

BY SUZ TRUSTY

ceves Field of American University, Washington DC earned the STMA 2002 Soccer Field of the Year award in the College/University division. Reeves Field has been called "the emerald" of the campus and visiting teams often comment that playing there is like playing on a lush, green carpet.

American University is located in zone 7A in the Mid Atlantic region of the US, which is the transition zone for turfgrasses. The 85-acre campus is basically land-locked in the urban setting, so space is tight. Nick Gammill, CSFM, is sports turf supervisor for the university.

Gammill says, "Reeves Field was originally a native soil field, built in the spring of 1955, the year before the University fielded its first soccer team. In 1994, the field was rebuilt to the current specifications. The 2-1/2-acre playing surface was constructed with an 80 percent sand/20 percent peat root zone mix over a gravel-parched water table. In-ground drainage consists of a system of 15-foot drain lines that feed into a 10-inch collector drain that surrounds the perimeter of the field. This connects into the main drainage system. Surface drainage is achieved with a 1-1/2 percent crown. The field was sodded with Vamont Bermudagrass. It is framed with a six-lane, oblong, rubberized track.

"The irrigation system is composed of nine zones, running widthwise across the field. Each zone has five Hunter I-40 heads with precipitation rates of 25 gallons per minute. The water is supplied by a 2-inch pipe, driven by a 2-1/2-hp booster pump and uses Rain Bird 2-PEB valves. The total irrigation cycle uses 28,800 gallons of water. A Rain Bird Maxicom computerized irrigation program runs the system. The irrigation cycle is based on evapotranspiration (ET) rates and is set to irrigate at night to conserve water use."

Reeves Field is located on the edge of the campus, with one side of the field bordered by large trees that lead into the neighboring residential area. It's not like the traditional big stadium field. Gammill says, "The field conforms to the space well creating a comfortable, relaxing feeling. It's unfenced and, because of the proximity to the residential area, it's unlighted. The aluminum bleachers and retaining walls added during the reconstruction were designed to fit into and enhance the setting. We use perennial plantings to make it even more inviting."

With no fence and no locks, Reeves Field is open to the residential area as well as the students. The track gets almost constant use by the students and the neighbors. While Gammill does post signs noting that the field is for varsity use only, many give way to the temptation to walk out on it just to see what it feels like. It also becomes the site of pick up soccer and football games.

There are other alternatives for such activities. The University has a small intramural field located across campus, about a mile from Reeves Field. It's in easy walking distance from anywhere on campus and also is served by a bus for quick access.

A native soil soccer practice field is located near the game field. Gammill says, "We improved the drainage on the practice field this summer, installing a WaterWick system. A vibratory plow was used to create trenches every two feet across the field surface. These were backfilled with rice gravel and a collector drain was installed to channel the water flow away from the field. This makes the practice field more accessible during wet weather.

"A synthetic surface field is currently under construction to serve as a combination field hockey and lacrosse field. The University opted not to install one of the infill synthetic systems. Since the ball is on the ground most of the time in field hockey, they felt there would be a little drag on the ball that could be avoided by using an earlier generation synthetic surface."

Reeves Field is used 9 months of the year. Though field hockey and lacrosse will move to the synthetic-surfaced field in the spring of 2004, in previous years Reeves Field was the site of that activity. Gammill says, "Lacrosse starts in late February. This past year we had heavy snows throughout the winter and into the early spring. We had to remove about 24 inches of snow from the field during the week before the first lacrosse game. We used a small front-end loader to remove the snow in layers, skimming as much as possible off the surface with each pass and piling it on the sides of the field area. That process took nearly a week. We left a couple inches of snow on the field surface and were fortunate that the weather cooperated enough to allow it to

"Spring was cool and wet, but we were able to work in the full season of play, wrapping up in mid-May. That put 24 games and about 50 practices on Reeves Field during that period."

Once play ends, repair begins. Gammill calls on an outside contractor to strip out the old sod, relevel the surface, and install the new sod. They cut and remove the lacrosse creases, going back to the soccer lines at both goals to cut out the small box all the way out to where it meets the semicircle at the end of the big box. They also cut out and replace the worn area at mid-field.

Because campus space is limited, there's no room for an onsite "turf farm." The replacement sod is the same Vamont bermudagrass as the original. It's grown on the native sandy soil of the area's coastal plains. The growing fields are a natural equivalent to the sand-based field, so there are no layering problems with sodding. Gammill says, "Generally we need no resprigging in other areas. This past year, the weather was so cool the bermudagrass showed little activity, so we delayed the repairs until early June. Conditions remained unseasonably cool, with little opportunity for the turf to regenerate itself. We had to come in during early August and replace the original sod in the area between the previously resodded sections of the goal mouth and the center of the field."

During the late spring and summer Reeves Field becomes the site of several professional soccer exhibition games and international soccer practices as teams prepare for the World Cup games. The Blackburn Rovers, an English soccer team, used the field for nearly a week in July. The Barcelona soccer team practiced there for 2 days at the end of July just before their game with AC Milan at RFK Stadium. The US women's team also used the field to practice in September.

Other events also take the field in the summer and the University is considering





moving graduation from the auditorium to the field in May of 2004. There's an annual cystic fibrosis fundraiser in June where participants hit golf balls on the field. There are men and women's alumni events, many with games and some also with lunch on the field. A gazebo adjacent to the field serves as hub for the food service for these alumni events and as a post-game snack area for the women's soccer team.

Men and women's soccer activity starts in mid-August. This year, that point marked the first good growing weather for the bermudagrass. Typical summer weather brings temperatures in the 90-degree range with humidity also in the 90s and stretches



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GAMMILL IS IN CHARGE OF A **ZONE THAT ENCOMPASSES** THE FOUR **ATHLETIC** FIELDS AND 20 OTHER ACRES.

of no rain. There were 30 straight days with no rain in 2002. During the summer of 2003, daytime temperatures ranged between 64 and 80 degrees with rain almost every other day. By mid-August rainfall was 10 inches above the annual average of 40 inches.

Both soccer teams will hold some scrimmages and practices on Reeves Field during August, for an average total of 30 sessions during that month. The regular season starts at the end of August. The practice field is used by both teams to spread the activity, but from mid-August until the end of November, some team is on Reeves Field everyday. Both soccer teams will practice there at

least one day before a game and all home games are played there. It will accommodate approximately 110 games and practices during a "typical" fall soccer season with little visible wear during that period.

Gammill paints the logos off the field as another field preservation practice and because the soccer team says when they run across the logo they feel a different transition for their feet. They're placed on the hillside so they're easy to see for the spectators and for those strolling through the campus.

Gammill says, "Goal mouths and the center of the field are the critical maintenance issues. We've resolved many of the problems by using semi-permanent World Cup goals that are set up only during a game. Drills are not held in the goal areas or at the center of the field. We use turf blankets to cover the goalmouths from the small box out to semicircle whenever the field isn't in use. This speeds turf recovery and also helps discourage non-scheduled on-field activity.

"In September, we'll seize a window with fewer games, or find a point where the team is off the field for a couple days, to make repairs. We'll core aerate, drag the cores back in, and then overseed, broadcasting 12 pounds of seed per thousand square feet. In the past, we've used a blend of perennial ryegrasses for this. But this year's weather gave us a lot of problems transitioning out. Generally, we're able to push it out by lowering the mowing height and cutting the irrigation. The heat and drought combine to knock it out. With the cool temperatures and every other day rains, it just kept going. We had a little rve still showing up in late August. This fall we'll switch to one of the new intermediate ryegrasses, actually an annual that looks and performs like a perennial. Last year, we weren't able to overseed until the first week of October and ran into Pythium problems with the ryegrass. This year, we'll come in a little earlier, when it's hotter, to avoid that. We'll continue to overseed every other week during the playing season, using 3 to 4 pounds of ryegrass per thousand square feet at each application."

When the season ends at the end of November, Gammill moves with aggressive repairs and then winterizes the field for its one rest period of the year. Heavy potassium applications keep the rhizomes and stolons stand up to the weather. Turf blankets covering the goalmouths and mid-field, help germinate any seed and discourage onfield activity. He'll overseed with more ryegrass in the spring if necessary, always aware that nearly 1-1/2 months of heavy field use will take place prior to that first spring mowing around April 10.

With the urban campus, heavy field use is the main problem. Gammill says, "We've tackled this by having regular meetings with our athletic directors and coaches regarding game scheduling, practices, and maintenance activities. The most important aspect of the job is developing good working relationships so we understand their needs and goals and they understand what we're trying to do. The key to our success has been understanding each department's needs and recognizing that we all want safe, playable fields and the best possible conditions for the athletes. Working in conjunction with the field users has emphasized the importance of real team work and instilled confidence and understanding between the athletic teams and the grounds maintenance crew.

Gammill has always loved the outdoors and knew his career choice would be headed there. Early on, he read the Maryland agricultural statistics and discovered the

REEVES FIELD MAINTENANCE PROGRAM

tests taken twice each year.

January-February

Turf blankets cover the goalmouths and center when the field is not in use for lacrosse

Apply 100 % organic fertilizer at the rate of 3/4 pound of N per thousand square feet (a dark granular product is selected to draw some heat from the sun)

April

Apply fertilizer balanced with a 1-1-1 ratio (10-10-10 or 17-17-17) at the rate of 1/2 pound of N per thousand square feet

Apply preemergent for goosegrass control

May

Core aerate, drag in cores Apply urea at the rate of 3/4 pound of N per thousand square

Cut out and replace sod in goalmouths and at mid-field

Topdress with 80/20 sand peat

Apply growth regulator to control annual bluegrass and ease maintenance during renovation

June

Apply fertilizer balanced with a 1-1-1 ratio at the rate of 3/4 pound of N per thousand square feet

Core aerate, drag in cores Spot apply postemergent for smooth crabgrass and yellow nutsedge if needed following standard IPM practices

Apply urea at the rate of 3/4 pound of N per thousand square feet making 3 applications 10 days

Apply calcium supplement/soil surfactant

Spot apply postemergent for smooth crabgrass and yellow nutsedge if needed following standard IPM practices

August

Apply urea at the rate of 1/2 pound of N per thousand square feet making applications every 5 days - but restricting N prior to practices or games if needed to prevent overly lush turf

Apply potassium sulfate at the rate of 1/2 pound per thousand

square feet 2 days prior to games

September

Apply slow release, balanced fertilizer with 1-0-1 ratio at the rate of 1/2 pound of N per thousand square feet making applications every two weeks

Apply potassium sulfate at the rate of 1/2 pound per thousand square feet weekly

Core aerate, drag in cores Overseed with perennial or intermediate ryegrass at rate of 12 pounds per thousand square feet

Topdress with 80/20-sand peat mix at 1/4-inch rate

Apply balanced fertilizer at the rate of 1 pound of P per thousand square feet

October

Apply 1/2 pound of K per thousand square feet weekly

Apply balanced starter fertilizer at the rate of 1/2 pound of P per thousand square feet

Overseed with perennial or intermediate ryegrass at rate of 3 pounds per thousand square feet each week

November

Apply 1/2 pound of K per thousand square feet every two weeks

Apply balanced starter fertilizer at the rate of 1/2 pound of P per thousand square feet

Overseed with perennial or intermediate ryegrass at rate of 4 pounds per thousand square feet each week

Cover goalmouths and center field with turf blankets at end of playing season

Mowing

1 inch height of cut in spring Drop gradually to 3/4-inch height of cut at bermudagrass green-up in

Drop gradually to 5/8-inch height of cut to transition out perennial or intermediate ryegrass

Raise gradually to 7/8-inch height of cut during summer

Raise gradually to 1-1/8 inch height of cut after fall overseeding

Insect Control

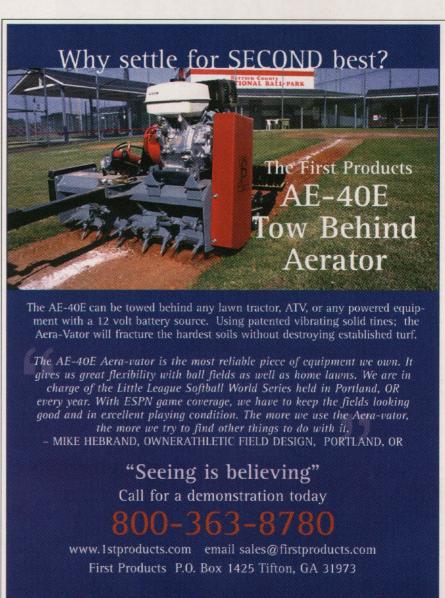
Monitor for insects; apply controls as needed following standard IPM practices

state's number one ag crop was turfgrass, so he figured he couldn't miss by going into turfgrass management. He earned a 2-year turfgrass degree from the University of Maryland. After stints in golf course management and production horticulture, he discovered his true niche first at Sidwell Friends School and now at American University. He also volunteers in taking care of the Washington, DC, street trees. The combination of turf and ornamental plant responsibilities allows him to use the full scope of his horticultural background.

Gammill says, "One of the goals of American University is to become one of the most distinctive urban campuses in the US. We want to be known for more than the historic buildings of our DC location. The turf areas, landscaping, and flower beds are an important part of achieving this goal. We have a great mass of flowers and unusual plantings. We try to use horticulture to attract people. One of the big reasons that students decide on a college is that they like the look of the campus, so we time the blooming period of our massive plantings of tulips to coincide with the students' spring campus visits."

Gammill says, "Reeves Field is unique because in 1963 President John F. Kennedy gave the Commencement address in which he stated, 'I have therefore chosen this time and this place to declare the most important topic on earth: World Peace. The United States will never start a war . . . this generation of Americans has already had enough of war and hate and oppression.' A monument and plaque now immortalize this spot. The monument is flanked by the American University flag and our nation's flag. When you read these words, overlooking the field, and you view the bright perennial flowers and ornamental grasses that gently encroach upon the bleachers, the expanse of green before you where young men and women emphasize their effectiveness on the playing field, you know this is really consecrated ground."

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