Harbin Fi

by Bob Tracinski

1998 STMA

College/University

Soccer Field of the

Year

arbin Field, STMA's 1998 College/University Soccer Field of the Year, sits at the center of Georgetown University's urban campus in Washington, DC. The University, often referred to as "The Hilltop," is essentially landlocked. Development has gradually filled the open areas on campus, and space is a major issue.

Currently, seven acres of natural-turf athletic fields cluster in the lowest spot on campus. Sports Turf Manager Bob Shumate explains, "Packed clay and over 150 years' accumulation of fill soil and construction debris make up the subgrade of the athletic fields and parking lots. A minimal layer of top soil, six inches or less, forms the workable profile of Harbin

"The field itself is 100,000 square feet, with 30,000 square feet of additional maintained turf inside the fenced enclosure. There is no subsurface drainage, nor does the field have a crown. A swale around two sides of the field intercepts runoff from higher ground, but the lack of both surface and internal drainage creates problems in both the maintenance and use of the field.

"Irrigation is supplied through nine zones utilizing Toro 640 heads linked to a Rainbird ESP-MC controller."

Maintenance "crew"

Shumate started at the University in April 1995, and is essentially the one-man crew for the natural-turfgrass athletic fields. He works within the University's landscape department, reporting directly to the superintendent.

Other departments do pitch in here and there. The athletic department support staff lines the fields, and the baseball coaching staff cares for the infield skinned areas.

In summer, a landscape department



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crew member helps Shumate three days a week. The department also provides additional help for special projects. Shumate generally gets a summer intern, but this year's worker couldn't handle the job and only lasted two days.

Field use

Because space is such a premium, softball must share its field with other sports. Men's lacrosse hits Harbin Field when the snow clears in mid- to late February. Games begin in mid-March, and the field hosts approximately six home games before the end of April. The team also practices on the field every day, weather permitting.

In mid-August, men's and women's soccer converge on Harbin Field. Both teams use the field for games and practices, and play can stretch into November if either team qualifies for post-season play.

Shumate says, "The 17 games within this period are no problem. It's the daily, two-hour practices by one or both teams that create the major wear."

Maintenance program

Shumate's field rejuvenation window follows the last men's varsity lacrosse practice, which occurred just prior to Memorial Day this year. He has until the second week of August to get his fields in shape.

During this window, he aerates heavily, transitions out the overseeded turfgrasses, promotes bermudagrass, fertilizes, and spot topdresses.

Shumate explains, "Agronomically, the University is located in the transition zone, which makes growing quality turfgrass problematic. Vamont bermudagrass was installed on Harbin Field in 1984 and continues to be the turf of choice. Though it

performs best in the hot summer months while the field gets little use, it forms a solid cushion for play, and a base for overseeding during the rest of the year. The Vamont also holds up well during our winters, which can range from mild to severe."

During the prime playing season, Shumate has traditionally overseeded with a blend of perennial ryegrasses to provide green cover for the bermudagrass base. In fall 1998, he used a mix of 85 percent perennial ryegrasses and 15 percent poa trivialis by weight. He notes, "Because the poa seed is so much smaller, the mix actually is almost 50/50 by seed count.

"I tried the poa mix because so many of the new perennial ryegrasses are so aggressive and heat and drought tolerant, it's been difficult to get them to transition out in the spring. I liked the results.

"The turf was uniform in color, texture, and growth pattern, and held up well during the playing season. The transition out was smooth - not all at once, but gradual, yet steady. The poa blows out in hot weather - almost like poa annua, but without the seed heads. I'll use it again this year."

In spring 1998, Shumate reseeded the worn areas in front of the lacrosse goals with bermudagrass rather than resodding. He says, "By that late in the season there are bare sections, and the bermudagrass that's left has taken quite a beating while dormant, so it's pretty weak.

"The seed took well where the turf was

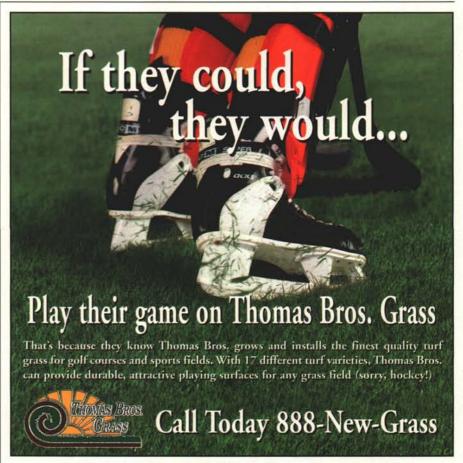


Courtesy: Georgetown University

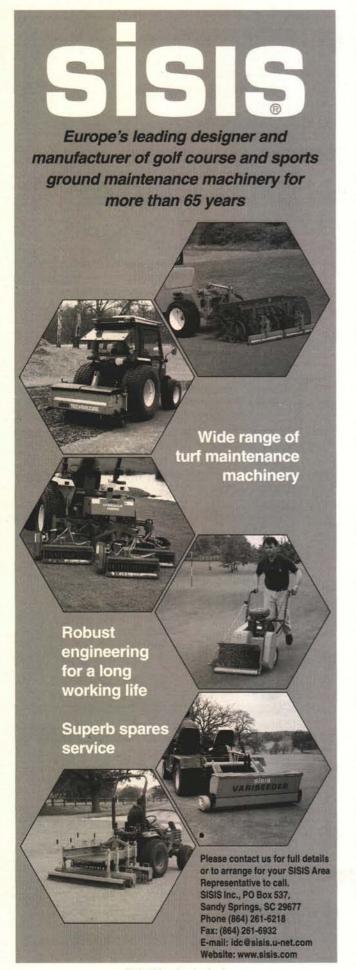
worn away, and there was good seed to soil contact. I was disappointed in the results of the overseeding over the existing turf. It may be the seed was so fine — almost dust-like — that it was trapped by the existing turf, rather than filtering through it to the soil during the broadcasting procedure. We also may be a little too far north to allow enough grow-in time before field use begins again."

Shumate skipped the regular pre-emergent application because of the seeding. He had to fight goosegrass and crabgrass with less-effective and more time-consuming post-emergent controls. He explains, "This year I put down pre-emergent control in the spring, and had Southern Turf come in to sprig bermudagrass into all three of the fields. Because of budget constraints, I used sprigging as an effective, lower-cost alternative to sodding.

"The fields were sprigged on June 15, and in such great shape at the end of July, they'd have been playable. For the first seven to 10 days, I ran the irrigation system three times a day to keep



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STMA President Steve Guise (left) presents Sports Turf Manager Bob Shumate (right) the Field of the Year award. Courtesy: STMA

the sprigs moist until rooting could occur. Then I backed off the irrigation gradually until rooting was solid enough to go to the regular nightly irrigation schedule."

In 1998, Shumate began working with a soils consultant. Rather than simply adjusting the pH, he attempted to balance the soil nutrients in the proper ratios for optimal growing conditions based on soil testing.

He has used both calcite and dolomitic lime to adjust the calcium and magnesium levels in the soil. He has also experimented with organic fertilizers on his sand-based fields. Based on continuing results and cost factors, Shumate may use them on Harbin Field in the future.

Future

Already challenged by field use demands, the campus athletic surfaces face further downsizing. Shumate explains, "We're soon to lose a third of our natural-turfgrass fields. That leaves just two fields for all varsity games and practices, intramural activities, and anything else that might need outdoor, open space.

"We'll have a semi-normal 1999 season during the preliminary stages of a massive building project slated to begin late this fall. During the construction phase, either the soccer or baseball

field will become the parking lot.

"The exact land-use configuration is still under consideration. Harbin Field may disappear. Then we'd need to reconfigure the baseball field for soccer and lacrosse. Or, it's conceivable we'd lose only one-third of Harbin Field to construction, and convert part of the adjacent baseball field to make up the difference.

"None of it will be easy. Since the baseball field is between 10 and 12 feet higher than Harbin Field, some excavation and engineering will be involved no matter which option is chosen."

Shumate continues, "It's tough to keep the fields in shape now, and it may be impossible to maintain year-round grass when we lose that space.

"If our daily usage keeps going up, in the next four or five years, we may need to convert to all artificial surfaces. It's not my preference, but may become a reality of life in this landlocked, urban setting."

Shumate's immediate goal is to explore all options to keep those natural-turfgrass fields not only functioning, but thriving. He's already proven himself a master of transitions.

Bob Tracinski is business communications manager for John Deere in Raleigh, NC. He is public relations co-chair for the National STMA.