

Get Serious.

Managers Association

Are you ready to get serious about the sports turf industry? Then it's time to become a member of the Sports Turf Managers Association (STMA).

Who we Are

STMA is an organization of professionals representing all segments of the sports turf industry. Our members work to combine the science of growing grass and the art of maintaining sports turf to produce playing fields that are both safe and aesthetically pleasing.

What's in STMA for You

We help you — the sports turf professional — do your job better. Here are the benefits STMA provides its members:

- An opportunity to share knowledge and expertise for better and safer sports turf areas
- A resource library of valuable technical information
- Education through the STMA National Conference and Trade Show, regional institutes and workshops
- A subscription to Sports Turf Manager, the STMA bi-monthly newsletter
- Facilities tours

- Support for sports turf research
- A National Awards Program
- An Annual Membership Directory to keep you in touch with your peers
- Scholarships for students with an interest in sports turf technology
- Participation in STMA Chapter meetings
- Complimentary subscription to sportsTURF Magazine
- Registration discounts for STMA events

Get serious about your profession. Complete the membership application below and join STMA today!

Get Serious With STMA

Application for Membership

The Sports Turf Managers Association (STMA) is an organization of professionals representing all segments of the sports turf industry. Our members work to combine the science of growing grass and the art of maintaining sports turf to produce playing fields that are both safe and aesthetically pleasing.

STMA provides members with a variety of benefits, including: Education through regional institutes and conferences; support for sports turf research; facilities tours; a national awards program; access to the STMA National Conference and Exhibition; complimentary subscriptions to Sports Turf Manager and sportsTURF Magazine; and much more.

If you're serious about the sports turf industry, then it's time to become a member of STMA. Join today!

Member Information		Membership Category (please check one)	
Name		□ Professional sports turf facility manager □ Additional members from same facility □ Four-year colleges and universities □ Additional members from same facility □ Other schools, parks, ext. agents, municipal	\$75
Title			\$45
Employer			\$75
Employer			\$45
Type of Business			\$50
Address		☐ Additional members from same facility	\$30
	StateZip	□ Student	\$20
		Commercial attitude (U.S. or International)	\$175
Phone	Fax	☐ Additional members from same company	\$45
Signature		International other than commercial affiliate	\$50
Referred by		(must be in U.S. dollars)	
		Total amount enclosed	\$

Please enclose payment (check or money order) and send to:

Sports Turf Managers Association PO Box 809119

Chicago, IL 60680-9119

For more information, contact STMA Headquarters at 312/644-6610

"Promoting Better and Safer Sports Turf Areas"

A UNIFIED INDUSTRY WORKING TOWARD A COMMON GOAL

Nearly every key issue affecting one part of the Specialty Pesticide Industry affects the entire industry.

RISE (Responsible Industry for a Sound Environment) is bringing industry leaders together to identify critical public issues and legislation, and address them as a unified body.

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A wide variety of companies and organizations are already members of RISE, and have contributed to successes like we enjoyed recently in Missoula, Montana, which demonstrates the industry is able to work constructively with local government bodies.

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For more information, call RISE at (202) 872-3860, or write to 1155 15th St. N.W., Suite 900, Washington, D.C. 20005.

SportsTURF

PROGRAM



THE OFFICIAL PUBLICATION OF THE SPORTS TURF MANAGERS ASSOCIATION

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ADVERTISING, EDITORIAL AND CIRCULATION OFFICES 68-860 PEREZ RD., SUITE J. CATHEDRAL CITY, CA 92234



AN ADAMS PUBLISHING COMPANY 68-860 PEREZ RD., SUITE J, CATHEDRAL CITY, CA 92234 (619) 770-4370; Fax (619) 770-8019

sportsTURF Magazine (ISSN 1061-687X) is published monthly except by-monthly October/November by Gold Trade Publications, Inc. Material in this publication may not be reproduced or photocopied in any form without the written permission of the publisher.

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SUBSCRIPTION RATES

ONE YEAR \$33 TWO YEARS \$50 FOREIGN (ONE YEAR) \$55 SINGLE COPY \$5

SUBSCRIPTION INFORMATION

P.O. BOX 2180, CATHEDRAL CITY, CA 92235-2180. SECOND CLASS POSTAGE PAID at Cathedral City, CA and at additional mailing offices.

Postmaster: Please send change of address to sportsTURF, P.O. Box 2180, Cathedral City, CA 92235-2180.

VOLUME NINE, NUMBER TWELVE

DECEMBER 1993

MAIN EVENTS

8 GRUBS VS. NEMATODES: THE BATTLE HAS JUST BEGUN

Researchers at the University of California, Davis are using beneficial nematodes to combat white grubs. While not a cure-all, explains U.C. Davis physical plant grounds operation manager Bob Milano, this natural approach to pest management looks promising.

14 PROFILE: THE TURFCON TEAM

Want to convert the concrete floor of an indoor stadium to natural turf with the push of a button? That's the "Stadium of the Future" from the team at Turfcon, a consulting division of The Greenway Group. Team members Dr. Henry Indyk and Dr. Richard Caton not only believe the concept is possible, but will be implemented in the not-too-distant future.

16 ALLOCATING SPORTS FIELD MAINTENANCE COSTS

Users of athletic facilities, such as gymnasiums, willingly pay user fees, but they tend to balk at paying user fees for athletic fields. Participant education on the need for athletic field fees and a fair and rational system for establishing them are the keys to persuasion, explains Joe Ardolino.

20 PRODUCT SOURCE BOOK

If it's made for sports turf, you can find it here.

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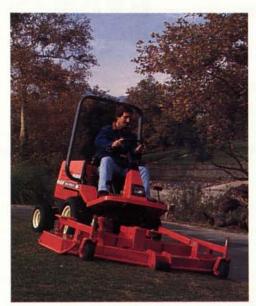
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ON THE COVER: Irrigation, one of the many categories in the sportsTURF 1993 Product Source Book, in action at

Yankee Stadium, New York City, NY. Photo courtesy:

Toro Irrigation.



KUBOTA RUNS CIRCLES AROUND THE COMPETITION

Kubota's FZ2100 and FZ2400 with Zero Diameter Turn (ZDT) run circles around the competition.

The power in the innovative FZ front mowers starts with 20 or 24 horsepower

Kubota liquid cooled diesel engines and continues with the Auto Assist Differential (AAD) drive system that automatically switches between 2WD and 4WD to match operating conditions. With AAD, you get extra power to maneuver easily in wet grass and muddy conditions with the front wheels rotating freely through the tightest turns. The FZ can turn completely around in one spot without damage to the turf, cutting way down the time spent on labor-intensive hand trimming jobs.

For productivity and versatility, Kubota's F-Series front mowers can't be beat. The F2400 is 4WD and 24 horsepower, while the F2100 is available in 2WD or 4WD, and has 20 horse-



power. Both have Kubota diesel engines, and are equipped with hydrostatic rearwheel power steering for easy handling. A wide selection of Performance Matched Implements provide the versatility. They include triplex reel, rotary, flail and mulching rear discharge mowers, rotary broom, leaf blower, snowblower, and front blade. Roomy operator's deck, tilt steering wheel, and excellent visibility increase comfort and productivity.

Your Kubota dealer can show you the complete Kubota turf equipment line with the power and maneuverability to run circles around the competition.

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THE FRONT OFFICE

OPINION PAGE

STMA Hits a Homerun at Camden Yards



In an editorial shortly after last year's STMA Conference and Exhibition, I fell all over myself praising the event and the organization, and gushed over the promise both held for the future. I'm not a gambler by nature, but I'd have bet the farm that the organization and its conference would be even better in 1993 at Oriole Park at Camden Yards. And more than a few cynics out there would have happily taken that bet.

Hate to gloat . . . but I'd have won.

Despite a cold snap that all but cleared the floor level equipment exhibits, an unfortunate turn that rankled more

than a few floor level exhibitors, the 1993 STMA Conference and Exhibition was a resounding success. This year, 230 people attended the event, which nearly doubled the previous year's attendance. Last year, 14 product manufacturers exhibited their wares. This year, there were 63. Compare these numbers with those of the event held in San Diego just three years ago, and the improvement picture becomes even more dramatic. Ten or so exhibitors, less than 100 attendees — STMA and its show looked near-dead.

What brought STMA out of its coma? The answers are leadership and commitment, which come from a number of sources.

First, you have to give outgoing STMA President Gil Landry and the Board of Directors a *tremendous* amount of credit. These people didn't inherit an organization on the rise — they inherited an organization that had almost received last rites. They made tough decisions, which included an association management change (for the better). Smith-Bucklin, the firm that now manages STMA, has helped the organization turn the corner. STMA's leadership also made a decision to be fiscally responsible. Three years ago the organization was \$58,000 in debt. By the end of this year, the organization will have cleared that debt.

Second, you have to give a tremendous amount of credit to the STMA Chapters. The chapters continued to grow during STMA's more troubled times, and they are the foundation for the national organization. Total membership stands at more than 500, and this year's retention rate was a record 77 percent. Some of STMA's strongest chapters, including Colorado and Chesapeake, have become strong forces in the last few years. The Chesapeake Chapter hosted this year's event. Their hard work translated into the most successful STMA Conference and Exhibition to date.

STMA is a volunteer organization. Its future rests on the commitment and enthusiasm of its members. From those I met in Baltimore (energetic individuals like Chris Bunnell, president of the growing Southern California Chapter, and Paul Greenwell of the Carolinas Chapter), I get the feeling that future is bright. New STMA President Greg Petry and the board members will inherit a healthier organization than their predecessors; and in a way, that increases the pressure on them. When you take over the leadership of any entity in distress, people don't expect much overnight. When you succeed quickly, everyone is pleasantly surprised. But when you take over a growing organization you are expected to maintain and improve upon that growth. Petry and the board, as well the entire STMA membership, are more-than-up -to the challenge.

I'd bet the farm on it.

Matthew Trulio

EVENTS

CALENDAR

JANUARY

3-5 Wisconsin Turfgrass & Green Industry Expo. Holiday Inn-West, Madison, WI. Contact: Dr. Frank Rossi (608) 262-1490.

4-5 Turfgrass and Ornamental Pest Control Workshop. Turfgrass Technology Center, Columbus, OH. Contact: Jeff Lefton (317) 846-7020.

5-7 Ontario Turfgrass Symposium and Trade Show. University of Guelph, Guelph, Ontario. Contact: Kelly Wilson, office of continuing education (519) 824-4120, ext. 3814.

10-13 Eastern Pennsylvania Turf Conference & Trade Show. Valley Forge Convention Center, King of Prussia, PA. Contact: Scott Guiser (215) 345-3283.

18-20 64th annual Michigan Turfgrass Conference. Holiday Inn, South Convention Center, Lansing, MI. Contact: Kay Patrick (517) 321-1660.

31-1 6th Annual Grounds Maintenance Seminar, Las Palmas Hotel, Orlando, FL. Contact: Floyd Perry, 800-227-9381.

JAN 31-FEB 7 International Golf Course Show. Dallas, TX. Contact: GCSAA, (913) 841-2240.

FEBRUARY

3-6 California and Pacific Southwest Recreation and Park Conference.

Anaheim, CA. Contact: California Park and Recreation Society (916) 446-2777.

7-8
29th annual Shade Tree
Symposium and Trade Show.
Lancaster Host Resort and Conference
Center, Lancaster, PA. Contact: Elizabeth
Wertz (215) 795-2096.

Send announcements on your events two months in advance to: Editor, sportsTURF magazine, 68-860 Perez Road, Suite J, Cathedral City, CA, 92234. Fax (619) 770-8019.

PRESIDENT'S MESSAGE

ByGreg Petry

STMA members I accept this position of president of STMA with a deep sense of duty and responsibility. I've been an active member with STMA since

Those of you who know me, know that I speak my mind and am open and honest with people. I also do what I say I'm going to



When I was critical of STMA's operation in 1987, I did something about it - I got involved. I made the commitment because I believed in our association, our industry and my career.

I hope that you will consider getting involved. This is our association and it needs volunteers and assistance. By committing to becoming an active member, you are committing to your career and your profession. I ask you, are you an active member?

Are You an Active Member?

Are you an active member, the kind that would be missed, Or are you just content that your name is on the list? Do you attend the meetings and mingle with the flock, Or do you stay in your office **Managers Association**

and criticize when one of us knocks? Do you take an active part to help the work along, Or are you satisfied to be the kind who will just belong? Do you ever work on committees to see that there is no "trick," Or do you leave the work to just a few and talk about the "clique?" So come to the meetings often and help with hand and heart. Don't be "just a member" but take an active part. Think this over my dear friend, you know right from wrong, Are you an active member OR DO YOU just belong?

This anonymous poem brings to heart the message that STMA is made up of people who want the association to succeed and grow. Today, STMA has grown - it's alive and viable. I have established three major goals for next year: 1. Continue on the current track and maintain our stability and momentum. We are moving STMA the old Penn State way - straight ahead, nothing fancy, grind it out and move forward. 2. We're going to work hard at creating a financial surplus. 3. Get more people involved by strengthening our working committees. If you are interested in joining any of the following committees, contact the chairman listed:

Membership Services — Richard Moffat, Chapter Relations - Bill Whirty, Education - Mike Trigg, Annual Conference and Exhibition - Mike Schiller, Awards and Scholarship - Bob Milano, Public Relations/ Communications - Gil Landry, Technical Standards - Steve Wightman, San Diego Jack Murphy Stadium or Steve Guise, Guise and Associates. Financial - Steve Guise, Nomination and Election - Gil Landry, Bylaws, Mission and Objective - Gil Landry.

If you ever have a question, need clarification on an issue or would like to talk about the association in general, call me at work, (708) 360-4725 or at home, (708) 623-7473. I must warn you - if you call me with a problem, have a solution ready. If you have an idea, be ready to act. If you have a special project in mind, be ready to plan and implement it. The Chesapeake Chapter can attest to that - they got involved, became a host chapter for our fifth annual conference and did a superb job.

I hope that throughout my tenure as president I get the opportunity to meet and talk with each and every one of you. I also hope we can form an active team; a team that works together to promote more newsletters, more institutes, more research and more conferences. Together we can develop more resources and opportunities for our careers and our industry.

In the immortal words of George Toma, "Let's work together, and them some," because the more we know, the more we grow.

STMA Chapter News

Chesapeake Chapter: STMA

The Chapter will be exhibiting at the Maryland Turfgrass Council's Turfgrass '94 on January 3, 4 and 5 at the Baltimore Marriott Inner Harbor in Baltimore, MD. This will be a great opportunity to "get the word out" on the chapter and its activities. Those interested in helping "man" the booth, please contact Art Downing at (410) 313-7254.

An all-day board meeting will be held in January to set the agenda for 1994. The place and time will be announced soon. All members are invited to take part.

For information on the chapter or upcoming activities, contact The Chapter Hotline (301) 865-0667.

The New England Chapter: STMA

The Massachusetts Turf Conference will be held February 28 through March 2, 1994. NESTMA will be one of the cosponsors, along with the Massachusetts Turf and Lawngrass Association. Included in the conference will be sessions geared toward athletic field maintenance and other issues of concern to sports turf managers. NESTMA will hold both a breakfast and mid-day meeting March

2 in conjunction with the conference.

For information on the turf conference, the NESTMA breakfast and meeting, or other chapter activities contact: Mary Owen, University of Massachusetts Cooperative Extension System at (508) 892-0382.

Iowa STMA

The ISTMA Annual Meeting will be held Wednesday, January 26 at 8 a.m. at the Des Moines Convention Center. This Meeting is held in conjunction with the 60th Annual Iowa Turfgrass Conference and Trade Show which runs from January 24-26.

Workshops and sessions geared to the sports turf manager include: The January 24th Sports Turf Workshop: 8:30 a.m., "How Grasses Grow," by Dr. Donald White; 10:15 a.m., "Physical Testing of Soils," by Chuck Dixon; 12:45 p.m., "Optimizing Pest Tolerance," by Dr. Ken Diesburg; and at 2:45 p.m., "ASTM Minimum Standards for Maintenance and Construction of Sports Fields," by Dr. Norm Hummel.

On January 25, the morning is devoted to general sessions beginning at 8 a.m., with concurrent specialized sessions held in the afternoon. Sports Turf Sessions: 1:30 p.m., "Managing Sand vs. Native Soils," by John Hopko; 2:15

p.m., "Sports Field Expectations," by Jesse Cuevas, Jr.; 3 p.m., "Post-Season Care of Football Fields," by Dr. Ken Diesburg; and at 3:30 p.m., "Weed Control for Sports Fields," by Dr. Frank Rossi.

Sports Turf Sessions on January 26 are: 8:30 p.m., "Care of the Field After the Game," by Dan Wright: 10 a.m., Panel Discussion: Flood Damage, chaired by Mike Anderson.

For information on the Turfgrass Conference and Trade Show, the ISTMA Annual Meeting, or other chapter activities contact: Gary Peterson at (515) 791-0765.

STMA Florida Chapter #1

For information on the South Florida Chapter and upcoming activities, contact John Mascaro (305) 938-7477 or Ed Birch (305) 938-0217.

Midwest Chapter

For information on the chapter and future activities, call The Chapter Hotline (708) 439-4727.

Colorado Chapter

For information on the chapter and future activities, contact Ron Marten, Falcon Colorado School District 49, at (719) 495-3601.

Grubs Vs. Nematodes: The Battle Has Just Begun

By Bob Milano



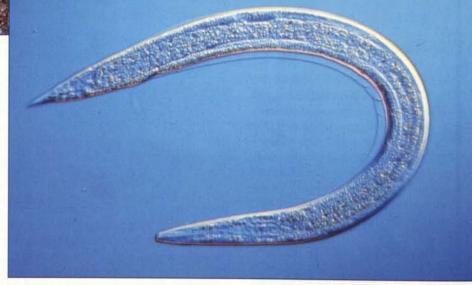
At left is a healthy white grub. At right is a white grub infected with a naturally occurring *Heterorhabditis* nematode. Photo by Jack Clark, courtesy H. Kaya.

s the summer season peaks, turf managers strive to maintain pristine turf under the rigors of baseball, soccer, softball and other activities. The competitive athletic battles and struggles that turf managers fight to maintain their playing fields are obvious. But there is a third unseen battle beneath the soil: Nematodes vs. White Grubs.

For two years, this war has raged beneath the lush blades of grass at Community Baseball and Soccer Facility at the University of California, Davis. With the assistance of Harry Kays, nematology professor, beneficial nematodes have been applied to both areas as a control method for white grubs (Cyclocephala hirts). The war rages on, with the experimental nematodes winning most of the recent battles, and we look for complete victory someday.

Nematode Lifestyles

Nematodes are very small, almost microscopic worms that can be divided into two types: plant-attacking and insect-attacking. Many grounds managers



Magnified view of an infected juvenile nematode. Photo courtesy: H. Kaya.

have experienced the destruction wrought by plant-attacking types, which can devastate turf or landscape plantings. Most grounds managers, however, have little or no experience with insect-attacking nematodes. This group of animals has been demonstrated as effective in controlling some turf and landscape pests, and is gaining popularity. The host range of the predacious nematodes includes a wide spectrum of insects including armyworms, cutworms, sod webworms and white grubs.

Beneficial nematodes reside in the moist soil of turf and landscape areas where they either ambush or hunt down pests. In many native soils, these animals are naturally present. According to Dr. Kays, they enter their victims (white grubs in this case) through their body openings.

One difference between nematodes and chemical controls is the method of attack. Some of the most effective nematodes are mobile and actively seek out their prey. In contrast, applied chemical pesticide agents must rely on the actions of the tar-