JOHN DEERE SCOUTING REPORT FROM MILWAUKEE

"We're a team," explains Gary Vandenberg, director of grounds for

> the M Brew Club ing Day "D ale an

Dave Mellor (left) and Gary Vandenberg the Milwaukee
Brewers Baseball
Club, when speaking of assistant
Dave Mellor.
"Dave and Loot

"Dave and I get along very well and think a lot alike. Dave handles the day-to-day

scheduling of the crew while I handle the budgeting and management chores."

One thing they both agree on is John Deere. "Our John Deere equipment allows us to do a better job," says Mellor. "For example, the 1200A is so fast and efficient that we can groom the entire infield in just five minutes. That means we can go out and smooth the skinned area between pregame batting and infield practices. Players appreciate that extra touch."

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2653 Utility Mower, 220 Greens Mower, Gator® Utility Vehicles, and 1800 Sprayer.

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"If one thing stands out about the John Deere equipment, it's that we've had virtually no downtime," concludes Mellor.

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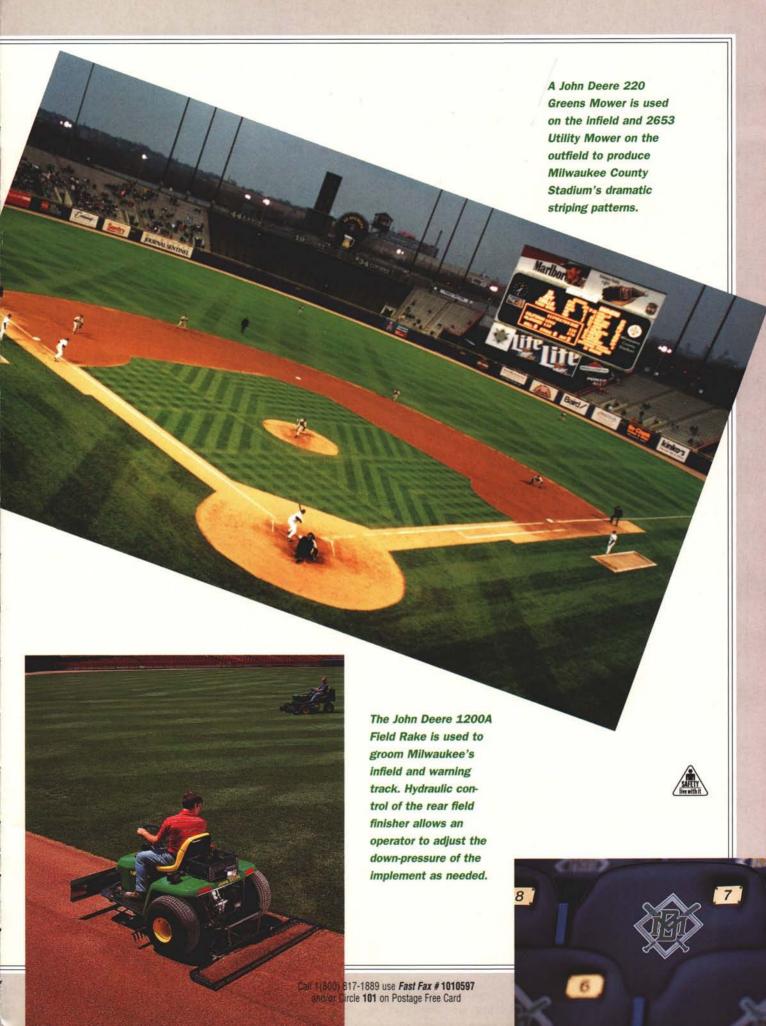
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VOLUME THIRTEEN, NUMBER FIVE

MAY 1997

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A limited budget, a packed schedule and Wisconsin's short growing season make baseball field maintenance a constant challenge for Park Manager Greg Freix and his staff. So, it was a sweet moment when their field won the 1996-1997 Beam Clay Baseball Diamond of the Year Award in the Schools, Municipalities and Parks category.

14 Striping and Marking Athletic Fields

From the recreational to the professional sports level, the types of materials and techniques to stripe and mark fields may be strikingly dissimilar or remarkably alike. STMA members Michael DePew and Gilbert Pulley describe the various materials and how to use them to your advantage.

20 Trends in Fitting Fields to Stadiums

To justify the financial commitment necessary to build and maintain a modern crowd-appealing, owner-pleasing stadium, a field must be able to accommodate multiple revenue-raising events day after day, rain or shine. Steve Guise outlines advances in design, construction and maintenance that are making field longevity and the financial success of stadiums possible.

26 Sod & Squad Work Miracle at Lambeau Field

Last January, 600 tons of bluegrass and a sod squad from the East raced 1,000 miles to Wisconsin in an attempt to transform the pigpen of Lambeau Field into sure-footed turf for the onslaught of the Green Bay Packers-Carolina Panthers playoff game. Overcoming near-zero-degree temperatures, snow storms and other adversities, they succeeded beyond anyone's wildest expectations.

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On the Cover: Chief Scientist Jim Beard (right) of International Sports
Turf Research Institute (ISTRI) and Bob Vaughn of Pure Seed Research
conduct tests with ISTRI's wear machine at Pure Seed's facility near
Canby, Oregon. Photo courtesy: Steve Guise.

TORN UP

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THE FRONT OFFICE

OPINION PAGE



More and More Recognition

'n last month's article about 1996-97 Beam Clay College Baseball Diamond of the Year award winner Mark Light Stadium (University of Miami), we neglected to mention that Head Groundskeeper Kevin C. Hardy and his crew provide maintenance for the university through Unicco Service Company. a multi-service provider that deserves to be recog-

nized for its support of Hardy's efforts.

While on the subject of recognition, we'd like to note that the one problem with the Beam Clay Baseball Diamond of the Year awards, now a decade old, is that there just aren't enough of them to go around. So many sports turf managers are doing so much with so little that three awards just don't seem enough to recognize all the hard work and dedication going into baseball diamonds. For this reason, we're glad that the American Baseball Coaches Association (ABCA) and Turface Sports Field Products began sponsoring the Outstanding Field Maintenance Awards three years ago, and we are pleased to announce the results.

During ABCA's annual banquet last winter, the Outstanding Field Maintenance Award at the college level was given to Baylor University. Waco, Texas. At the high school level, Deerfield Beach High School,

Deerfield Beach, Florida, won the award.

The awards were presented by Joe Betulius, Turface product manager. Each winner received \$400, a plaque and one ton of Turface sports field con-

Two other awards, the Field Maintenance Scholarships, were presented to Franklin College, Franklin, Indiana, and Camelback High School, Phoenix, Arizona. The scholarships are awarded "to coaches and teams that best demonstrated a need and a strong desire to improve their fields for maximum athletic performance and safety for their athletes."

Additional recognition for the work sports turf managers are doing comes from the NFL Players Association (NFLPA), which announced the results of its latest league-wide player survey concerning NFL clubs' play-

ing surfaces.

The written survey was conducted by NFLPA staff members at team meetings during the 1996 NFL season, as a follow-up to a similar survey conducted during the 1994 NFL season. The 1996 survey revealed that 86.7% of the 1,034 players who answered preferred to play on natural grass (up from 85.1% in 1994), while only 6.3% preferred artificial turf (down from 7% in 1994), and 7% had no preference (8% in 1994). Almost threequarters (74%) of NFL players in this survey also indicated that playing on a natural grass surface was either very important or somewhat important in selecting the teams they would consider signing with as free agents (up from 70% in 1994).

The players also chose the five "best" NFL playing fields, all of which are natural grass surfaces. In order of preference, they are Tampa Stadium, Miami's Pro Player Park (formerly Joe Robbie Stadium), Jacksonville Stadium, Arizona's Sun Devil Stadium and Kansas City's Arrowhead Stadium.

Does it surprise you that, at the bottom of the list, the five "worst" stadiums all had artificial turf? We refrain from mentioning the stadiums' names, but if you'd like to know

who they are or want a copy of the survey, call the NFLPA at (202) 463-2200.

EVENTS

CALENDAR

May

28 Pesticide Applicators Professional Association's (PAPA's) Hands-On Pesticide Applicators Seminar. Two locations: Santa Rosa and Davis, California. Contact: PAPA. Phone: (408) 442-3536.

June

18 Landscape Entomology Symposium, sponsored by UC Cooperative Extension. Fee: \$50 (includes lunch and proceedings). Rancho Del Rey Conference Center, Oak View, California. Eight ISA and 9 PCA CEUs approved. Contact: Jim Downer, UC Farm Advisor, Phone: (805) 645-1458, Fax: (805) 645-1474.

19 PAPA Pesticide Applicators Seminar. Eureka, California. Contact: PAPA. Phone: (408) 442-3536.

July

17-19 Turfgrass International Producers Summer Convention and Field Days. Minneapolis, Minnesota. Contact: Tom Ford. Phone: (847) 705-9898. Fax: (847) 705-8347.

23 PAPA Pesticide Applicators Seminar. San Jose, California. Contact: PAPA. Phone: (408) 442-3536.

26-28 International Lawn, Garden and Power Equipment Expo 1997. Louisville, Kentucky. Contact: Sellers Expositions. Phone: (800) 558-8767 or (502) 562-1962.

29 Midwest Regional Turf Foundation's Turf Field Day. West Lafavette. Indiana, Contact: Bey Bratton, Phone: (765) 494-8039 or (317) 494-8039.

August

PAPA Pesticide Applicators Seminar. Fresno, California. Contact: PAPA. Phone: (408) 442-3536.

18 Golf Course Seminar at SUNY-Delhi. Delhi, New York. Contact: Dominic Morales at (607) 746-4413; or NYSTA at (800) 873-8873, (518) 783-

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.

STMA MESSAGE





BvMike Schiller

STMA Certification Committee held a day-long planning session on March 16th laying the preliminary ground work for a certification program. The committee will be presenting its recommendations to the STMA Board for consideration at the July 11-12 board meeting. Because the committee, and STMA, want the program to answer the needs and concerns of the individual sports turf manager, and of the sports turf industry, a call for input from STMA members was issued in the March-April issue of our newsletter, Sports Turf Manager.

Consider this message a call for your input on the certification program and, further, a call to join the

Moving Ahead

national association, if you have not already done so. If you are an active participant in the sports turf industry in any contributing capacity - administrative or hands-on management, turf-related education and training, supplier of products or services -STMA needs you. And you need STMA. Responsiveness to industry demands and needs comes through communication and cooperation. Working together, we have the resources and strength to accomplish great things.

Speaking of great things, the 1998 Conference and Exhibition coming up January 14-18 will be just that. The STMA Board met at the Walt Disney World Sports Complex on March 14 and 15 to check out some of the exciting things that will be incorporated into the conference. This truly impressive 200-acre site offers athletic opportunities for over 30 sports - and con-

ference attendees will see it all. Our headquarters hotel is another Disney property, the Coronado Springs Resort. We'll take full advantage of its unique design and excellent meeting facilities. If you have not had a Disney experience (like me before the March meeting), polish off your "Wow!" Every "cast member" (as Disney personnel are called) is there to serve you.

There's more. The Conference Committee is putting together two different Seminar on Wheels opportunities and a golf outing. And, just in case you'd like to tie this Florida trip to family vacation time, the committee is working with Disney to set up special multi-day, multi-park programs for the Walt Disney World attractions.

You'll want to come early or stay late to fit it all in.



Get Serious With STMA

Application for Membership

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

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

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A member of STMA, Greg Freix attends "every sports turf seminar I can work into the schedule." Photos courtesy: Greg Freix.

Wausau's Athletic Park Wins Municipal Diamond of the Year

By Bob Tracinski

limited budget, a packed schedule and north-central Wisconsin's short growing season make baseball field maintenance a constant challenge for Park Manager Greg Freix and his staff. So, the moment seemed even sweeter when the 1996-1997 Beam Clay Baseball Diamond of the Year Award in the Schools, Municipalities and Parks category went to their field, Wausau's Athletic Park, the premier facility of the City of Wausau and Marathon County Park Department.

Freix says, "We strive to have the field prepped consistently for every event. That's what it's all about." And that attitude and commitment pay off in quality.

The baseball field of Athletic Park is one of 13 diamonds located throughout the city. The closest is a Little League field located behind Athletic Park.

The Wausau Park area has been used since the early 1900s, which is reflected by the older residential

neighborhood that surrounds it. During the Work Projects era of the 1930s, a stone wall was constructed three-quarters of the way around the park when the original infrastructure was built. The only open section of the diamond ran from right center field to left center field, a space now filled with bill boards added in the late 1970s as a fund-raiser for the field's primary user.

Freix says, "The park is essentially land-locked, but that's not all bad. The community, and the city, consider it 'theirs.' For all events, people park along the neighborhood streets and walk to the facility. We have bleacher seating for 1,800 and, with a packed house, have reached attendance levels of 2,500 to 2,700.

"Everyone enters through the main gate behind the grandstand area and walks up to the bleachers, so their first glimpse of the field is similar to the experience of entering a major league facility."

Freix and crew are very conscious of the "wow" factor, the reaction of players and spectators alike when they get that first look at the field. The maintenance program is focused on delivering the playing level anticipated by those first perceptions.

Freix says, "Because of our northern location, we have an average of 115 to 125 playing days available for an average 150 game schedule. An April 1st season opener used to be planned, but we've moved that to April 15th, and we're lucky to get up to three games in before early May. The season ends in mid-August. In 1995, a record of 162 games were played here. In 1996, we worked in 161 games with 111 days available for play. Obviously, there are lots of doubles."

Until recently, the last major field work had been completed in the 1940s, so with the combination of heavy use and the native clay soil, the infield became "a lake" following rain. At times, crews resorted to digging holes and installing sump pumps to get water off the field.

Renovation began in August of 1993 to improve both surface and subsurface drainage. The infield was excavated to a three-foot depth and the original material hauled off site for fill on

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other projects. A subsurface drainage system with perforated tile lines spaced at 15-foot intervals was installed. The tiles are embedded in gravel and surrounded by geotextile material. Excess water flows through the tiles into the storm sewer system.

A 10-inch layer of material covers the drainage system. In the turf-covered portion of the infield, the material consists of a sandy-loam native soil that was screened off-site and trucked in. A local landscaper laser graded the field, establishing a one percent crown.

Freix says, "The skinned area, including the base paths, was filled with a mixture of 60 percent sharp sand and 40 percent clay loam. This was mixed off-site and trucked in. It's similar to the infield material of the turfed area, just a little bit sandier. The renovation has allowed us to get in most of our games as scheduled. We generally can play except when it's actually raining or there's lightning. Following the renovation, the skinned area was playable within 15 minutes of our heaviest rain."

The city's budget for the field improvement wouldn't stretch enough for an in-ground, automatic sprinkler system. A quick coupler was installed behind the mound for irrigation. By mid-September, the reconstruction was completed and the infield seeded with a ball-field mixture from Reinderers Brothers consisting of 75 percent Kentucky bluegrass (Touchdown, America and Banff) and 25 percent perennial ryegrass (Cutter II).

Freix says, "We overseeded with annual ryegrass in the spring of 1994 to create a nurse crop cover for the young field. At the end of the 1995 season, we killed the existing outfield turf with glyphosate and seeded with a mixture from LaCrosse Seed Company consisting of 60 percent Kentucky bluegrass using Bartitia, Alene and Ken-Blue and 40 percent perennial ryegrass using Pinnacle and Premier."

A Great Group

Freix is in his sixth year as park manager for the Wausau/Marathon County Park Department. He earned a BS degree in forest management from the University of Wisconsin, Stevens Point, planning a career in forestry. Instead, he spent six years working for Chemlawn in various capacities before taking a position as horticulturist for Marathon County. After a year, he advanced to his current position in

A member of the national Sports Turf Managers Association and the Wisconsin Turfgrass Association, he's attended "every sports turf seminar I can work into the schedule." He especially enjoys the tremendous variety, and challenge, of maintaining a top quality facility. He gives credit to his wife, Yvonne, who is supportive through all the demands of his position and keeps things running smoothly at home with three-year-old Clare and nine-month-old Jackson.

Less than half of Freix's work time is committed to the Athletic Park baseball facility. For assistance, he calls on the Parks Operations Department for such time- and equipment-intensive projects as aeration. He calls their support "excellent."

Freix says, "Though the rest of my crew members are seasonal, many of them were 'repeaters,' with some even working at the park before I came on board. We've had a great group with total dedication to do the job right.

"Two people are assigned to the 11 ball diamonds at other sites and six people are assigned to Athletic Park. Two of these people come on staff the first of April and work until mid to late August. Most of the other six crew members are college students who join us at the end of May or in early June and work until their class sessions begin in the fall, usually around the end of August. This will be a transitional year for us, because most of this crew have completed their formal schooling and are moving on to fulltime positions in other areas."

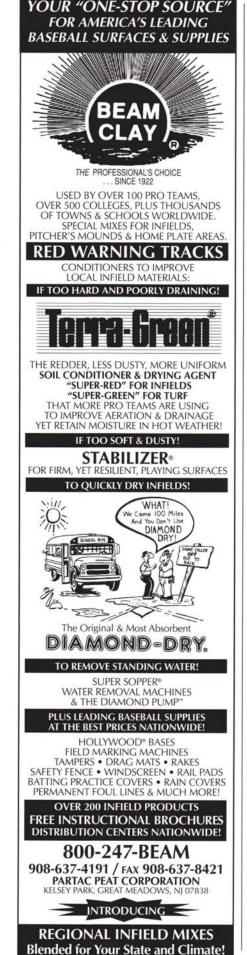
Seven Days a Week

Besides developing and overseeing park maintenance, Freix handles all field scheduling, no easy task with a lighted facility open for play seven days - and nights - a week. He says, "The park is home to the Wausau Woodchucks baseball team, a summer college team which is a member of the Northwoods Baseball League. The field also is home for three local high schools, a Legion team, three adult league teams, Babe Ruth baseball and Senior League baseball (Little League). Many other non-local teams use the field if and when it's available.

"Athletic Park also is host to several tournaments each season and several locally organized events, most of which are held on weekends. This will be the 25th year for the Wisconsin State Baseball Tournament, which brings us 13 games in 3 days. For the last 15 years, the Breakfast Optimists have held a tournament for the Senior League that packs 10 to 15 games into



"Wow" is generally the reaction of those who visit Wausau's Athletic Park for the first time.





A typical day during the season begins at 8 a.m. and ends well after midnight.

2 1/2 days, including a 6-game session on the opening night."

The Park Department does allow practice on the field, if the schedule permits. A batting tunnel in the left field bullpen can also be used prior to a game if that activity doesn't disrupt a scheduled event.

All field users pay a game fee. The Wausau Woodchucks have a primary use arrangement with the facility and maintain a small office at the front of the grandstand. They also operate the three concession stands and pay a percentage of their profits to the city.

Different Every Day

During the season, a "typical" day begins around 8 a.m. and wraps up well after midnight. Freix says, "We start the day with infield grooming and any maintenance needed along the grass/skin edge. We also try to allow a short break between games so the crew can whip the field back into shape. Plate and mound repairs and a quick drag of the baseline take between a half hour and 45 minutes. But circumstances are always changing, so it's a different situation every day and for every game. Sometimes, when games run long and fit together

back to back, we have to rely on the integrity of our overall maintenance program carry us through."

That program includes core aeration at least twice a year to at least a three-inch depth. This is done once in the spring and once in the fall, and more frequently if conditions warrant. The level of compaction. degree of heat and time available are critical factors. The cores are dragged in. Crews overseed weekly with a pregerminated seed mix. They also fill in divots with a mixture of pregerminated seed and sand or calcined clay. They do this weekly for the infield and on an "as needed" basis in the outfield.

The field is fertilized four or five times a year with the timing and amount of nitrogen and supplemental nutrients based on

soil-test results, weather patterns, and growing conditions. Soil tests are conducted every two years. Modifying potash and pH levels are usually the two basic adjustments needed. The last fertilization of the year is scheduled for the end of October or the beginning of November to prepare the turf for the following spring.

The field is moved every two days. A tow-behind, 3-gang reel mower clips the outfield turf to 1 3/4 inches. A walk-behind rotary mower trimmed the infield turf to 1 1/2 inches in past years, but a riding reel mower will be added this year.

Insects and grassy weeds are not a problem, and broadleaf weeds are minimal. Those that do appear are spot treated with a Trimec solution administered from a backpack sprayer during spring and fall field checks.

But the same total enclosure that helps keep weeds at bay creates conditions that increase the incidence of diseases, especially pythium. Freix follows IPM principles of close observation and cultural adjustments, applying a combination of preventive and curative fungicides as needed.

Infield watering is basically by continued on page 13