say it's the best thing that's happened to me professionally. Add the special friendships I've been privileged to make through STMA, and it ranks right up there on the personal scale as well. A simple, local introduction has changed and enriched my life more than it's comfortable to admit sometimes.

The STMA face that greets many in this industry is a local or chapter representative. Active chapters with aggressive offerings and great newsletters are critical to STMA's health. Engaged chapter leaders sell the STMA vision at the local level. In turn, STMA works to produce education for your newsletters, and our national chapter sponsors are helping to bring high-level educators and leaders to your local chapter events. We could not be a strong national association without the dedication of chapter volunteers. Thank you for all you do!

Regional summer workshops or institutes—an idea that STMA has tried in the past—is returning this summer. Five chapters are helping to develop the STMA Mid-Atlantic/Northeast Regional Sports Turf Management Workshop. It will take place June 27 in Philadelphia at Lincoln Financial Field and Citizens Bank Park. Top educators, tours, equipment demonstrations and a chapter competition will fill the day.

STMA plans to host more of these events within its chapter network in the future. Learning together and from each other really connects us as sports turf managers and that connection builds a strong foundation for the profession. STMA realizes that the national conference is not always affordable for multiple attendees from your facility. Thus, these regional conferences provide a high-end learning experience for great value for your entire crew. I hope many chapters are able to come together for a joint event of education and fun under the STMA regional umbrella!

Mike andresen

local roots

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IRRIGATION & DRAINAGE

Drought, water restrictions, and community sports fields

By Dr. Robert N. Carrow



hen drought conditions are severe enough to result in local water-use restrictions, com-

munity sports fields may not be immune from adverse effects of drought. If the state or water district do not have appropriate regulations that allow community sports fields to receive reasonable irrigation during water restrictions, more than the grass on the field is affected.

When severe drought starts to impact states or local communities, a very common theme is for the general public and governmental agencies to impose total water bans on outdoor landscape areas, including community sports fields, as a means to achieve water conservation as well as other visible water-use industries such as car washes and pressure washing. However, when a drought is prolonged the fallacies of this approach become increasingly evident in terms of impact in the community.

Impact can be assessed from several viewpoints, but the most apparent being immediate site users, the players:

- Hard surfaces increase player injuries; player safety is compromised.
 - · Field surface conditions of hardness and

unevenness affect the playability for the sport.

 Field conditions continue to deteriorate as turf cover is lost with exposure of the soil sur-

face, which escalates the potential for further injuries.

However, impact is much broader than the immediate site-user and transcends into the local community. Community sports fields, including K-12 sports venues, have substantial positive contributions to society and these are adversely affected by water restrictions that are too harsh to maintain fields in a suitable manner. For example, contributions entail:

- An integral component of community activities for the youth.
- Promotion of physical development and health.
- Enhancing community identity, spirit, and local pride.
- Economic development via creating a community attractive to potential new residents and businesses.
- Economic development through creation of jobs, purchases, provision of goods and services such as sports camps, tournaments, etc.



- Positive activities for youth can translate into safer communities with fewer crimes
- Once the grass cover is lost and the surface conditions deteriorated, restoration of fields is costly and requires considerable time and effort.

Lessons from down under

Experiences in Australia over a 7-year drought period illustrate a positive change in attitudes and actions that can serve as a model for other regions and point to possible proactive actions for the sports community. Drought conditions over much of Australia over the past 7 years have shown: a) the connection between drought and player safety; b) increasing awareness of the extensive influence of drought and total water restrictions on local communities; and c) a shift from total ban on water towards a more "industry friendly" attitude as government officials and the general public came to understand the adverse consequences of the initial actions.

The Municipal Association of Victoria

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2005

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Spring Tine Rake Rear Brush Attachment



GreensSpray



LitterKat*



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IRRIGATION & DRAINAGE

developed an D Hexcellent resource for positive action that addresses: impacts, field usability, management options, site-specific best management practices (BMPs), and water conservation plans. The BMPs allow controlled irrigation during drought for maintenance of the turfgrass cover and reducing surface hardness. Interestingly, a recent development was the Victorian Government is the \$9.3 million Drought Relief for Country Sports Program for assistance to communities to maintain their community sports activities during prolonged dry periods and avoid the adverse consequences from loss of the fields. These governmental responses during prolonged drought illustrate a progressive attitude and model for maintaining community sports fields and avoiding the adverse economic, job related, and community impacts.

Just as the Victoria experience revealed there is a better plan to deal with drought issues on community sports fields than a total water ban, the Council for Technology and Agriculture (CAST) recently affirmed this in a special publication emphasizing the important of site-specific BMPs for water conservation. Carrow and Duncan explain foundational principals of site-specific BMPs and why it is the "gold standard" for dealing with any environmental issue including water conservation. One foundational principle of BMPs is to use multiple strategies selected from all possible strategies that are the best suited practices for the specific site (e.g. sports field) to address the issue, i.e., the "best" of the "management practices" for the site conditions. Basic strategies for site-specific BMPs on sports facilities are presented in Table 1.

Since water conservation starts at the level of each individual water user or facility, site-specific BMPs implies that each community sports field develop and implement a BMPs water conservation plan. Resources that can assist are: a) the MAV document available on-line; b) the www.GeorgiaTurf. com site, especially the 'Environmental and Water Issues' section which contains basics of BMPs and detailed templates for site-specific golf course and landscape sites that could be adapted for sports fields. The STMA may consider proactively developing a standard template that could be used by any sports facility similar to the template

by Carrow et al. (2) developed for the golf course industry and has been used as a model within certain states.

It is possible to have very good sitespecific BMP plans for water conservation, but for it to have little meaning during a drought. It just depends on the nature of governmental regulations, which are either rigid regulations or science-based BMPs. When drought conditions occur, state and local water agencies come under pressure to institute water restrictions. If these regulations are based on the same foundations as site-specific BMPs, water conservation can be achieved without major adverse economic or functional impacts (Table 2). These types of state or water district regulations are termed "state level BMPs for water conservation." It is important to note that a critical component of a state BMPs plan is that all water users (industrial, commercial, institutional, agricultural, and irrigation landscape water users) must participate by implementing site-specific BMPs.

Waltz et al. developed a model set of state level water restriction guidelines that incorporate BMPs principles and is modeled after the successful SAWS programs. It is informa-

Table 1. Primary Site-Specific BMPs strategies for water-use efficiency and conservation on community sports fields (adapted from Carrow et al., 2007)*.

- Facility Planning and Site Assessment for a Water Conservation Plan. Irrigation audit; intensive site assessment of soil physical and chemical properties and spatial variability; subsurface and surface drainage; evaluate potential irrigation water sources; soil and water quality tests. All water conservation practices implemented in the past or current time period should be identified along with estimated cost in money and labor.
- Site Design for Water Conservation. Includes initial construction aspects: soil modification to a allow water infiltration; omitting irrigation on surrounds of recreational facilities where irrigation is not essential; water harvesting and capture form surrounds for irrigation use.
- Use of Alternative Irrigation Water Sources. Includes evaluation of any needs that arise from use of particular irrigation water, especially total soluble salts and/or sodium.
- Irrigation System Design, Installation, and Maintenance for Uniformity of Application and Flexibility. Rain shut-off devices.
- Irrigation Scheduling For Water Conservation: Budget approach to irrigation; implementation of irrigation scheduling plant, soil, or climatic methods by using sensor technology.
- $\bullet \, {\sf Selection} \, \, {\sf of} \, {\sf Turfgrass}. \, {\sf Drought} \, {\sf resistance}; we {\sf ar/compaction} \, {\sf resistance}; {\sf adapted} \, {\sf to} \, \, {\sf climate} \, {\sf and} \, {\sf site} \, {\sf use}. \, \\$
- Additional Management Practices for Water Conservation and Field Safety/Playability.
 Surface cultivation programs are especially important to capture rainfall, allow efficient irrigation scheduling, and maintain a resilient surface; deep cultivation program to promote deep rooting; traffic plan to prevent undue wear and rutting in localized areas; topdressing to level the field and modify surface conditions; promotion of deep rooting by fertilization, liming, etc.; wetting agents; proper mowing height; consider soil modification or sand-capping if necessary.
 - Maintenance Facility/Buildings and General Grounds Water Conservation Strategies.
- Develop Water Plans. Sustainable water use for normal conditions; water conservation plans for drought periods which includes a plan for each water restriction level. During water restrictions, priority areas for irrigation are identified both on the fields and for surrounding areas.
 - · Benefits and Costs of Regulations for All Stakeholders.
- Education. Internal and Outreach to understand water conservation; implications; and management strategies.
 - · Monitoring and Modifying the BMPs Plan

"Carrow, R. N., R. Duncan, and C. Waltz. 2007. BMPs and water-use efficiency and conservation plan for golf courses: Template and guidelines. Document developed for Golf Course Superintendent Association of American by the University of Georgia. http://www.commodities.caes.uga.edu/turfgrass/georgiaturf/Water/Articles/BMPs_Water_Cons_07.pdf