

## LANDSCAPE PROFILE

### GAME from page 50

quarry out there," he says of the ground the field is built on.

The headaches didn't stop there. "The field when it was originally built in 1927 had an 18 inch drop-off, which nobody really knew," he explains. "When you look at the track you can see we had to move the field because it needed to be perfectly flat. One end is down and the other end is up."

### Laying it down

The PAT system is constructed with a flat subgrade and plastic barrier under a system of perforated pipes. The pipes set below a special mixture of sand, peat and nutrients. Pumps connected to the pipe system can

draw off excess surface water in minutes.

When weather cleared in the spring of 1986, the PAT people began installing the system. "We have our graduation out there (on the field)," Volkmer recalls. "By graduation, they had just put in all the sand.

"If you can imagine everybody sitting in the stadium; I mean everybody looked at me like 'what did they do to the football field?' If they could have had my ass, they would have had it. Everybody goes to the games. We've got 5,000 to 8,000 for every football game. It's like the only game in town."

Volkmer adds the pumps are only used in heavy downpours on

or near game days. This occurred twice during the 1986 season. "The first game we had just a huge rainstorm. Huge. We had to hold up the game until 8:30."

"You couldn't see from one end of the field to the other," adds field maintenance manager Chuck Andrus. His job has been relatively easy. The PAT system worked so well, the field looked as good last November, after 11 football games, as it did before the season started.

"The footing was never bad (during the first game)," Volkmer notes. "That's the key thing: the footing and the safety of the ball players."

And that's no small change either. **LM**

# RESOURCEFUL RENOVATION

Even when budgets are low, school systems can renovate athletic fields. Here's how a Philadelphia area school system tackled the job.

by Heide Aungst, managing editor

**B**are spots speckle the field. Stressed turf clumps fight to hang onto life. Twelve gym classes, a soccer league and a junior high football team trample and tear up what's left. A kid cries after a fall on the rock-hard surface. The field cries for renovation. The field manager cries for more money. The school board cries for the lack of money.

Everybody loses.

Money may be hard to come by for some school systems, but excuses are abundant. Field managers jump at the "we-can'ts" before fully exploring the "how-tos."

Every industry has tricks of the trade and corners to cut. It's possible in athletic field management, too. Just ask the Springfield, Pa. County School District. They've used almost every trick in the book, and some they dreamed up themselves, to renovate dwindling fields on a dwindling budget.

"About 35 percent of the ground on one field was bare," says Bruce Thomas, maintenance supervisor for the Philadelphia area school district. "The school was complaining about the bare ground



Bruce Thomas, Andy McNitt and Bob Scanzaroli look at the deep root system of the turf on the newly renovated E.T. Richardson field.

and the field was lower."

### Personnel

Thomas took the first step by hiring Bob Scanzaroli as grounds manager in mid-August. The school system couldn't afford to create such a position, but when the grounds

manager left for another job, Thomas made sure the replacement had the necessary turf knowledge. Scanzaroli is an '84 graduate of Penn State University.

Together Thomas and Scanzaroli consulted with the Philadelphia County extension agent, Andy

## LANDSCAPE PROFILE

McNitt. States differ on their approach to extension agents. In western Pennsylvania, McNitt explains, agents sometimes cross county lines depending on their specialty.

Besides seeking McNitt's advice, Thomas looked at other fields in the area that had been renovated. He consulted with managers at local Swarthmore College, where he could see results.

### Equipment

The next step was to take an inventory of the equipment the school system already had, and that which would be needed. The pair resurrected a more than 20-year-old reel mower from the grave. They got the cooperation of the local parks and golf course in sharpening the reels for free.

They did decide to replace a 30-year-old tractor with a new 40 hp version. "It was a \$25,000 expenditure from the replacement equipment budget," says Thomas. "Some school districts choose to lease them. We feel it's worth our while to purchase it. In the winter we use it to push snow."

They bought a new rotovator. The two new purchases have since been lent free of charge to other "poor" school districts which can't afford to purchase their own equipment.

### Materials

The third step was to decide which fields should be renovated and what seed and other materials would be used to do it. Thomas chose two fields to start with. A third, the varsity football field, is currently undergoing similar renovation.

The first field they chose to renovate was at E.T. Richardson Junior High School. The field is used by soccer teams, lacross, softball and gym classes. The field isn't irrigated.

"We chose rye because it enabled us to put the field in use by spring," Thomas says.

The key to the field renovations is an organic material called Earthlife. The material is made from the city of Philadelphia's sewage sludge, similar to Milorganite. The difference is that Earthlife is mixed with wood chips.

Scanzaroli renovated the field—practically by himself in five days. "That was as early as we could get the field," Thomas says. "We also got



When goal areas wear away, field renovation is necessary.

a lot of support from the school district and community.

"The first day and a half, I aerated the field more than 20 times," Scanzaroli explains. He aerated with a Westpoint aerater then dragged the field to break up the cores.

By the third day, he dumped five trailers (250 yards) of Earthlife on the field and dragged it. The next day Scanzaroli aerated and fertilized. "That allows the material to drop into the holes," he explains.

The final step was to fill in the holes with Champion perennial ryegrass mix of 49 percent SR4100, 24 $\frac{1}{2}$  percent SR 4000 and 24 $\frac{1}{2}$  percent Tara. They did this using a Jacobsen verticut seeder.

The entire project cost only \$4,300: \$2,900 for Earthlife; \$450 for seed; \$300 for fertilizer; and \$650 for labor.

### Multipurpose field

The next field, Halderman, is a multipurpose field used for varsity soccer, varsity lacross and community softball.

Because of the intense use, the school district decided to spend more money on the renovation to provide a good sand base. "But it

won't need to be renovated again for 10 or 12 years," says Thomas.

"Sand cuts down on compaction, but the particles have to be uniform or it will compact more," McNitt says. "You have to use more than 50 percent sand or it will turn into cement."

"Because it's an all-weather playing field the sand aids in drainage," adds Thomas.

During the renovation of this field, Scanzaroli rotovated the field three times. Then brought in the Earthlife and sand and rotovated again another three times. Then Scanzaroli graded the field and seeded with a special Springfield mix. The mix included Adelphi, Merit, Eclipse and Glade Kentucky bluegrass and Premier, Jazz and Fiesta perennial rye.

The field used 500 cubic yards of one millimeter sand at \$13,000; 300 lbs. of Earthlife at \$2,300 and \$690 of Springfield seed mix.

Scanzaroli and two other workers maintain a total of 83 acres of athletic fields on an annual budget of \$22,000. They plan more low budget renovations in the future.

After all, they'll admit, where there's a will, there's a way. **LM**