George Mason University earns STMA's 2003 Soccer FOY

BY **SUZ TRUSTY**

Photos by David Brooks (www.davidbrooksphoto.com)

The Stadium Soccer Field of George Mason University, Fairfax, VA, earned the 2003 Sports Turf Managers Association (STMA) Soccer Field of the Year Award in the College/University division. Michael W. Sullenberger, Sports Turf Manager, and his crew kept this field ready for play through diverse weather conditions and drainage and irrigation system problems that required innovation and commitment to overcome.

The Stadium Field opened in 1982. The field meets international specifications with dimensions of 400 feet by 225 feet. The original construction featured a 90 percent sand, 10 percent peat soil profile with a Duraflow drain system and a seven-zone, 28-head in-ground irrigation system. The field is encircled by a Martin I.S.S. 200 all-weather track. The grandstand seats 5,000, has an enclosed press box and is wired with a public address system. A new "soccer" scoreboard was installed in 2001.

The facility has served as the home to Men and Women's ICA Soccer and Men's and Women's Track & Field since it opened. Lacrosse, added to the GMU sports program in 1994, has used the field since that date.

The field is in nearly constant use from March to November each year. The soccer and lacrosse coaches fit their camps into the available open dates. GMU rents its facilities to outside athletes whenever possible. One such arrangement is with a professional Central American Soccer League. From April until October, they play six games every Sunday.

The field has hosted two Women's National Tournaments, several international matches and many regional tournaments. In June of 1994, the Stadium Field served as the main practice site for the Mexican Men's National Soccer Team. In July of 1994, the US Women's National Soccer Team won the Chiquita Cup over Germany's National Team on the Stadium Field. It hosted the 1999 World Cup Champion US Women's National Team in 1999 and the US Men's World Cup Team in 2002.

The professional team, D. C. United, has practiced on the field, as have many of its MLS competitors. The track is used by the track program athletes, other athletes in training, GMU students, faculty and staff, and by the Fairfax community.

During the summer of 2000, the existing bluegrass sod was stripped and the field regraded to reduce the 28-inch crown to 8 inches. This change resulted in a nearly flat field, with a crown of slightly less than one percent, which met the specifications the Men's soccer program desired. Though Sullenberger had recommend replacing the drainage and irrigation systems during that renovation, budgetary restraints didn't allow it.

"Following regrading, the field was sodded with Tuff-Coat Bermudagrass as part of the conversion to Bermudagrass on all the GMU athletic fields. There are nine athletic fields besides the Stadium Field, one of which is the STMA 2002 Baseball Field of the Year, Raymond H. "Hap" Spuhler Field. The changeovers have allowed our fields to better withstand the heat and humidity of summer in

INNOVATION AND EXPERIMENTATION ARE A NATURAL OUTFLOW OF SULLENBERGER'S ENTHUSIASM AND COMMITMENT. HIS CAN-DO ATTITUDE IS CONTAGIOUS.

our area of the transition zone," says Sullenberger. "We've tried other varieties, but Tuff-Coat has held up to our winters, started earliest in the spring and been the most aggressive, with great horizontal growth that seems to get tighter the more it is mowed. The summer of 2000 was so dry irrigation restrictions were issued statewide. Thankfully, special permission was granted and we were able to water in the sod. Little did we know that the next year would start a 3-year period of record precipitation.

"Following the heavy rains and snows of 2002, we were hit with a record precipitation in February 2003, according to the National Climatic Data Center standards for Virginia," says Sullenberger. "On March 21, the field hosted the first Lacrosse game of the season. The lacrosse team continued to use the Stadium Field through March and then every other day up to April 15, despite 'much above normal' rainfall for that month."

In May, rain fell 27 out of 31 days. In late May, the Stadium Field hosted the NCAA East Coast Regional Men's and Women's Track & Field Meet. Thousands of athletes had gathered hoping to secure a spot in the NCAA Finals to be held the next weekend on the West Coast.

"No rain date was scheduled for the event so my crew and I knew the pressure was on us to allow every competing athlete a fair chance to win his or her event," notes Sullenberger. "Before the meet, we took an auger and added an extension on it so we could drill six-foot deep holes around the edges of the field. Then we pulled in eight or nine people to push the excess water into the holes with squeegees. During the meet, between thundershowers, we dried the track, long jump pits and other use areas with squeegees and backpack blowers to make all surfaces safer for competition. During and after the meet we replaced divots and repaired the Stadium Field after it was pounded by thousands of hammer, javelin and discuss throws. Then we pumped the water from the holes, filled them with a mix matching the soil profile, put sod on top and stapled it down."

June's rainfall totaled 6.35 inches and July brought another 6.28 inches. Sullenberger says, "Although we wanted to preserve the field for ICA Soccer in August 2003, we had scheduled two Central American Professional Soccer games for the 4th of July and athletes had flown in from Central America to play. We decided to allow the event to go on and repair the damage later.

"On July 7 and 8, we used a junior sod cutter to cut sod from two areas measuring 60 feet by 132 feet around each goal mouth and we installed new sod. Conditions remained so wet we resorted to mowing the Stadium Field and all of our other Bermudagrass fields with a walk-behind reel mower rather than risk using the heavier ride-on reel mower. On July 30, we decided to re-sprig the field

because it didn't appear the existing Bermudagrass would cover the area sufficiently for safe play. We experimented with what I have been told is an Asian technique for resprigging. Our crew spent a day walking the field without shoes or socks, using our feet and toes to 'work in' the sprigs for that important sprig to soil contact."

The good news is that these extra efforts were effective. The bad news is the Stadium Field had more problems than excessive rainfall. Sullenberger says, "Once the rains let up, we searched the files for as-builts and finding none, resorted to the original plans in the University's archives. The irrigation valve boxes were 4-foot deep and several of the old valves were sticking and coming open. The 15-year-old drainage tile's filter cloth was filled with silt preventing proper drainage. Once we had tracked down these problems, we shut down the irrigation system and drained the lines. We kept pulling soil samples and realized we also were dealing with black layer in the previously sodded sections of the field. While the field looked okay to the eye, the root foundation we wanted for play just wasn't there.

"We had planned to overseed with perennial ryegrass in September, working around our normal seasonal rainfall. We hit it hard, twice putting down 10 pounds per 1,000 square feet. This time, the rains didn't come. We had to run the irrigation system and then hook a hose to a quick coupler to drain the main line to prevent water from seeping through the valves. We deep tine aerated to a 14-inch depth with solid tines to move the water off the field surface. Finally the perennial rye started to jump, filled in and gave us a dense turf. We could even stripe. We managed to host all 32 home soccer games scheduled between the Men's and Women's programs for the fall season, wrapping up play the last week of October, just before Halloween. And we earned rave reviews for the appearance and playability of the field."

Spring of 2004 brought decent weather and the perennial ryegrass flourished. In fact, the field looked so good initially that no one wanted to fix it. Sullenberger persisted and provided the Athletic Department with proof of the struggles he faced maintaining the Stadium Field during the fall of 2003, which required extra labor, materials, and equipment.

Renovation began in June and wrapped up in July. He says, "The new irrigation system has seven stations running the length of the field rather than across it. We'll now be able to isolate and water just one side, or the middle of the field. The new drainage system will be able to handle 5 inches of water in an hour. There are lengths of 2-inch drainpipe running across the field on five-foot spacing and connecting to a drain line that surrounds the field. The drainpipe is installed within a 4-inch layer of clean stone and topped with sand. In addition, a Carolina Green system has been installed with sand inserts running the length of the field at two-foot intervals. We're again using a 90 percent sand, 10 percent peat soil profile. It is topped with a sand cap and laser graded to a one percent grade. Carolina Green has handled the design and installation of the renovation. Oakwood Sod Farms supplied the Patriot Certified Bermudagrass sod.

"We're also installing a synthetic field on one of our recreational sports fields. It's a 400 x 220-foot Prestige system, made in France. Carolina Green is installing the base for this field. I look at this as a tool to aid the overall program. The synthetic field will be available to athletes for use in bad weather. We also plan to switch much of our field rental to the synthetic surface to further alleviate wear on our natural turf fields."

Innovation and experimentation are a natural outflow of Sullenberger's enthusiasm and commitment. His positive, can-do attitude is so contagious it's caught by his staff and everyone around him. Sullenberger had come to GMU as Assistant Sports Turf Manager in March of 1996. Before that he had worked for The Athletes Foot shoe stores. During the same period, he gained his experience with

Game Day, Inc.

Heather and Michael W. Sullenberger have teamed up to tackle another aspect of sports turf management. Game Day, Inc., with Heather as President, and Michael as a stockholder, is currently providing athletic field consultation, maintenance and management services in Fairfax, Virginia, and the surrounding areas. After years of providing consultation on a pro bono basis, Michael and the new company provide a venue for the related services that Sullenberger has been asked to provide. Safe, playable fields for all levels of play are the company's goal and Game Day, Inc. is focused on providing them.

On the horizon is their dream to help alleviate the shortage of athletic fields in the Fairfax area. To meet the current demand, 900 rectangular fields and 400 softball/baseball fields are needed. Their dream - Game Day Park - would be a field rental facility and would ideally have a 65,000 square foot building and 14 acres of outdoor fields, both natural turf and synthetic turf.

The Sullenbergers say, "We want every athlete to have a safe field on which to play. We know that a good field, not maintained properly, will fall apart. Natural turf is the answer - and synthetic turf is a tool in the overall program. We're excited about the possibilities for Game Day Park and hope to move forward in the near future."

bluegrass turf through a part-time position with Chantilly Turf Farms, Inc. He graduated from James Madison University in 1986 with a Bachelors degree in Business Management and a minor in Sports Management. As a linebacker, he lettered all four years. That sports background gives him the athlete's feel for field conditions.

Just as the constant attention to detail builds field endurance, Sullenberger insists on the same performance level among the crew and he gets it. He says, "These guys never fail to deliver at top level, even under the marathon maintenance we've needed to put out. We've had a seven person rotation going all summer, with a combination of full-time and part-time staffers, so that at least one crew member is on campus from 6 am until 11 PM. Special thanks go to Gary DeBrielle, Phil Scherrens, and Ryan Barden for all their extra efforts and commitment. Our whole crew has adopted the concept that 'Every day is GAME DAY.'"

And Sullenberger gives his top kudos to his own personal supporter and partner, his wife Heather. He says, "We're both so blessed to be able to do what we love doing - and to do it together. And I can't say enough about how great the GMU campus environment is to work in."

Bordered by residential areas and woodlands, the cohesiveness of the GMU setting has encouraged the neighborhood and GMU to develop an almost family type relationship. Neighbors stroll around the campus; joggers use the track and walkways. Twice each year, a neighborhood picnic is held on the softball field. In return, the neighboring families walk the campus on trash pickup detail four times a year. GMU has initiated an outreach program for the children of families in nearby public housing facilities, providing them with free access to the GMU sports camps.

Community events are staged on campus, too. This year, Relay for Life, a 24-hour fundraiser for breast cancer, used both the track and common grounds around the Stadium Field since field renovation was underway. The Stadium lights burned all night long to accommodate participants and the news media, which helped generate more attention for the charity.

Sullenberger says, "The outreach program is just one example of how great the GMU administration is. They stand behind our program 100 percent and have put their trust in us. My staff and I extend special thanks to Mickey McDade Associate Athletic Director, and Bruce Cooper, Assistant Athletic Director. These two gentlemen have been instrumental in facilitating the renovation projects we've tackled this year. Their support, and that of the entire administration, is what has enabled us to grow and move forward." **ST**

Suz Trusty is director of communications at the STMA and a member of our Editorial Advisory Board. She can be reached at 800-323-3875.

George Mason Stadium Field Maintenance Program

October 2002
Fertilizer: 14-0-25 at the rate of .5 lb. of N per 1,000 square feet
Mowing: four to five times a week at 1inch height of cut

November 2002
Fertilizer: 0-0-50 at the rate of 2 lb. of K per 1,000 square feet
Mowing: once a week at 1inch height of cut
Late November: Blow out irrigation lines and winterize pump houses
Tools and Equipment Refurbishing: Sports Turf Crew inspects, cleans and performs maintenance on all equipment
Snow removal as needed on West campus

December 2002
Hope for insulating blanket of snow
Inspections: Every field is walked each day
Tools and Equipment Refurbishing: Sports Turf Crew inspects, cleans and performs maintenance on all equipment
Snow removal as needed on West campus

January 2003
Inspections: Every field is walked each day
Tools and Equipment Refurbishing: Sports Turf Crew inspects, cleans and performs maintenance on all equipment
Snow removal as needed on West campus

February 2003
Snow removal as needed on West campus

March 2003
Fertilizer: 20-4-10, 40% CRN with 1% Ronstar at the rate of 1.1 lb. of N per 1,000 square feet
Mowing: three to four times a week at 1inch height of cut
Daily Field Maintenance: line field for lacrosse and soccer
Herbicides and insecticides: Applied as needed following standard IPM Procedures (March - October)
Snow removal as needed on West campus

April 2003
Fertilizer: 19-0-19, 60 % Mesa, 3% FE at the rate of .6 lb. of N per 1,000 square feet
Aerification: slice aerate with goal of increasing soil temperature
Mowing: three to four times a week at 1inch height of cut
Daily Field Maintenance: line field for lacrosse and soccer

May 2003
Fertilizer: 16-8-8 at the rate of 1.1 lb. of N per 1,000 square feet
Mowing: three to four times a week at 1inch height of cut
Daily Field Maintenance: line field for lacrosse and soccer

June 2003
Fertilizer: 19-0-19 at the rate of 1 lb. of N per 1,000 square feet
Mowing: four to five times a week at .75 inch height of cut
Aerification: Deep tine aerate using 1-inch hollow tines with penetration to a 7 to 8 inch depth. Mat drag in plugs after topdressing with 45 tons of topdressing sand
Daily Field Maintenance: line field for soccer
Aerification: slice aerate with goal of increasing soil temperature

July 2003
Fertilizer: 19-0-19 at the rate of 1 lb. of N per 1,000 square feet
Mowing: four to five times a week at .75 inch height of cut
Daily Field Maintenance: soccer lines are maintained on field
Extra projects: resodded Stadium Field

August 2003
Fertilizer: 46-0-0 at the rate of 1.75 lb. of N per 1,000 square feet
Mowing: as needed at .75 inch height of cut
Daily Field Maintenance: soccer lines are maintained on field
Extra projects: sprigging of Stadium Field

September 2003
Fertilizer: 14-0-25, 92% Mesa, 1.8% FE at the rate of 1.25 lb. per 1,000 square feet
Mowing: as needed at .75 inch height of cut
Daily Field Maintenance: soccer lines are maintained on field
Extra projects: overseeding of Stadium Field with perennial ryegrass, 2 applications at the rate of 10 lb. per 1,000 square feet

October 2003
Fertilizer: 14-0-25, 92% Mesa, 1.8% FE at the rate of 1.25 lb. per 1,000 square feet
Mowing: as needed at 1-inch height of cut
Daily Field Maintenance: soccer lines are maintained on field