Step

TMA chapters have made a huge step forward in 1999. Prior to the opening of STMA's 10th annual Conference & Exhibition in Mesa, AZ, last month, representatives of most affiliated and forming chapters met for the first-ever Chapter Officers Training and Exchange Session.

The session provided a networking bonanza for those attending. The phrase, "been there; done that," takes on a whole new meaning when you can compare and share the results of your experiences with others.

Look for exciting new developments within your chapter, and take a few minutes to thank those involved for their commitment and hard work.

Chapter news

KAFMO Chapter: The Keystone Athletic Field Managers Organization elected 1999 recently its

Board of Directors: Dan Douglas President Don Fowler Vice President Kevin Yeiser Secretary Jim Welshans Treasurer Tim Spangler Central Dauphin School District Co-Director: Public / Private Schools Stanley Weaver Upper Dauphin School District Co-Director: Public / Private Schools Neale Magill Hampden Township Co-Director: Parks/Recreation Chris Lessig Manheim Township Co-Director: Parks/Recreation Jim Welshans Dauphin County Coop. Extension Co-Director: Education / Extension



Don Fowler PSU Extension (retired) Co-Director: Education / Extension Dennis Coleman Millersville University Co-Director: College / University **Kevin Yeiser** Lebanon Valley College Co-Directors: College / University Joe Bialek Harrisburg Senators Co-Director: Professional Facility Dan Douglas **Reading Phillies** Co-Director: Professional Facility **Rich Valentine** Valentine & Sons Co-Director: Commercial Category Kurt Nilsson PROFILE Co-Director: Commercial Category KAFMO/STMA will sponsor an athletic field conference in Grantville, PA, Feb. 19. It will feature seminars and





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program. We use it in hard compacted soils where core aeration would not penetrate. We were able to loosen up areas prior to games Overall we are very pleased with the varity of turf tasks we can use the Aera-Vator on. It is

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vendor displays. Presentation topics will include: drainage, liability, sprayer calibration, low-budget turf care, innovative establishment systems, and more.

KAFMO/STMA is co-sponsoring the Northwestern Pennsylvania Athletic Field, Turf, and Ornamental Conference in Meadville, PA, Mar. 23. For details on this event, contact Jeff Fowler: (814) 437-7607.

For general information, contact Dan Douglas, Reading Phillies Baseball Club: (610) 375-8469, ext. 212.

Minnesota Chapter: The Minnesota Sports Turf Managers Association 1999 Board of Directors follows:

Connie Rudolph Midway Stadium President Paul Griffin City of Woodbury Immediate Past President Ron Werner Kasson Mantorville Schools

President Elect Dale Wysocki Minnesota Vikings Secretary Lori Gislason University of Minnesota Treasurer Arin Laugtug Tessman Company Commercial Rep. Tom Rudburg University of St. Thomas Minn. Turfgrass Foundation Rep. The Minnesota Chapter is also planning a March workshop at the newly expanded Toro headquarters in Bloomington, MN. For information, contact Connie Rudolph: (612) 646-1679. Colorado Chapter: The Colorado Sports Turf Managers Association 1999 Board of Directors follows:

Troy Smith Denver Broncos President Abby McNeal Pleasant View Sports Complex Immediate Past President Jim Mueller City of Westminster/Colorado Rapids Vice President Dave Cooper CPS Distributors Commercial Officer Bobbi Smith Executive Secretary

The following members have been elected to the position of director: Dave Brueggeman, South Suburban Parks and Rec. District; Jim Lamb, Littleton Public Schools; Kalin Stovall, Colorado State University; Riley Caldwell, City and County of Denver Parks and Rec.; and Scott Patterson, City of Northglenn Parks.

For information, call the 24-hour CSTMA chapter hotline: (303) 438-9645.

Florida Chapter #1: In March, Florida Chapter will participate in the South Florida Expo - IFAS in Fort Lauderdale.

For information, contact John Mascaro: (954) 341-3115.



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Great Lakes Chapter: The chapter is currently planning two spring events. The site and date are yet to be determined for an athletic field day and workshop. Another workshop has been tentatively planned with the Cleveland Browns.

Aimcor - TURFACE has again agreed to sponsor the GLSTMA Field of the Year awards. Contact GLSTMA headquarters for criteria information. Members may enter their facility no later than Oct. 1, 1999.

GLSTMA will also have an exhibit booth at the Ohio Parks and Recreation Association Show in February.

The chapter is working on a website so that members will be able to check upcoming events, get membership applications, link to the National STMA and other turf-related websites. and e-mail GLSTMA Board members.

For information, contact Joe Zelinko: (800) 897-9714, or Boyd Montgomery: (419) 885-1982.

MAFMO Chapter: MAFMO is planning a two-day irrigation training and installation seminar this spring. The date and site will be announced soon.

For information, contact the hotline: (410) 290-5652.

Iowa Chapter: For information, contact Lori Westrum at the Turf Office: (515) 232-8222, or fax: (515) 232-8228.

Michigan Chapter: For information, contact Rick Jurries, West Ottawa Public Schools: (616)395-2364.

Mid-South Chapter: For information, contact Jim Calhoun: (901) 755-1305, or Robert Bodi: (901) 383-2414.

Midwest Chapter: For information, call the chapter hotline: (847) 622-3517.

Northern California Chapter: For information, contact Sal Genito, UC Davis: (530) 752-1691.

Southern California Chapter: For information, contact the chapter hotline: (888) 578-STMA.

Chapters on the grow

Arizona Chapter: For information, contact Bill Murphy, City of Scottsdale Parks & Recreation Department: (602) 994-7954; or Kris Kircher, City of Chandler Parks & Recreation Department: (602) 786-2728.

Indiana Chapter: For information, contact Terry Updike, B & B Fertilizer: (219) 356-8424; or Pat Hickner: (800) 672-4273.

Nevada Chapter: For information, contact Ibsen Dow: (702) 649-1551: or Alan Paulson. Clark County School District: (702) 799-8724.

North Texas Chapter: For information, contact Rene Asprion, Diamond Pro: (800) 228-2987; or Tom Welch, CSM, Central Garden and Pet: (800) 788-9581.

Wisconsin Chapter: For information, contact Rich Riggs, R. H. Rettler & Associates, Inc.: (715) 341-2633.

Great Plains Chapter: For information, contact Mark Schimming, City of Wichita: (316) 337-9123.

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CHANGING THE COURSE OF DISEASE CONTROL

Trends in turfgrass use: a **Q**uestion-and-**A**nswer session with NTEP exec

1) Is there a trend away from the more popular but higher maintenance grasses (like Kentucky bluegrass) for home and commercial lawns and landscapes? If not, why not? If so, what grasses are being substituted?

Kentucky bluegrass is still the dominant turfgrass species in many areas of the U.S., and probably will be for many years to come. Development of new Kentucky bluegrass varieties is increasing (especially at Rutgers University), so demand must be strong. Kentucky bluegrass is still used quite extensively in the traditional bluegrass areas — the Cool-Humid (Northeast and Upper Midwest) and Cool-Arid (Western and Mountain states) areas.

However, in much of the Transition Zone, tall fescue is now the grass of choice by landscapers and homeowners. Sod growers in the middle and upper Transition Zone have been forced to shift to more tall fescue production and less Kentucky bluegrass production as a result of increasing demand for tall fescue sod.

Perennial ryegrass is being used in mixtures more, and as monostands some in the Northeast and Pacific Northwest (Kentucky bluegrass succumbs to leaf spot and other diseases in the Pacific Northwest), but its winter kill problems in the northern U.S. and disease susceptibility in the Northeast and Transition Zone has limited its use in those areas.

Fine fescues are being used more in the traditional bluegrass areas, but mainly on low-maintenance lawns, no-mow slopes and droughty sites.

2) Has the concept of using seed mixes totally caught on by now, since it's long been believed that monostands are harder to maintain? Are the favorite components in mixes changing at all? In other words, are Kentucky bluegrass and perennial ryegrass still the most popular components, or are astute landscapers substituting other species?

Seed mixes are quite commonly used by landscapers and homeowners since lawns and commercial landscapes frequently contain several sub-environments or microclimates (that is, sun and shade. traffic and compacted soils in some areas, buildings and shrubs that reduce air flow, etc.). The reasoning is that several different species present in the lawn give some insurance: maybe one will survive better in shade or during a drought than another. The exception is probably tall fescue, as I see mostly tall fescue monostands being established.

The situation is quite different in the golf course industry where monostands still prevail.

3) What about overseeding dormant warm-season grasses? Is perennial ryegrass still the species of choice for home lawns and commercial landscapes? Are choices regionally-based, or are there national trends?

Perennial ryegrass is still the dominant species used. On golf courses, other species such as Poa trivialis and even bentgrass are increasing in popularity because they transition well (disappear when the warm-season grasses start to grow again in the spring). In commercial landscapes, however, perennial or annual ryegrass are most frequently used.

When overseeding a thin stand of cool-season grass lawn, species used are mostly regionally-based. Much tall fescue is used in the transition Zone, but perennial ryegrass is used for temporary turf situations. Perennial ryegrass is used extensively for overseeding in northern areas, but often in mixtures with Kentucky bluegrass. Landscapers seem to want a seed mix that provides quick cover (perennial ryegrass) along with long-term performance (Kentucky bluegrass).

4) What seem to be the most





Plots like this are an integral part of the NTEP testing process, as seed breeders and marketers continually seek to define the most desirable traits for lawn and landscape turfs.



desired characteristics of new varieties that seed companies are entering in the NTEP program? Are there trade-offs to obtain these characteristics? For instance, do you necessarily have to sacrifice color for wear tolerance, or disease resistance for color?

Grasses that are top performers in NTEP trials need to have at least the following characteristics:

- medium to dark green color;
- medium to high density;
- good to excellent disease resistance; and
- good summer persistence.

Under specific management or in extreme environments, the needs may also include such things as tolerance of close mowing, ability to prevent Poa annua invasion, and good to excellent winter tolerance.

It is possible to have a dark green, dense, wear-tolerant or disease-resistant grass. But in some cases, changing one characteristic will affect something else in the variety. For example, tall fescue varieties that are extremely dense and do not produce as much upright growth are generally more sus-

ceptible to brown patch than varieties that are less dense and have an upright growth habit. Also, it is possible that very dark green perennial ryegrasses absorb more heat and therefore have more problems during summer.

Grasses that perform well in many different areas of the U.S. and therefore perform well in NTEP trials must have improved persistence. (They survive summer heat and drought well, resist several important diseases). Again, medium to dark green color and good density is important and can be incorporated into an improved variety, but the basis of the improvement has to be persistence.

5) How close are some of the breeders' pet projects to becoming reality? (Like endophyte-enhanced Kentucky bluegrass and Roundup-resistant tall fescue.)

There are many projects in the works, but it is hard to say which will make it to commercialization.

Endophyte-enhanced Kentucky bluegrass and bentgrass will eventually be commercially available, but will most likely take longer than expected. Many aspects of the host plant/endophyte relationship that are not well understood could slow down the development process considerably.

Roundup (or other herbicides) resistance is coming, but there are so many legal issues involved that it is unsure when these products will be available. For instance, patents are held by different companies on the Roundup-resistant gene, the gene gun (used to incorporate the gene into plant cells), and other technologies needed to produce one of these grasses. All of the patent-holders have a stake in the development process. Royalties will have to be negotiated with



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each patent owner, and that cost will be passed on to the consumer.

There is a big question in my mind of the ultimate demand for herbicide-resistant grasses. Will consumers pay much more for a grass that has herbicide resistance? Only time will tell, but most plant breeders are using biotechnology as but one tool to improve grasses, along with traditional breeding techniques of crossing, hybridizing, and population improvement.

Probably more progress can be made in collecting and improving little-known but promising species such as Koeleria (prairie junegrass), Deschampsia (tufted hairgrass) and seashore paspalum.

Grasses that will provide quality turf with reduced inputs is the wave of the future. Another technique that breeders are using to develop improved grasses involves screening for improved stress tolerance. The best example of this is tall fescue developed for use in high-stress, acid soil situations (such as much of the Southeast).

6) What kinds of trends do you personally envision coming down the road, in the near future, as far as turfgrass use and breeding?

I think breeders and companies will develop grasses that are more regionally adapted or that provide better performance under a particular stress

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(like traffic or drought).

Biotechnology will be important in adding genes for resistance to various stresses (for example, resistance to brown patch in tall fescue). Much more work will be done on endophytes, including identification of disease-suppressing strains. As stated before, new species will be investigated, but their acceptance in the marketplace is unclear at this time.

More breeders will be searching the world for new sources of germplasm (plants that have beneficial genes to create new varieties). This will broaden the gene base of varieties in the market.



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7) Finally, given the NTEP's partial dependence on USDA funding, what is the program's future, in your opinion?

Federal funding constitutes only about 8 percent of total NTEP funding with the majority of funding resulting from entry fees charged to test grasses. The federal funding is actually use of offices, greenhouse and land at the USDA in Beltsville, MD. The funds do not come directly to NTEP and cannot be spent the way a business would buy supplies with a checking account.

Federal funding is important, however, because NTEP is a national program that is neutral and therefore unbiased. Federal support gives the NTEP the credibility and visibility worldwide to be successful.

The future of the NTEP is bright. We have new programs including testing of grasses in actual use situations (on golf course putting greens). We are investigating new and better methods to analyze the NTEP information and present it to the general public. And we are using specific management regimes on our test sites to more precisely identify those grasses that require less water, pesticides, and fertilizer.

Our goal is to help the end-user find superior grasses for their region or level of management. \Box

Kevin Morris is director of the National Turfgrass Evaluation Program (NTEP), an arm of the United States Department of Agriculture, which conducts seed trials all across the country. Because of that, he's in the perfect position to observe how turf breeders and marketers are adapting to market needs, and turfgrass use trends in the U.S. Last month, we posed seven trend-related questions to him. Here are his responses.—ED.