"I feel that pond management is just as important as turf management," says Palmer, who uses aerators from Otterbine/Barebo to maintain water quality in the course's water features. "From the start of my career in 1955, pond management was always something I was interested in. We use the water [in the ponds] for irrigation and, of course, every member that plays the course sees it."

Lakes and ponds have balanced ecosystems, just like turf. Just before dawn, water oxygen levels are typically at their lowest levels because aquatic plants ceased photosynthesis after the sun set. Plants won't begin recharging the water until the sun rises again. In a well-balanced pond, there is enough oxygen present in the water to support aquatic life. However, lakes and ponds can easily fall out of balance, especially in warm weather.

In the summer, thermal stratification is a fairly common occurrence, especially in relatively shallow lakes and ponds. The aerobic or epilimnion layer near the surface is the warmest part and contains the most oxygen. Algal blooms flourish in these conditions. As algae thrive, they block sunlight from penetrating the surface. This kills beneficial aquatic plants, which under good circumstances keep oxygen levels up in all water levels. The facultative or thermocline layer features rapid temperature drops and much less oxygen.

The anaerobic or hypolimnion layer at the bottom contains little or no oxygen. As fish and plants die, they drift to the bottom of the pond where they decompose. The decomposition process further robs the water of oxygen. The resulting organic matter is filled with toxic gases, such as methane and hydrogen sulfide. The "rotten egg" smell of hydrogen sulfide is characteristic of a eutrophic pond. Nutrients released from the pond bottom can rise to the surface and trigger blooms of scum-forming blue-green algae. This dense filamentous algae not only looks unattractive, but it can cause havoc in irrigation systems if you are using the pond as a holding area for irrigation water.

The Eutrophication Process

In all lakes and ponds, eutrophication is an ongoing process. In nature, the build-up of nutrients slowly transforms ponds into wetlands and then into meadows. Finally, the woodlands take over.

The eutrophication process can take many decades when ponds are undisturbed. Nutrients build up slowly. However, in highly maintained areas, fertilizers can mix with runoff water to quickly add nitrogen to pond water. The influx of effluent water also greatly adds to the water's nutrient level. Aquatic plants thrive on the nitrogen, growing rapidly.

A process that naturally takes many years can be accelerated to just a few years. Restoring a eutrophic pond to a healthy, clear body of water requires a combination of techniques. Aquatic herbicides, mechanical harvesters, water aerators, and plant-loving fish are a few of the alternatives to remove unwanted vegetation. Many water site managers choose an integrated treatment approach.

Aeration will help restore depleted dissolved oxygen levels. Nature aerates water with wind, waves, and rainfall. Wind whips oxygen into water at the surface and sends the aerated water crashing down. This circulates down, pushing the deep layers of water upward.

Water aeration systems are designed continued on page 12

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May, 1992 11
Preserving Lake & Pond Water
continued from page 11

to assist nature in keeping water supplies adequately aerated. There are several aeration methods. The best method for your situation will depend on the size and depth of the lake, the local climate, and the desired effect.

The primary water aeration methods are vertical aerators, horizontal aerators, and diffused air injection.

**Vertical Aerators.** The fountain displays you see in lakes and ponds are often the work of vertical aerators. While all fountains supply some amount of water aeration, only vertical aerators provide significant aeration. A pump pulls water from lower levels and sends it shooting into the air. As the water sprays in a pattern, it absorbs oxygen. As the water drops crash to the lake or pond surface, they penetrate the surface and create wave action. This further oxygenates the water.

“Our primary reason for using vertical aerators was to oxygenate the water,” explains Larry Major, general manager of Moon Valley Country Club in Phoenix, AZ, which has six Air-O-Lator vertical units in a total of four ponds. Keeping the water oxygenated is particularly crucial for Moon Valley, as its ponds are home to bass, and aquatic-weed-eating Tilapia and White Amur, a variety of carp.

“On two of the holes, the vertical aerators serve a secondary function—they let the golfers know where the water features are,” notes Major. “Because of the way the course is laid out, you can’t see the water hazards, but you can see the water thrown up by the aerators.”

Vertical aerators are available in a number of sizes and they create a variety of water displays. The height and width of the water display will depend on the size of the pump and motor. You want an aesthetically pleasing pattern that will move the desired amount of water without spraying bystanders. Also, a curved pond or a lake with several “fingers” will need several aerators located through the body of water to give adequate circulation.

When Hunter Ridge Golf Course, a “development” course in Bonita Springs, FL, installed a Hardie Rainjet vertical aerator in a two-acre pond (used also for holding irrigation water), the course realized an unexpected benefit.

“The aerator throws water about 20 feet up in the air—you can definitely see it when you make the turn onto Hunter’s Ridge Drive,” says Ron Moore, superintendent of the 6,300-yard semi-private course. “As a result of the ‘fountain’ appearance the aerator creates, we have been able to sell a couple of lots.”

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Many vertical aerator manufacturers also make lighting kits you can attach to the units for night displays. Remember, the more elaborate patterns and lighting, the more electricity you will use. When you prepare a budget, keep in mind whether you are using the vertical aeration for pond maintenance, decoration, or both.

The sound of falling water can provide a soothing mask to other urban noise.

Another element to consider is timing. It is better, says Kevin Clunis, superintendent of Stillwater Country Club in Stillwater, MN, to address water quality before it becomes a problem. Last year, the club installed a Kasco vertical aerator in a 2.3 acre pond.

"Because the pond freezes in the winter, obviously we can't use the aerator year-round," says Clunis. "But we get it out there in the spring, as early as possible. You can't just throw a unit out there with wall-to-wall algae mats and except it to work overnight. You want to get it out early, before your problems start.

Although Clunis says the unit has cleared up 98 percent of the pond's algae problem, he still uses copper sulfate and Aquashade dye, which helps cut off sunlight that weeds and algae require to grow. "Plus the members like to see the blue water coming out of the aerator," he adds.

Many units have timers so you can program the aerator to operate overnight or at specific times. The sound of falling water can provide a soothing mask to other urban noise.

**Horizontal Aerators.** The main purpose of horizontal aerators is to circulate water beneath the surface. These units typically float on the surface and stay mounted in one location or circulate in a given area.

A submerged propeller sends aerated water to lower water levels. This oxygenated stream of water helps break up stratification by sending oxygenated water to the bottom and water with lower oxygen levels to the surface. This mixing keeps nutrients in suspension and

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[continued on page 14]
Preserving Lake & Pond Water
continued from page 13

Oxygen-rich water throughout the pond. These conditions favor aerobic bacteria and algae species. As these beneficial organisms feed on nutrients, they help prevent algae blooms.

The angle of the propeller and size of the motor will determine how deeply the aerator will circulate water. As a general rule, the larger the motor, the more water the propeller will move. Horizontal aerators also are available with decorative covers, such as rock-like structures. The covers make the aerators more aesthetically pleasing and discourage vandalism.

The pond or lake size will determine how many aerators are necessary to provide adequate aeration. Few lakes are perfect circles or ovals. For maximum benefit, you need to plan enough aeration for the entire area.

**Diffused Air Injection.** Diffused air systems work through a series of tubing placed at the bottom of the lake or pond. A series of emitters along the tubing break up the air stream into different bubble sizes. The larger the bubbles, the more surface disturbance will occur.

An air compressor located on shore generates an air flow that circulates through the tubing. As bubbles escape through the emitters, they oxygenate the water as they rise to the surface. The rising air also helps circulate the water, breaking down stratification.

For uniform aeration, the length and spacing of the tubing and the size of the compressor must be designed specifically for the pond you are treating. The cost of operating this type of system will depend on the size and depth of the pond. The deeper the pond, the more power it will take to send air upward.

Ozonation is a variation on diffused air injection. Instead of just injecting air through underground tubing, the system adds ozone. Ozone is an unstable gas that acts as a powerful oxidant. Its 03 configuration readily breaks down into 02, which we know as the oxygen we breathe, and the oxygen radical, which easily with other ions. This means ozone is capable of oxidizing many organic and inorganic components.

"Algae are funny little creatures," says Owen Stone, superintendent of the San Joaquin Country Club, an 18-hole, 7,900-yard course in Fresno, CA. "You never know where they’re going to pop up. It used to be that the only thing we used to control algae was copper sulfate. We used to have to rake the algae out of the lake to keep it from getting into the irrigation system—we had a great filtration system but it was working overtime. But three years ago, we installed an ozone aeration system from EP Aeration in our upper lake, which is about 3-1/2 acres, and two years ago we put one in another smaller lake.

"For the first year in the upper lake, I went with just the system and didn’t use any chemicals—and it went really well," he continues. "I would say it controls at least 80 percent of the algae. Now, I help it along with copper sulfate and Aquashade dye."

**Making Choices**

When you determine which system to use, evaluate not only how much you want to spend initially, but also how much you can afford for ongoing treatment. Then, prioritize your needs. Do you want a water display or a natural-looking pond? Do you need to maintain a fish population? Will golfers tolerate some level of floating algae?

Weigh these considerations when you shop for a system. Know the surface area, water depth, and design of your pond when talking to distributors about your options. If possible, bring a sketch of the pond with you when you talk to distributors. Addressing water quality today will save you serious headaches tomorrow.

**DONALD ROSS AWARD PRESENTED AT ASGCA ANNUAL MEETING**

The American Society of Golf Course Architects presented the Donald Ross Award to its Executive Secretary, Paul Fullmer, during their annual meeting at the Maidstone Club, East Hampton, Long Island, NY on May 3-7. The award is bestowed annually to an individual who has made significant contributions to golf, specifically in golf course architecture.

Other highlights of the four-day meeting included: Past President Rees Jones, who moderated a panel on the "Historical Impact of Long Island Golf Courses;" President Tom Clark, who moderated a panel on "What’s Next With Environmental Permitting?;" Former president Dr. Mike Hurdzan, who lead a panel on the "Audubon Cooperative Sanctuary Program for Golf Courses;" Financial sources committee chairman Brian Silva, who moderated "Where Will We Get Financing In The 90s?;" Alice and Pete Dye, who presented a professional development seminar on "The Ultimate Challenge;" and Mike Klemme of Golfoto, who presented a seminar on "Marketing—The Key To Growth."

**PAGE COMPLETES CERTIFICATION PROGRAM**

Donald Page, who is landscape manager of Harbour Ridge in Stuart, FL, has completed the Professional Grounds Management Society Grounds Manager Certification Program. He is the 29th person to do so since the beginning of the program.

The PGMS began this program to upgrade professionals and bring recognition of professionalism in the field. Applicants must be approved by a certification committee, pass an exam and complete a series of booklets on the various phases of grounds management.

**MILLER APPOINTED MANAGER FOR SMITHCO**

Emil Miller has been appointed marketing manager for Smithco. He will be responsible for all phases of marketing for the company distributors and end-users throughout 13 Southeastern states and the Caribbean area. He will also provide sales support services for distributors and participate in corporate new product development and introduction.
RECYCLED WATER FOR GOLF GREENS STUDIED

A research project conducted by John Dunn, turfgrass specialist, and graduate student, Tom McKay, at the University of Missouri-Columbia, is comparing turf treated with both sewage and drinking water. They are also comparing irrigation by sprinkler with irrigation through porous pipes laid under the green.

The green was constructed according to U.S. Golf Association standards and planted with creeping bentgrass. Irrigation pipes were set six-inches below the grass surface and 12-inches apart.

Problems may arise with pipes being blocked from lime build-up, effluent particles or root hairs. Other problems could be from the gradual accumulation of salt, but the research team says that conventional irrigation with sewage effluent will likely cause the grass even more salt problems.

"It's too early to reach firm conclusions," Dunn said. "But we have found no difference in green quality since the turf was laid last fall."

NURSERY FIELD DAY

The annual Nursery Field Day of the Hampton Roads Agricultural Experiment Station takes place July 15 in Virginia Beach, VA.

The tour of ongoing research will include landscape weed control, azalea insect resistance, tissue culture, and Euonymus scale biocontrol.

An auction of landscape plants and hardgoods donated by Virginia nurseries and suppliers will be held to raise money for research projects.

For registration information, contact the Hampton Roads Agricultural Experiment Station at 1444 Diamond Springs Road, Virginia Beach, VA 23455, or call (804) 363-3900.

GENTRY JOINS IRWIN

Stanley B. Gentry has joined the golf course design division of Hale Irwin Golf Services, Inc. As the company's project architect, he will work with development executives to produce planning, construction documents and specifications for golf course designs.

Gentry has a degree in horticulture from the University of Missouri and a master's in landscape architecture from Kansas State University. He has worked for Dick Nugent Associates of Chicago, IL, and Rees Jones Inc., of Montclair, NJ.
Bobcat Stadium graces the campus of Southwest Texas State University, in San Marcos, TX. It's a convenient site, located 30 miles from Austin and 60 miles from San Antonio.

The stadium serves as home field for the university's Bobcat football team. It's also the home field for San Marcos High School. It hosts about five state high school football play-off games each year. Five major track meets are held at Bobcat Stadium annually. At the end of March, it was filled with the hustle and bustle of a Special Olympics weekend. Bobcat Stadium is also the temporary home field for the World Football League's San Antonio Riders. (The Riders will be playing in the new San Antonio Alamo Dome next year.)

This active schedule keeps things hopping for STMA member, Randy Porter, SWTSU's manager of grounds and horticulture.

Coordinating the football field use for college and high school level teams is always a challenge. The high school teams usually play on a Friday night, followed on Saturday afternoon by the college game. The turf gets a heavy workout with this one-two punch, even when weather conditions are ideal. Add a heavy rain, drought, or drying winds, and problem solving gets a bit more intense.

Track meets put a different kind of stress on turf. There are running events, usually confined to the track surface; and jumping events, throwing events, and active spectator groups, which are everywhere but the track surface. These activities occur in the spring when Texas grasses are making the cool season/warm season transition.

If it all sounds like a build-up to an excuse for poor field conditions, think again. Bobcat Stadium is the Sports Turf Managers Association Football Field of the Year.

STMA has developed the award, which it plans to present annually, to honor the facility that rates highest in field condition and overall management. Bobcat Stadium is the first field to receive this award.

Plenty Of Ground To Cover

The university's total campus covers 350 acres. Says Porter, "Our department maintains between 150 and 175 acres. We have 100 acres under irrigation. Besides the turf, we plant and care for all the trees, shrubs and flower beds. We're involved with a number of other matters that relate to grounds care and maintenance, too. For example, we're even in the garbage business. We empty 300 litter containers every day."

There are no revolving doors at Bobcat Stadium. It just seems that way because of the seemingly constant stream of events held there.

Twenty-five acres of university property are devoted to sports turf. Besides the football and track facilities of Bobcat Stadium, there are men's baseball fields, women's softball fields, a football practice facility and 12 acres of intramural fields. With a student body of 21,000, these fields get quite a workout.

Student activity levels are rising at SWTSU, as on most campuses. Besides organized sports, the number of informal activities, like pick-up games, frisbee throwing, jogging, biking and walking, are steadily growing. As use increases, so do maintenance demands.

In the grounds and horticulture department, Porter has a full-time staff of 35, and an additional 10 seasonal, part-time employees during the busiest seasons. These part-time workers are usually students. Of this staff, five full-time and seven part-time employees are assigned to the athletic department. The work at Bobcat Stadium itself is handled by one of the full-time and three part-time athletic department personnel.

"Even though we work with around 175 acres of property, and sports turf is only 25 acres of that total, the sports fields are the most challenging," says Porter. "Other high-profile areas that require a great deal of time and attention are the President's house and the academic mall, a student gathering spot."

"We follow a monthly maintenance schedule for the football field, which includes aerifying, fertilization, top dressing and weed control. Fire ants are the only insect problem we have here. We bait three times a year to control them."

"Our athletic fields are all bermuda. We overseed all of the fields with ryegrass..."
in the fall, using annual rye for everything but the stadium. We've chosen to use perennial rye on the stadium because it takes hold quickly and is longer lasting. Even though the cost of perennial rye is five times greater than annual rye, because of the extensive use of that field during the spring and fall seasons, it's worth the price.”

“An underground drainage system at the stadium helps keep the field in top shape for play, even when the weather is less than cooperative,” says Porter.

Turf care equipment used for football field maintenance includes a Toro Turf-Pro mower, Ryan aerifier and Jacobsen turf sweeper. A John Deere 950 tractor gets a steady workout pulling equipment such as a top dresser, fertilizer spreader and the 100 gallon sprayer used for weed control. According to Porter, two John Deere AMTs have proven to be excellent time and energy savers.

**Up To The Task**

Working with a wide variety of sports programs, the demands of an active campus, and a good-size staff can be daunting. It requires all of Porter's considerable talents.

He brings a combination of academic training and hands-on experience to his position. He was hired by the university 14 years ago as a grounds keeper, mainly mowing turf. To advance his education, he moved into a part-

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_Student activity levels are rising at SWTSU, as on most campuses. As use increases, so do maintenance demands._

continued on page 18
STMA Florence Field of the Year
continued from page 17

...continued from page 17

time position as draftsman on the irrigation systems. Porter now holds a bachelor's degree in Industrial Arts and a master's in Applied Geography/Environmental Management, both from Southwest Texas State University.

In 1984, Porter returned to full-time work in the athletic department as supervisor of athletics and irrigation. And, as he says, "Things just evolved from there." After seven years as supervisor of athletics and irrigation, he moved to his current position, manager of grounds and horticulture.

STMA sounded like an organization that was headed in the direction I wanted to go.

It's important for Porter to keep abreast of industry advancements and continually upgrade both his professionalism and that of his staff. An article about Sports Turf Managers Association and its programs caught his eye in 1987.

"I thought STMA sounded like an organization that was headed in the direction I wanted to go, especially with its emphasis on professionalism, and I joined in 1987," he recalls. "The relationship has been even more beneficial than I anticipated. I've especially enjoyed the opportunity to talk with others, to exchange ideas and to pick up professional tips."

Porter has attended the last two STMA national meetings, which were held in Houston and San Diego. "The meetings were packed with practical, useful information," he says. "The tour of Jack Murphy Stadium with hands-on information, was especially enlightening."

The sports field program at STSU has long been an intensive one. Besides upkeep and general maintenance, the program has included renovation and construction.

Says Porter, "In the years that I've been with the university, we've been able to handle most of the field construction in-house."

Field quality has been, and continues to be, a prime concern. That high quality has attracted the pros. Besides the current relationship with the San Antonio Riders, for several years, the Houston Oilers football team held their summer training camp at STSU, utilizing the football practice facilities at Bobcat Stadium.

Being the 1992 home field for the Riders has some interesting benefits. "We're pleased that the San Antonio Riders have chosen our facility," says Porter. "Several of the World Football League games will be shown on television. Bobcat Stadium will get national exposure on two network games and three or four cable channel games. We're excited about the positive effects that exposure will have, not only for our sports turf program, but for the university as a whole."

Of course, Porter and his staff won't be standing around taking bows for the camera. They'll be busy behind the scenes as usual, upholding that quality image that made Bobcat Stadium the STMA Football Field of the Year. 0
STMA in Action

Association News

 Chapters Announce Summer Events

Regional meetings help STMA members keep up-to-date on the latest in sports turf management and provide a forum for interaction between individuals facing similar problems. Borrowing a quote from the Florida Chapter: "We learn from the mistakes and experiences of others because we cannot possibly live long enough to make them all ourselves."

Midwest Chapter—The Midwest Chapter announces its June 24th, National Midwest Sports Turf Institute, "The Look of the Professional—Meeting the Challenge for High Quality and Safe Sports Turf." The event takes place at Wheaton College, Wheaton, IL, from 8:30 a.m. to 3 p.m. On-site registration begins at 7:30 a.m.

This Institute is a combination of practical demonstrations on athletic field maintenance techniques and educational sessions, led by a virtual "Who's Who" of the sports turf industry. STMA President Dr. Gil Landry, University of Georgia, president STMA will welcome attendees. Keynote speaker, Chip Toma, Kansas City Chiefs, will set the tone with his address, "Being a Sports Turf Professional."

Other topics and speakers include: "What's Our Image—Natural Turf Grass," presented by Dr. Harry Indyk, professor emeritus, Rutgers University and consulting agronomist, Turfcon; "Quality Painting, Striping and Lining Techniques," by Walt Holden, Carbit Paint Company; "The Ultimate Challenge in Athletic Field Care—How One Guy Does It All," by Jim Lewandowski, groundsman, Hinsdale Central High School; "Inexpensive Athletic Field Renovations for Field Playability," by Roy Zehren, Natural Athletic Turf, Inc.; "Recognizing Poor Athletic Field Safety," by Dr. Dave Minner, University of Missouri; "Organizing and Scheduling Your Field Maintenance Crews," by Brian Huckstadt, superintendent of parks, Rolling Meadows Park District; "Putting Research Findings to Work for You," by Gary Peterson, Jasper County-Iowa Cooperative Extension Service; "Low Cost Athletic Field Management Equipment," by Bill Wolfsfeld, Wheaton College; and "Edging for Sharp Baselines and Arcs," by Mike Trigg, Waukegan Park District.

The event also includes a trade show at which vendors will display and demonstrate what's new in the industry in equipment, seed, fertilizer, irrigation, sports field supplies, and more.

For further information, contact Mike Trigg, Waukegan Park District, (708) 360-4750.

Chesapeake Chapter—The Chesapeake Chapter quarterly meeting will be held June 3 at the University of Maryland, College Park Campus. Details of the meeting will be announced shortly.

continued on page 20

President's Message

Dr. Gil Landry, Jr.

The Sports Turf Managers Association is in a state of change—a state of evolution.

Change is an everyday fact of life. The very structure and make-up of STMA is constantly growing and expanding—changing. STMA has not only weathered the persistent storms of change, but also, time-in and time-out, successfully met the challenges of evolution.

At this very moment, STMA is at a unique and very exciting crossroads—a crossroads that will dramatically affect its future.

With the continued development of chapters and the continued growth in membership, the STMA board has embarked on a bold and progressive course. This course not only preserves the vital daily activities of the association, but also assures a prosperous future for the STMA.

The association is currently working through a 90-day transition period, which will culminate at the June 23, 1992, board meeting during the Midwest Institute in Chicago. At this meeting, the board hopes to decide on a permanent executive director and/or association management company.

Currently, the association management company of Smith, Bucklin & Associates is managing the day-to-day affairs of STMA, which include organizing an annual conference and meeting; maintaining involvement with national issues like the American Standards Testing Materials (ASTM) Committee; and, perhaps most challenging and important, cultivating membership services.

STMA is also considering a national certification program, which will serve to certify and accredit its members. When in place, this program will give individuals a means to demonstrate their professionalism and add leverage during job searches and salary negotiations.

STMA has always been responsive to its members' need and is committed to fulfilling its mission. Rest assured, the STMA board is taking a total business perspective regarding the future of this organization. As the architects of change, the STMA board understands the operational, human resource, and long-term planning issues that impact this organization. With the continued support and participation of its members, STMA will continue to evolve towards the future.

May, 1992 19
STMA in Action
continued from page 19
On August 5, an All-Day Field Day and Workshop will be held at the University of Maryland, College Park Campus from 8 a.m. to 4 p.m. This event will combine practical demonstrations and hard-hitting informational sessions.

For recorded details on these events, call the Chesapeake Chapter Hotline at (301) 808-3966. For additional information on the chapter and its programs, contact Ray Flood at (301) 601-4311.

Florida Chapter #1:—The next bi-monthly chapter meeting will be held in late May. For details or to find out more about the South Florida Chapter and what it has to offer, contact John Mascaro at (305) 983-7477.

Carolina Chapter: STMA—The Carolina Chapter will host two major events in June. Pre-registration is strongly urged.

A workshop will be held at Charlotte Knights Stadium from 11:30 a.m. to 5 p.m. on Saturday, June 6. Some highlights of the program include a tour of the stadium, an overview of managing the multi-purpose facility, and a problem-solving question-and-answer session on athletic field maintenance with the speaker panel.

As an optional attraction, attendees can stay for batting practice, pre-game preparations and the evening’s baseball game between the Charlotte Knights and the Knoxville Blue Jays.

For further information on the workshop, please call Bucky Trotter at (803) 862-3071 or (803) 288-7654, or Marc Farha at (704) 332-3746 or (803) 548-6771.

The Carolina Chapter’s Sports Turf Institute will be held Friday, June 26, and Saturday, June 27, at the Greenville-Spartanburg Airport Marriott. June 26 hours are 8 a.m. to 5 p.m. June 27 hours are 8 to 11:45 a.m.

The program includes educational seminars, a tour of the Furman University Athletic Field, and equipment demonstrations. Just a few of the seminar highlights include: "Environmental Efforts of Turfgrass Management," presented by Dr. Lundon Miller, Clemson University; "Athletic Field Cultivation," presented by Dr. Gil Landry, University of Georgia; and president of the National STMA, and "Equipment Maintenance and Turf Renovation," Tim Drake, Furman University, Lawn and Shrubs.

For more information on the Sports Turf Institute or the Carolina Chapter, contact Bucky Trotter at the numbers listed previously.

Iowa Chapter—The Iowa Chapter of STMA will be hosting a workshop in Des Moines, IA, on June 11 from 9:30 a.m. to 2 p.m. The workshop is centered on the care and maintenance of football and other sports turf areas. Topics will cover specific tasks, such as preparation of the mound, home plate and bases. Iowa State University extension turfgrass specialists and University of Iowa athletic coaches will present the program.

The Iowa Chapter’s mid-year meeting will be held on June 18, at the Turfgrass Research Station in Ames, IA.

On August 11, a workshop in Carroll, IA, will involve the care and maintenance of football and other sports turf areas. Exhibitors will be on hand to discuss their products. The hours of this program are 9:30 a.m. to 3 p.m.

For more information on the workshops or the chapter, contact Gary Peterson at (515) 792-6433.

COMING STMA EVENTS
Eastern Iowa Baseball Field Workshop, June 8, University of Iowa, Iowa City, IA. Contact: Gary Peterson, (515) 792-6433.

Chesapeake Chapter Quarterly Meeting, June 3, University of Maryland, College Park, MD. Contact: Ray Flood, (301) 808-3966


Midwest Sports Turf Institute, June 24, Wheaton College, Wheaton, IL. Contact: Greg Petry, Waukegan Park District, (708) 244-7275.

South Carolina Sports Turf Institute, June 26, Greenville, SC. Contact: Bucky Trotter, (803) 862-3071.


Northwest Sports Turf Institute, July 9, University of Portland, Portland, OR. Contact: STMA, (702) 739-8052.