As warming weather moves spring sports onto the field, it's time to take a quick pause to say thank you to all those who have made STMA Chapters so successful in 1999 and to all those who have made the commitment to actively support their chapters in 2000.

The administrative tasks associated with running a chapter take hours of hard work by each chapter’s officers, board members, committee chairs and committee members. Records must be maintained, funds collected and bills paid. There's more time involved in developing and maintaining communication channels: a newsletter, hot-line, Web site or calling tree. Chapter programs for scholarships, fields of the year or service projects all must be developed and coordinated by more volunteers.

There's a mountain of behind-the-scenes work that must take place for each event, whether it's an educational session, on-field workshop, vendor display, site tour or a combination of any of these. A team of individuals must come up with the idea; gain the approval of all involved; work out the scheduling and logistical details, including a back-up plan for inclement weather; line up the speakers, demonstration materials and equipment; put together the informational materials to alert potential attendees; coordinate the registration, funding, and/or sponsorships; coordinate the set-up, tear-down and on-site activities; and handle all the wrap-up details.

So please, do make a point to personally pass along a thank you to your chapter’s dedicated team.

Also please thank Chapter Relations Chair Abby McNeal and our chapter sponsors: Gold Level for 1999 and 2000: Novartis and John Deere; Gold Level for 2000: Pro’s Choice; Silver Level for 1999 and 2000: Alpine Services and Hunter Industries.

Great job everyone!

Chapter News

Congratulations to STMA’s newest affiliated chapter:
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March 2000 41
The Gateway Chapter Sports Turf Managers Association. For information on upcoming events or on the chapter, contact: Jim Anthony, Saint Louis University, St. Louis, Mo., at (314) 977-3228.

Florida #1: The chapter will participate in the IFAS/South Florida Expo on March 16. The chapter will also meet on May 16 at the Miami Dolphins training camp. Meeting focus will be weed control. For information on the Florida Chapter or pending activities, contact: John Mascaro at (954) 341-3115.

KAFMO: KAFMO will participate in the Northwest Pennsylvania Athletic Field, Turf and Ornamentals Conference, which will be held from 8 a.m. to 3:15 p.m. on March 21 at Allegheny College in Meadville, Pa. General session topics and presenters are: “Building Your Toolbox Online,” by Joel Hunter of Crawford County Extension; “What Does the EQPA Mean to the Green Industry,” by William Hoffman of Penn State University; and “Soil Health and Its Importance to Turf,” by Mark Altman of Altman & Altman Consulting. Athletic field options in the three breakout sessions are: “The Anatomy of a Ballfield Failure,” presented by Tim Anderson of UHS, Quantumleaf Consulting; “Is My Field Safe?” presented by Don Fowler of KAFMO; and “Putting It All Together,” presented by Mark Altman. For information on the KAFMO Chapter STMA or upcoming events, contact: Dan Douglas, Reading Phillies Baseball Club, at (610) 375-8469, extension 212 or via the chapter e-mail address: kafmo@aol.com.

North Texas: NTSTMA has elected officers for 2000. They are: President—Dr. James McAfee, Texas A & M University; President-Elect—Rene Asprion, Diamond Pro; Commercial Vice-President—Scott Piecha, Gail’s Flags; Secretary—Kathy Cassmeyer, Lockheed Martin Missiles and Fire Control, Dallas; Treasurer—Mickey Landry, City of Colleyville Parks Department; Membership Chair—Mike Reber, City of Flower Mound Parks Department; Communication/Publicity Chair—Helen Manroe, Turfgrass America; Program Chair—Jim Brown, Tex-Sand Sport Turf Specialty Company; and Meetings Chair—Gregg Zimmerman, City of University Parks. For information on the North Texas Chapter or pending activities, contact: Rene Asprion, Diamond Pro, at (800) 228-2987 or Dr. James McAfee, Texas A & M University, at (972) 952-9220, or check the website: www.ntstma.org.

Great Lakes: GLSTMA has announced their annual Award Recipients. They are: Oak Harbor High School—Football Field of the Year (Gary Cousino); Heritage...
Stadium, Baldwin Wallace College—Division III Baseball Field of the Year (Duane Smith); Buckeye Softball Field, Ohio State University—Softball Field of the Year (Brian Gimbel); Bill Davis Stadium, Ohio State University—Division I Baseball Field of the Year (Brian Gimbel); Gercey Park, Ottawa Hills High School—High School Baseball Field of the Year (Tim Erickson); and Cat Stadium, Sylvania Recreation/Sylvania Schools—Soccer Field of the Year (K. J. Petinoit and Brian Hall). The President’s Award for the turf manager who stands out in Ohio went to Brian Gimbel from Ohio State University. The Commercial Affiliate of the Year was The Andersons. For information on the GLSTMA Chapter, the Chapter’s Field of the Year Program or upcoming events, contact: Joe Zelinko at (800) 897-9714 or Boyd Montgomery at (419) 885-1982 or click on your computer to www.glstma.org to visit the chapter’s Web site.

Wisconsin: The chapter will hold its Spring Meeting in early May at the Nienhaus Sports Complex and Appleton North High School Athletic Fields in Appleton, Wis. The exact date and further details will be announced soon. For more information on the Wisconsin Chapter or pending events, contact: Rich Riggs, R. H. Rettler & Associates, Inc. at (715) 341-2633.

Arizona: For information on upcoming events or on the chapter, contact: Bill Murphy, City of Scottsdale Parks & Recreation Department, at (602) 312-7954.

Colorado: For information on the chapter or upcoming activities, log on to the chapter’s Web site: www.cstma.org or call the CSTMA Chapter Hotline: (303) 346-8954.

Midwest: For information on the chapter or pending activities, call: The Chapter Hotline, (847) 622-3517.
**Minnesota:** For information on the chapter or upcoming events, contact: Connie Rudolph at (651) 646-1679 or Ron Werner at (507) 634-1176.

**Tennessee Valley:** For information on the TVSTMA Chapter or upcoming events, contact: Bill Marbet, Southern Athletic Fields, Inc. at (913) 380-0023 or Bob Hogan at (888) 224-6426.

**Northern California:** For information on the Nor-Cal STMA Chapter or pending activities, contact: Janet Gift at (530) 758-4200.

**Southern California:** For information on the chapter or pending activities, contact: The Chapter Hotline, (888) 578-STMA.

**Indiana:** For information on the chapter or pending activities, contact: Terry Updike, B & B Fertilizer, at (219) 366-8424 or Pat Hickner at (800) 672-4273.

**Iowa:** For information on the chapter or upcoming activities, contact: Lori Westrum at The Turf Office at (515) 232-8222 (phone), (515) 232-8228 (fax) or e-mail: Lori@iowasturfgrass.org.

**Michigan:** For information on the chapter or pending events, contact: RickJurries, West Ottawa Public Schools, at (616) 395-2364.

**MAFMO:** For information on the chapter or pending activities, contact the Hotline: (410) 290-5652.

**Mid-South:** For information on the chapter or upcoming events, contact: Jim Calhoun at (901) 755-1305 or Robert Bodzi at (901) 383-2414.

**Chapters On The Grow**

**Nebraska:** A new chapter is taking shape in Nebraska. For information on the chapter or upcoming events, contact: Greg Bostelman, City of Grand Islands, at (308) 385-5426.

**New Jersey:** For information on this forming chapter or upcoming events, contact: Jim Gavigan, Lesco, at (732) 468-6215; or Eleanora Pene, director, Township of Clinton Parks & Recreation Department, at (908) 795-8873.

**Kansas City, MO/KS:** A meeting will be held on Saturday, April 1, at Kauffman Stadium, home of the Kansas City Royals. This event will feature demonstrations on mound and home plate building; basepath preparation and maintenance; field painting; and equipment use. Question and answer sessions with those providing the demonstrations will be part of the program. For information on the forming chapter or upcoming events, contact: Trevor Vance at (816) 504-4271; John Cundiff at (816) 525-7600; Bill Tritt at (816) 941-4424; Jody Gill at (913) 681-4121; Gary Custis at (816) 468-6215; or Jay Sutton at (816) 795-8873.

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**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 turf grasses 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: educational opportunities; support for sports turf research; facilities tours; a national awards program; job hotline; access to the STMA National Conference & 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!

<table>
<thead>
<tr>
<th>Member Information</th>
<th>Membership Category (please check one)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>1 - Professional Sports Turf Facilities Managers $ 85</td>
</tr>
<tr>
<td>Title</td>
<td>11 - Four-year Colleges and Universities Sports Turf $ 85</td>
</tr>
<tr>
<td>Employer</td>
<td>Facilities Managers $ 85</td>
</tr>
<tr>
<td>Type of Business</td>
<td>111 - Other Schools Sports Turf Facilities Managers $ 85</td>
</tr>
<tr>
<td>Address</td>
<td>IV - Parks &amp; Rec. Sports Turf Facilities Managers $ 85</td>
</tr>
<tr>
<td>City/state/zip</td>
<td>V - Commercial (US or International) $ 295</td>
</tr>
<tr>
<td>Phone</td>
<td>Va - Additional from same Commercial Company $ 50</td>
</tr>
<tr>
<td>Fax</td>
<td>VI - Student (full-time w/valid ID) (non-voting) $ 20</td>
</tr>
<tr>
<td>E-mail Address</td>
<td>VII - International (other than commercial) (must be in US dollars) $ 85</td>
</tr>
<tr>
<td>Signature</td>
<td>VIII - Research, Teaching &amp; Cooperative Extension Personnel $ 50</td>
</tr>
<tr>
<td>Referred by (STMA)</td>
<td>Chapter Dues (Call Headquarters for amount) $</td>
</tr>
</tbody>
</table>

Total amount enclosed $ 85

Please enclose payment in U.S. dollars (check, money order, Master Card, Visa, Discover or American Express) and send to:

Sports Turf Managers Association, PO Box 3480, Omaha, NE 68103-0480

For more information, contact STMA Headquarters at 800/323-3875, 712/366-2669, fax: 712/366-9119 or e-mail: SportsTMgr@aol.com

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March 2000 45
Dealing with a Hard Pan

Have Questions? Send them to Dave at: ISU, Hort. Dept., Ames, IA 50011

by Dr. Dave Minner

I would like your opinion on the type of aerifying unit to purchase. Here are some of my concerns, all related to aerifying a native soil field. I think that everybody agrees that we should pull a plug when aerifying. If that plug is always pulled at, for example, a 4-inch depth, I believe that over time a hard pan will develop at that depth. I have seen this in agriculture using a moldboard plow and especially with a disc. The only way to alleviate this problem is to rip the ground about 18-inches deep. In turf we would use a deep tine machine to do the same thing. Most of the affordable plug aerifiers will only pull a plug to a depth of 4 inches. So, here is my question:

CULTIVATION GOALS

There are many cultivation methods available for sports turf management. The best method of cultivation can be selected when specific cultivation goals have been determined.

Cultivation Goal

<table>
<thead>
<tr>
<th>Cultivation between playing seasons (no activities scheduled on the field)</th>
<th>HOLLOW-TINE 4 INCH</th>
<th>SOLID-TINE 4 INCH</th>
<th>HYDROGER</th>
<th>SHATTER CORE 4 INCH</th>
<th>VERTIBRAIN</th>
<th>FLOOD-MOYRA DRILL &amp; FILL</th>
<th>SLICING SPREADING &amp; VERTICAL MOWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change soil type in top 4 inches by removing soil and back filling with amendment</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create large and deep holes that are back filled with a soil amendment such as Profile</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove surface soil layer that was attached to soil during sand-based field construction</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote deep rooting, 8 inches or more</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum removal of water puddles</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultivation during playing season</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase initial water infiltration rate with minimal disturbance to surface</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant seed with minimal disturbance to grass and soil stability</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourage lateral growth of sod forming grasses</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fracture hard skin infiel, drag surface and begin play</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

If we are only able to afford one type of aerifier, would you be better off buying something like an AerWay type machine? They will go 6- or 7-inches deep, and claim to shatter the soil to an even deeper depth, including a sideways shatter. You would still have a hole in the ground for fertilizer and top dressing, but would lose the opportunity to turn the soil by pulling a plug. Would more frequent usage of the AerWay unit make up for not pulling a plug? I was able to get a demo with AerWay and on very compacted soil it will pull a “chunk” of soil out of the ground. On non compacted soil it will just make a hole with a minor disturbance to the soil surface.

Ken Hanawalt
Transportation Director/Grounds Keeper
Rockwell-Swaledale Community Schools
Rockwell, Iowa

do $20,000 and this gives nearly every sports field manager some opportunity to purchase a piece of equipment that can improve their field situation.

When selecting cultivation equipment first consider your specific goal. Coring, slicing and shattering are all beneficial, but they may not produce the effect that you desire unless you know what it is that you are trying to achieve. Examples of specific aerification goals and the equipment needed to produce the desired effect are listed below.

Now for your specific question. It is true that some research indicates that a compacted layer could develop just below the depth of the cultivation tines. From a practical aspect I would not worry too much about this hard pan phenomenon. Most of the sport field situations that I encounter are more concerned with reducing surface compaction from excessive traffic rather than a hardpan layer caused by aerification equipment. What I typically see is that roots proliferate in the zone of aerification and then decrease below that zone of aerification, even if a hard pan does not exist.

Should a hard pan layer or any other type of layer develop below the 4-inch depth, simply contract with an aerification company that uses deeper penetrating equipment that can probe the field at depths of 8 to 18 inches. Watch out for the irrigation lines when using deep tine equipment and don't consider deeper aerification only when you have a layering problem. It is becoming more of a routine practice on tight soil and even on sand-based fields.

As to what type of aerifier to purchase, I would always recommend that you first consider a good reciprocating tine machine that can utilize both hollow tines and solid tines. This gives you the most flexibility when deciding about core removal and topdressing incorporation. Slicing and fracturing machines are beneficial, but I would not consider them as a substitute for hollow coring. The tufts of grass that come up from seeding and persist in hollow core holes, even after continued traffic, are a real testimony to the usefulness of coring type aerifiers. Remember, any type of aerification will be better than none at all. So buy the machine that you have the most confidence in and use it often.

David D. Minner, Ph.D., is an associate professor with the Department of Horticulture at Iowa State University. He serves on STMA's Certification Committee. Send your questions to Dave At: ISU, Hort. Dept., Ames, IA 50011; or call: (515) 294-0730, or e-mail: dminner@iastate.edu.

March 2000

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**Feature of the Month**

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