Golf Course Superintendents country-wide have proven that McCords Flotation Tires are essential during the following delicate operations:

- Top Dressing
- Spraying
- Mowing
- Back Filling Traps
- Aerating

The large contact area of the flotation tire effectively distributes load over a broad area. This produces lower unit ground pressure resulting in minimized soil compaction.

Our custom built tire and wheel combinations will convert your golf course equipment into the most productive tools you will ever own. For further information call our toll free number today.

US 24 West, Box 743, Monticello, IN 47960 • In the United States and Canada 800-348-2396 FAX: 219-583-7267
Call 1(800) 817-1889 use Fast Fax #1010696 and/or Circle 101 on Postage Free Card
Chandler Arizona has selected Primavera bermudagrass for all fifteen of the new soccer fields that have been seeded in the last eighteen months. In addition, they are using Primavera on all the city parks and grounds.

According to Kris Kirsher, maintenance coordinator, they have used common bermudagrass before but had problems with allergic reactions among the players. Then they tried Mid-iron bermudagrass but it was very susceptible to bermudagrass scale. The third variety they tested was Primavera. Kris was really impressed with its quick germination and establishment. It stayed greener longer in the fall and greened-up earlier in the spring than any of the other seeded types they tested. Primavera also was resistant to bermudagrass scale, so their problems were solved.

Kris and his crew of four were able to convert old cattle corrals to excellent quality soccer fields. The San Tan Soccer Association plays on the fields nine months out of the year and with the use by other groups, there are soccer games almost every day of the week throughout the entire season. The quality of the playing surface is excellent throughout the year. The number of injuries and loss of players have been greatly reduced with the dense turf that they are able to produce with Primavera. It has been stated by numerous authorities that Chandler has the best soccer fields in the Phoenix area.

The work done by Kris and his crew is impressive, especially when one realizes that it was done on a minimum budget.

"Primavera is a high quality, lower cost alternative to the standard turf varieties sold only in sod or stolon forms." Kris Kirsher, Maintenance Coordinator
MAIN EVENTS

8 Vos and Team Make Muscatine Soccer Field of the Year
A safe, healthy stand of turf takes priority at the inviting, eight-field Muscatine Soccer Complex in Iowa. To meet the challenge — and win STMA’s Soccer Field of the Year — Kevin Vos has relied on a dedicated crew and an arsenal of tricks.

12 Thatch Management for Warm-Season Turf
Dr. Gil Landry prescribes moderation. Thatch, in moderation, protects grass plants and creates a softer, safer playing surface for athletes.

14 SUNY Cobleskill’s Turf Equipment Program
Maintaining modern turf equipment isn’t rocket science, but it’s getting close. Qualified mechanics are in short supply, and so are schools equipped to teach the space-age technologies necessary to service the latest computer-guided machinery.

24 Organics Like It Hot — Natural Turf Management, Part 6
Besides year-round disease suppression, organic fertilizers offer other benefits synthetics don’t. Summer is the perfect time to go organic, not only to bring grass through the heat but to harden it off in late fall.

LINE-UP

On the Cover: Iowa’s Muscatine Soccer Complex kicks off its season as STMA’s 1995-96 Soccer Field of the Year. Photo by: Robin Vos.
First, it was an honor to be asked and accepted as a board member of STMA. Secondly, I quickly became aware of the level of dedication that exists throughout the association's membership. Sports turf managers are dedicated to their profession. I have witnessed this not only with the other board members, but also with the individual members I have met in my travels.

As a business owner, I can relate to the ups and downs and growing pains STMA has gone through since its early beginning. Had it not been for the dedication I referred to earlier, this association would not be where it is today.

Your executive director, officers and board members do have their fingers on the pulse of what is happening in the industry. Frankly, I was impressed with the formalities of the board meetings and the budgets that are in place for revenue and expense forecasts.

I look forward to my tenure on the board and the opportunity to help STMA continue its forward progress.

To me, STMA represents the platform to help its membership gain recognition and hopefully one day certification in the sports industry for the job they do. Turf management today goes far beyond the art of growing and cutting grass. Multi-use facilities demand many skills on the part of the sports turf manager. Game day preparations often include conversions from baseball to football or rock concerts to soccer.

Through STMA, members can exchange ideas and help one another “learn the ropes” on how to deal with today’s demands on sports turf.

STMA’s 1997 Conference and Trade Show, January 15-19, Colorado Springs

For exhibitors, the trade show is the ideal way to present new and existing products to a mass audience. In addition, exhibitors can meet with their customers and potential customers to get important feedback on their products. An added plus of STMA is that exhibitors can attend any of the conference seminars without additional charge to learn firsthand the issues facing sports turf managers. A number of conferences sponsored by other associations require trade show exhibitors to pay an additional registration fee to attend the seminars.

For a sports turf manager, how important is it to attend conferences and trade shows? Most product innovations are introduced at trade shows. There’s always something more to learn from the educational seminars.

The interchange of ideas and networking with fellow sports turf managers alone makes attendance at STMA’s Annual Conference and Trade Show worthwhile.

Coaching the Rookies

STMA members manage different venues and have differing levels of experience. A lot of our members are young, up-and-coming turf managers. The educational programs available through the association are of utmost importance to them.

Equally important is the need for more participation in the association by the sports turf managers at the professional team levels. Young turf managers look up to the "pros" and would love to learn from them. This is the same attitude I’m sure the "pros" had when they first started out.

I know that a great number of professional sports turf managers participate in the association – these people and their assistance are very much appreciated. I feel there are still a number of "pros" out there who could get more involved with STMA and pass on their wealth of knowledge to these "rookie" turf managers.

The whole sports turf industry would be the benefactor.

Bob Curry is president of Covermaster Inc. and a board member, Category V, of STMA.
Congratulations To All

With this issue, sportsTURF reaches the halfway point in reporting the fields of the year, and at this time, we want to congratulate not only the winners of the awards but also the “losers”: those who submitted their fields for consideration but did not quite reach the top spot. In many instances, the voting was razor close and the winning edge was a field’s budget — or the lack thereof. Given a choice between two or more fields of equal quality, the judges tended to pick the lowly budgeted.

For these awards, like so many others, the real honor lies in just being considered. In the case of the Beam Clay Baseball Diamonds of the Year, for instance, the judges were asked (1) to “recognize professionalism in maintaining outstanding baseball facilities” and (2) to award no points if no candidates were “sufficiently qualified.” In all of the categories, the bulk of the fields that entered received points from at least one judge. This means most the fields that entered were deemed professionally maintained, outstanding baseball facilities — which is no faint praise, coming from three Major League groundskeepers.

Any sports turf manager with a substantially renovated field should consider entering it for next year’s awards (call STMA at 712/366-2669 for entry forms). It doesn’t matter if the field is short on staff and budget and long on fickle, inclement weather. The judges take such adversities into consideration. The main thing they seem to look at is the ingenuity and tender, loving care of the management.

Ask the Experts

Internet site of the month is SportGrass Turf System at the following address: http://www.sportgrass.com The site provides the e-mail addresses of and a chance to correspond with the following turfgrass specialists: Dr. John Rogers, Dr. Dave Minner, Dr. Norman W. Hummel, Dr. Milton Engelke and Chuck Dixon.

Hebrard Moved

People trying to reach Mike Hebrard in follow up to his April article, “Field Striping and Painting,” are welcome to contact him at his new address: Athletic Field Design, 12586 S.E. Bluff Dr., Clackamas, OR 97015; phone (503) 698-6383, fax (503) 698-7289.

July

10 Field Day at Penn State, a tour of the school’s turf plots and athletic fields. Penn State Univ., University Park, PA. Contact: Keystone Athletic Field Managers Organization, (610) 375-8469, ext. 212.


24 Training with the Bears, a tour of the professional football team’s new state-of-the-art training facility. Chicago Bears Training Facility, Lake Forest, IL. Contact: Midwest Sports Turf Managers Association, (847) 439-4727.


28-29 OPE Technicians Certification testing (8 a.m, 11 a.m. and 2 p.m). EXPO, Louisville, KY. Contact: OPE Technicians Certification, (512) 442-1788, fax (512) 442-1789.

28-30 International Lawn, Garden and Power Equipment EXPO. Louisville, KY. Contact: (703) 549-7600.

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

With the presentation of the FY97 budget by President Clinton to Congress in late March, the Agricultural Research Service (ARS) of the United States Department of Agriculture (USDA) canceled its funding of the National Turfgrass Evaluation Program (NTEP) effective October 1, 1996. The ARS apparently considers the US turfgrass industry a very low priority because, with this action, the USDA canceled essentially its only funding in support of the turfgrass industry. If this decision is not reversed, the USDA will have severed ties to the turfgrass industry after more than seventy years of financial support.

The good news is that there is still time to reverse this decision. The USDA and ARS need to know the following.

1. Turfgrass is a $30 to $35 billion industry in the US.
2. The turfgrass industry is growing faster than any other segment of agriculture. Many states, including Florida, Maryland and North Carolina, have documented that turfgrass is their number one or two agricultural industry.
3. NTEP fits perfectly into USDA objectives, such as integrated pest management and sustainable agriculture (reduction of inputs while maintaining quality). NTEP is an excellent example of how private industry, state universities and the federal government can cooperate to address critical issues in a cost-effective manner.
4. Much positive publicity has resulted from past USDA support of turfgrass research and the NTEP. This publicity is crucial to a positive image of USDA among a growing urban population.

If you are interested in saving this program, we would appreciate you contacting your senators and representatives and telling them you support turfgrass research funding by USDA. Also, the following individuals within USDA need to hear from you:

Secretary Dan Glickman; USDA; Jamie L. Whitten Federal Bldg., Room 200A; 14th & Independence Ave. SW; Washington, DC 20250; phone: (202) 720-3631.

Dr. Floyd Horn, USDA, ARS Administrator; Jamie L. Whitten Federal Bldg., Room 302A; 14th & Independence Ave. SW; Washington, DC 20250; phone: (202) 720-3656.

Dr. Edward Knipling, Deputy Administrator; USDA, ARS, NPS; BARC-West; Bldg. 005, Room 125; Beltsville, MD 20705; phone: (301) 504-5084.

If you have any questions, please feel free to contact NTEP by phone (301-504-5125), fax (301-504-5167) or the Internet (kmorris@asrr.arsusda.gov).

Kevin N. Morris, national program coordinator
National Turfgrass Evaluation Program
Beltsville, MD

Munson Amendment

The article in the March sportsTURF on the Thurman Munson field, and the recognition of the field, was great to see. Unfortunately, the information on where all the materials for the construction of the project came from was overlooked.

Being the supplier of the turf and being curious of the origin of other materials, I feel the article fell short of the informative side, so other sports field managers might learn more about the extremely tough conditions all the material went through and still came out beautifully.

Scott Gregoire, farm manager
Medina Sod
Orrville, OH

The all-purpose field conditioner that always finishes first...with smooth, hydrostatic drive for top performance and fast response...quick and quiet...plenty of power...highly maneuverable...and a big variety of implements. All Star - choice of the Hall Of Fame Baseball Field in Cooperstown.

The riding field liner that delivers professional results...for baseball, football, soccer and running tracks...with hydraulic drive...tight turning...excellent visibility...50-gallon constant-agitation paint tank...easily adjustable line widths...with cultivator, spray boom and hose-and-gun kit.

Top Liner - the top liner.
Vos and Team Make Muscatine the Soccer Field of the Year

By Bob Tracinski

Hard work and good ol’ Midwestern values prevail in Muscatine, IA, a city of 24,000 located about 30 miles from the Iowa-Illinois Quad Cities area. This community enthusiastically follows youth sports from grade school through college. Adult residents are also active sports participants.

It’s here in the nation’s heartland that the inviting, user-friendly Muscatine Soccer Complex captures that essence as STMA’s 1995-1996 Soccer Field of the Year.

Eight soccer fields spread across the 41-acre complex. Two sand-based fields and four native-soil fields were completed in the first phase of construction. Play kicked off in the late summer of 1993. During 1994, a second building phase developed two additional native-soil fields.

A paved parking area leads up to one side of the chain-link fence that surrounds the complex, enclosing the fields, an administration-concession building, maintenance building, shade shelters and wide paved walkways. The two amended-soil fields are lighted and have bleacher seating for approximately 1,100 people. Eye-catching, low-maintenance landscaping of hardy trees, shrubs and perennials adds to the aesthetic beauty of the setting.

Vos on Board

Establishing a top level complex was the goal of Kevin Vos, hired as athletic facilities supervisor in May of 1993.

Vos earned a BS degree from Iowa State University in December of 1988, with a major in horticulture specializing in turfgrass management. Though he initially aimed for the golf course area, his first position, athletic field maintenance at the University of Iowa, changed that focus to sports turf. After three years at UI, he accepted a position as assistant facilities manager of the 17-school Overland Park, KS, school district.

The Overland Park experience in coordinating materials and labor, among multiple sites with multiple needs, added to the precision field-care techniques of UI and provided Vos with a balanced outlook for the Muscatine position.

Vos says, “The community was really excited about the new complex and anxious to put it into play. The six original fields had been seeded in the fall of 1992 or early spring of 1993, so I came on board in time for the grow-in and play-prep stages.

“The two amended-soil fields are 80 percent sand and 20 percent Dakota Sedge Peat. Each measures 300 feet by 390 feet. They have a one percent crown.

“The six native-soil fields are silt-loam with a 1.5 percent crown. These field dimensions are 240 feet by 360 feet.”

Constant Maintenance

The six original fields have underground drainage to ensure rapid recovery after rains. Buried, four-inch tiles spaced 25 feet apart run the length of each field. These connect to a six-inch collector drain that runs perpendicular to them at the middle of the field. Water is channeled through the six-inch collector to the city’s storm-drain system and eventually to the sanitation department.

The amended-soil fields can absorb a four- to six-inch rain and be playable within an hour.

Each of the original six fields have a Toro hydraulic irrigation system covering the total playing area: 2.5 acres for the native-soil fields and 3.25 acres for the amended-soil fields. The system can be programmed to irrigate each field’s entire playing surface or to irrigate only critical zones such as the goal and midfield areas. The two added fields are watered manually with a Kifco Water Reel. Outlying areas are watered with the Water Reel or with manual, roller-based sprinklers.

Vos adjusts irrigation levels from one to 1.5 inches of water per week, varying with natural precipitation, heat and humidity. Relief from the combination of hot summer days and drying winds is achieved with light syringing. Native-soil fields are watered 24 to 36 hours before use; amended-soil fields eight to 12 hours before use. This maintains good sub-surface moisture for plant roots, while keeping the field surface fast and highly playable.

Vos says, “The fields were originally seeded with a 50-50 mix of the bluegrass varieties Touchdown, Ram I, Nassau and Glade and perennial ryegrass varieties Palmer II, Prelude II, Pinnacle, Affinity and Repel II.

“Native-soil fields are mowed twice a week with a rotary mower to a two-inch height. Amended-soil fields are mowed three times per week with a reel mower to a height of 1 3/8 inches. Other turf areas are mowed as needed, generally once or twice a week. Cut direction is alternated at each mowing. String trimmers are used for edging and grooming hard-to-mow spots.

“We maintain a nearly constant overseeding process, drill seeding perennial ryegrass during the season if time permits and broadcasting seed to be worked in by players’ cleats. Divots are filled weekly with a blend of topdressing material, pre-germinated perennial ryegrass and Milorganite. Fields are watered...
light when needed to keep the divot-seed mix slightly moist.”

Soil testing is done separately for the native-soil and amended-soil fields. Fertilization programs are based on test results. Vos says, “On native-soil fields, an application of Scotts 40-0-0 or Grass Roots Pro 22-0-22 with minors is made every six to eight weeks at the rate of one pound of nitrogen (N) per thousand square feet. Amended-soil fields are spoon-fed applications of approximately one-quarter pound of N per thousand square feet using Scotts 15-0-30 and Grass Roots Pro 22-0-22 with minors. Ferron Liquid Iron AC 15-0-0 is applied twice per year. Non-field turf areas are fertilized two to three times per year at one pound of N per thousand square feet using Scotts 40-0-0. All fertilizer applications are watered in.”

Fighting Compaction

Soccer in Iowa begins in mid-March and runs through November, with the heaviest concentration of play in the spring and fall. Weekdays in these peak periods will bring team practices to six or seven of the fields for three to four hours each day.

The Muscatine Soccer Complex hosts high school and college teams, local soccer clubs, the YMCA/YWCA, and adult open-league player groups start at age ten and range up to the seniors.

Vos says, “Field use is scheduled through the Parks and Recreation Department. The complex hosted a total of 1,700 games and practices in 1995: 400 games in tournaments; 370 in club use; 50 high school games; 30 for colleges; and 60 for adult leagues. There were 780 practices for all user groups. Game use requests for 1996 are running 20 to 25 percent above 1995 levels. Practices probably would be up too, but we’ve pretty well maxed out the usable, daylight hours of weekday field time.”

Tournaments include the Regional Iowa Games, Iowa Youth Cup (for three weeksends each, spring and fall), Iowa High School State Cup (both spring and fall), Muscatine Summer Classic, Iowa State Youth Soccer Association Olympic Development Program, along with college tournaments, high school conference tournaments, district playoffs and various clinics. Major tournaments may involve 60 to 80 teams.

Fighting the compaction of all this play calls for lots of aeration. Vos says, “We generally use slicing times at the beginning of spring green-up to sever bluegrass rhizomes and spur additional growth. We use slicing times in the direction of play every two weeks throughout April and May. In June, September and October we use 3/4-inch coring times in a 3x3 pattern in one or two directions. We always drag the cores in, and will pick up any thatch debris with the Parker Sweeper if it’s excessive or play schedules warrant it. Worn areas such as the goal mouth, sidelines, team areas, and turf bordering walkways are aerated additionally as needed.

“Turf cooperates, there’s a 1 1/2 week window the first of June for renovation. Fields are mowed at two inches, core aerified in three directions, the cores dragged back in and thatch removed. We drill seed perennial ryegrass in two directions. Then we broadcast pre-germinated Kentucky bluegrass, mixed into the topdressing mix. The native-soil fields are topdressed with straight sand at the rate of 30 tons per field. The amended-soil fields are topdressed with an 85-percent sand, 15-percent Dakota Sedge Peat mix at the same rate. We irrigate as needed.”

Vos also topdresses the amended-soil fields in November to provide turf crowns extra protection from excessive cold and winter desiccation.

Spring of 1996 presented quite a challenge. In mid-March at the start of soccer practice, temperatures were too cold to trigger turf green-up and growth. Rains were minimal, with a two-inch-below-normal deficit until the very end of April. As temperatures yo-yoed up and down the scale, supplemental irrigation and fertilization helped boost grass growth. Then the skies broke, dumping rainfall first at three-day intervals, then two-day intervals, and finally every day. Temperatures still remained below normal, but spiked at times to record highs.

The level of soccer play slows somewhat in the summer, but Vos and crew don’t slow down. Fields and sections of fields are rejuvenated during July and August. Play is moved from field to field to allow a two-week or longer recuperation period for high-wear areas.

The Muscatine Team

The workload also shifts a bit. Adjacent to the soccer complex is the 50-acre Kent Stein Park with its 18 lighted ball diamonds, hard surface parking, two spacious rest room/concession buildings, picnic areas, horseshoe courts and fishing areas. Little League baseball, girls softball, high school and college baseball and softball, and adult fast pitch/slow pitch softball/baseball games fill the complex.

Vos says, “Both the soccer complex and the park are included in Muscatine’s Parks and Recreation Department. In addition, there are two city parks with ball diamonds. Our regular crew and nine seasonal staff members maintain these facilities. We have a tremendous crew, capable, dedicated and cooperative.”

Vos oversees four part-time, on-site supervisors. Each supervisor is responsible for monitoring and operating the complex during usage. Besides minor pre-game set-up, this includes ensuring that teams are using the assigned fields at the correct times, and that city rules for the complex are being followed. Supervisors encourage and assist with site cleanup, serve as damage control agents and provide a safer, smooth-running facility.

Vos says, “Joe Wagner, athletic facilities technician, has major responsibility for the maintenance and repair of equipment, buildings and the irrigation system and assists with field maintenance. His knowledge, proactive approach and precise record keeping ward off problems. Scott Meerdink, groundskeeper, tackles aeration, fertilization, field painting and care of landscape plantings. Bill Fletcher, equipment operator, concentrates on mowing.

“But there’s no ‘it’s not my job’ attitude. Work assignments overlap, and everyone

continued on page 10
is willing to do whatever it takes to meet
the needs of the facilities. Our high-quality fields and this Field of the Year
honor reflect the great effort and dedication
of the entire staff.”

On the personal side, Vos says, “My
wife, Robin, is terrific. She’s always sup-
portive, a real partner and source of
ideas. And our son, Matthew, at 18
months, loves the whole soccer experience.
His excitement, about the games and
the complex, is contagious.

“The whole team is always looking
for ways to do things better, faster
and more efficiently,” says Vos. “Our
staff knows we’re always open to sug-
gestions and will give most reasonable
options a good try, whether it means
altering maintenance methods or
equipment use.”

**Trade’s Tricks**

A safe, healthy stand of turf is Vos’ top
priority, and he has a whole arsenal of
“tricks of the trade” to make sure that the
priority is met.

All fields are painted once per week
when used: game fields in white J.S.
Sports Turfcoat and practice fields in
yellow. Fields are laid out according to pre-
cisely measured string lines in the spring
and restrung every few weeks to keep lines
straight and accurate.

“Because of referee wear along the side-
line areas, we move sidelines out three
feet and back in, while still staying
within the official size field for each age
group,” says Vos. “The team areas are
moved at the same time, either posi-
tioning them along the ‘new’ sidelines, or
moving both team areas to the other
side of the field.

“Because of the large turf playing
surface and overall field layout, we can
move the entire field to spread wear. If
the ‘window’ is tight when we shift all or
part of the field, we use green paint to block
out the old white lines to alleviate con-
fusion. We match the paint shade to
turf color as closely as possible.”

Vos denotes practice fields with yellow
dotted lines that run perpendicular to