

BY CHRIS HARRISON

Being nationally ranked in football is nothing new for the Ohio State Buckeyes. And the field they played on this year justifies national ranking, too. With a brain trust made up of Ohio State alums from the grounds superintendent to the sports turf researchers to the vendors, the Buckeyes got the best possible field they could find.

In summer 2003, Ohio State upgraded its field to a new Prescription Athletic Turf System and TS-II Synthetically Stabilized Turf. The new field is a mixture of perennial ryegrass grown through a synthetic grid and stabilized by a sand base.

"This has worked a lot better than we anticipated. The field has held up great," says Ohio State Athletic Grounds Superintendent Brian Gimbel.

The Buckeyes already were familiar with stabilized turf. For three years they had been using a stabilized Kentucky bluegrass field. "It was working well but there were a lot of challenges," Gimbel says. For one thing, they were watching plots put out by Dr. John Street and Pam Sherratt, extension sports turf specialists at Ohio State. The bluegrass was having problems that the ryegrass plots were not experiencing.

The question of whether or not to change turf was made by the fans after the Michigan game a year ago. Excited fans swarmed onto the field and pulled up great



Installing the field. Photo by Pam Sherratt

with the stadium crew (Don Patko, superintendent of athletic facilities; Gimbel; and athletic grounds specialists Brian Blount and Brent Packer) to make plans for the week ahead.

The rye grows more quickly and is sturdier than the Kentucky bluegrass that used to cover the field. Joe Motz of The Motz Group, Cincinnati (www.themotzgroup.com), installed the new system. Keeping it in the family, Motz is also an Ohio State graduate, with a 1977 degree in Horticulture.

The old system, also installed by The Motz Group, was replaced with the TS-II

OSU's stabilized turf a Buckeye exclusive

chunks of turf, right through the stabilizer. They tore through the thatch and the grass. Gimbel could understand their excitement; he earned his BS in agronomy at Ohio State 10 years ago and now is in charge of all Ohio State outdoor varsity sport facilities, including the field inside the Horseshoe.

The biggest change was the decision to install a seeded ryegrass field, instead of bluegrass. One of the prime concerns was keeping moisture off the surface.

"We grew the field in from seed," Gimbel continues. The ryegrass is a mixture of six cultivars from three breeding groups and suppliers. One of the turf's main features is high resistance to gray leaf spot and pythium.

On synthetically stabilized turf, fertilization, mowing, and irrigation are about the same as any other sand-based field, says Sherratt. She recommends careful monitoring of the fertility levels through soil and tissue testing etc. "Because we used perennial ryegrass this year, we did have a preventative fungicide program developed with our pathologist, Dr. Mike Boehm," she adds.

The three main management differences are verticutting (more verticutting to keep biomass accumulation down); tining (they have done none yet as they know from experience that it ruins the integrity of the stabilizer); and little-or-no topdressing, which would also create a biomass build up and move the stabilizer away from the surface.

Since they grew the field in from seed, they were able to lay the stabilizer in long, full strips. They run about 15 feet wide by 40 yards long. "We were able to lay enormous sections flat and then sow them together," Gimbel says. Then they put the sand on top.

Keeping organic material off the field is a prime concern of Gimbel's. During the season the crew mows every day at fifteen-sixteenths to one-inch height. In the off-season, they may mow every other day.

Topdressing strategy is another ticklish area. "I know one field manager who does topdress his field but plans to take all live matter off with the Koro and re-seed onto the stabilizer surface," Sherratt says. "That might be an option for us, but we literally play it week-to-week." In fact, Street and Sherratt meet once a week during the season

product, a combination of real grass and a synthetic base to hold it in place. It combines sand-filled, fibrillated synthetic tufts and a backing of biodegradable fibers and plastic mesh. The unique matrix shelters the vegetative parts of the grass plant that are essential for vigorous growth and rapid recuperation.

"I personally feel that sand-based fields (those with over 90% sand) have to have some kind of synthetic reinforcement, whether it be Motz TS-II, GrassMaster, Loksand, or Fibresand, etc.," Sherratt says. She adds that these systems usually are too expensive for most high schools but should not be a problem for high-profile facilities.

A plastic grass field costs \$800,000; if a stadium manager replaces the stabilized natural grass field every three years, that would still give 15 years for the same money.

Ohio State seeded the field during the first week of May and felt that it was playable several weeks after seeding date. "Note we used 100% perennial ryegrass," Sherratt says. "Establishing soil sod is a whole different ball game. If it rains a lot (like it did last year), then the imported sod layer remains saturated for long periods of time and it's difficult to core until it is drier and knitted down a bit."

Research shows that the amount of time it takes to root depends upon the turf thickness, with thicker cut sod, like that used in sports, taking a lot longer than washed or regular cut.

Gimbel was pleasantly surprised that the system required less overseeding than he expected. "I thought we'd be sending out tons of rye seed through the year," he says. "But the stabilizer held the crown of the plant intact."

In 2003, they had no serious divots all season long. There was some leaf tearing from cleats, but Gimbel points out that is exactly what they want to happen. The player's foot is released immediately and the leaf, not the whole plant, gives. "The crown shoots out a new leaf and the divots heal back quickly," Gimbel says.

Ohio State did overseed the field by the fourth game. "It was thinning a bit," Gimbel recalls. But overall, he is quite happy with the new field. **ST**

Chris Harrison, like everyone else involved in this article, is a graduate of The Ohio State University.