## Contractor Provides To Worn

Years of heavy, uncontrolled use were taking their toll on New England's limited number of athletic fields.



Harvard University's stadium field dressed up for soccer.

evin McCarthy is a small businessman and he wants to stay that way. But lately he has had more work than he can handle.

McCarthy started an athletic field renovation company in 1977 in Peabody, MA, one year after completing a degree in environmental design. He could have signed on with a landscape architecture firm or landed a design job with a landscape installation contractor, but the independent thinker shunned conventional career choices. He sensed there were other opportunities and other challenges in landscaping.

Turf and sports were in his blood. As a teenager he worked summers on the crew at Colonial Country Club in Lynnfield, MA, and continued his turf education at Essex Agricultural & Technical Institute. But then McCarthy's mind began to stray to other aspects of turf management. He wasn't sure he wanted to be a golf course superintendent, so he transferred to the University of Massachusetts to explore other avenues available to him.

Upon graduation, he decided to help a friend with his custom spraying business for golf courses. His friend had purchased the large spray equipment many municipal and small daily fee courses did not own.

By taking over fertilization, weed control, insect control and disease control, they provided better results and saved the courses the expense of buying the equipment and training someone to apply pesticides.

"We were the only ones in the area doing custom golf course spraying," McCarthy reflects. "The concept was interesting and very sound. However, after a year of trying to convince public works directors and



Kevin McCarthy

municipal golf course superintendents who were very set in their ways to try something new, I decided to take another direction."

One thing stuck in his mind from his previous experience. He knew towns didn't have the labor, the equipment or the expertise to do many types of turf work. Public works directors who were often in charge of parks, muncipal golf courses and school athletic fields had difficulty justifying the expense of large equipment to city budget directors. Voters were resisting tax increases even though the pressure on public athletic fields was increasing each year. There were few places where new fields could be built. Women's sports and youth leagues were expanding rapidly. The public works director was in a jam.

Since McCarthy knew most of the public works directors within 30 miles of Peabody from his custom spraying job, he thought he might have better luck by expanding the services he could provide and concentrating on athletic fields. Anybody can mow grass, he thought. As long as the soil structure and drainage hold up, simple fertilization and mowing will keep a field green. But years of heavy, uncontrolled use were taking their toll on New England's limited number of athletic fields.

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## Affordable Solution out Fields



A contractor could provide better results and save towns the expense of buying equipment and training applicators.

Worn-out football stadium field before renovation.

Undaunted by failure, McCarthy kept juggling ideas in his mind until the right combination was revealed. Rather than giving up, he created his own business called Greenway and started to develop custom programs to help towns and private institutions keep their fields from collapsing under heavy use.

About the same time, parents started to call local newspapers when their children got injured on area fields. "The local press started investigating field conditions and were on constant watch for any injuries that were field-related," McCarthy says. The towns had to do something without raising taxes. Buying equipment and hiring experienced turf managers was something they wanted to avoid if possible.

To prove his programs worked at a fraction of the cost of buying equipment and hiring personnel, McCarthy's pitch was to sell them on using the program for one field. He could renovate a football or soccer field at less than a fourth of the cost of reconstruction. His price was also below the \$4,000 mark set by the state for bids. The town did not have to purchase a single piece of equipment or add staff.

Convinced he was on the right track, McCarthy purchased an aerifier, large broadcast spreader, topdresser, boom sprayer, tractor, slicing seeder, utility vehicle, rototiller and landscape rake. If other equipment is required, he rents it for the job. All this equipment saves his customers thousands of dollars.

"I wanted an equipment-based operation for a reason," he states. "Labor is just as expensive for me as it is for the cities, at least \$8 per hour. I wanted to hire someone to work throughout the year, someone who would become familiar with conditions at each job site. It's hard to find good people here willing to work at \$4 per hour, so you're forced to replace as much hand work as possible with machinery." All work is performed by McCarthy, assistant John Carey or two part-time crewmen.

Each program is custom-tailored to fit the particular field. Once a field is renovated, Greenway follows up with a management program to maintain drainage and soil condition levels to where the field can withstand the beating of heavy sports use.

"We try to talk with everybody involved with the field before making our recommendations," reveals McCarthy. Each person's input helps identify the problems which must be worked out to win their support. "I've found that if specifications aren't tight," he

advises, "the town loses out. It's the combination of specific work that makes the renovation effective. Just to say cultivate, grade, fertilize and seed in a proposal will open up the job to those who really aren't familiar with athletic field considerations."

Renovation begins with a site evaluation and soil test. After soil test results are back from the lab, the design team goes to work. McCarthy, or an engineer, does drawings for each field to show dimensions and elevations. By planning each job and relying heavily on equipment, the company can completely renovate a field in one day.

The first step is "quaking" the top four inches of soil by making two passes over the field with a rototiller with vertical blades. This restores surface drainage and conditions the soil. "One pound per 1,000 square feet of 10-10-10 fertilizer and 1,000 pounds of ground limestone are mixed into the topsoil because we are seeing definite effects of acid rain on area fields," adds McCarthy.

The soil is then power-raked and graded by a subcontractor to include a crown for proper drainage. A Brillion seeder is used to sow 350 pounds of a blend of three perennial ryegrasses. A starter fertilizer with preemergence broadleaf herbicide (siduron) is

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applied with the broadcast spreader after the field is dragged. If the field does not have an irrigation system, water cannons are

brought in for six weeks.

Six weeks and \$3,300 later, the customer has a top-notch field. All he has to do is mow properly. And that's all he'll ever have to do if he takes Greenway up on its annual maintenance program. For as little as \$1,800 per field, the company will aerify the field to fight off compaction and take care of all fertilization and weed control. It topdresses the field with medium-size sand to keep it smooth and resilient and slice-seeds once in the spring and again in the fall. McCarthy tests the soil each year to check pH and nutrient levels and periodically checks the field for any disease or insect problems that might occur.

If there is a problem with the field, McCarthy works with the facility turf manager to correct it. "Once the turf manager on site sees his new field, he becomes more receptive to advice," explains McCarthy, A maintenance guideline is provided following renovation which covers mowing, irrigation and suggestions for controlling field use.

He recommends that soccer and football fields be mowed at least once a week between two and three inches. He stresses the importance of keeping blades sharp and suggests the cutting height be raised during summer months. During regular visits, McCarthy will check to see if the field is performing as it should and goes over any problems with the turf manager.

"I also try to keep in touch with athletic directors and coaches where possible to get their opinions on the fields," he adds. "It's important to get feedback from everyone who has a say in field management."

A fun part of McCarthy's job is keeping track of the teams playing on his fields. "Salem State College was Division 3 soccer champion this past season," boasts McCarthy, "We pay special attention to keeping their field smooth."

Baseball fields are also an important part



Sand topdressing is part of Greenway's annual maintenance program.

of Greenway's service. As a whole, McCarthy says, baseball fields get less abuse. There are key wear areas, such as where the outfielders stand, around the dugouts and between home plate and the pitcher's mound. These areas need to be periodically topdressed and overseeded to keep them from wearing thin.

Maintaining the skinned areas is the real art of baseball field management, he says. Edging the base paths with a sod cutter, adding new clay mix and removing any clay which has built up on the turf adjacent to the skinnned areas brings an average baseball field up to professional standards. The pitcher's mound is rebuilt to specifications and McCarthy shows the field manager how to keep it that way.

Greenway has the equipment to haul in new basepath mix, spread it, cut the edges and pack it in half a day. This service comes in handy when a college team makes the finals and becomes host for a tournament

"As a team improves it wants a better field," McCarthy points out. The Manning Bowl in Lynn, MA, called Greenway in late May. The problem was they wanted to play their first football game in early August. McCarthy couldn't schedule the job before mid-June due to other work. To speed up establishment of the field, McCarthy soaked the ryegrass seed in 55-gallon drums of water for two days to pregerminate it. The water was changed every few hours. When the seedbed was ready, the seed was mixed with Milorganite and Turface and spread over the field. The turf was thick and healthy when the players jogged onto the field for their first game. McCarthy plans to sliceseed the field with Kentucky bluegrass next year.

Drainage and irrigation installation are subcontracted out by Greenway. But McCarthy is looking closely at slit-trenching, a process where narrow trenches are cut across the field and backfilled with sand. "The machine that does this is one of the few pieces of equipment made specifically for sports turf," he states. "Up to now we have had to adapt golf equipment and landscape equipment to fit our needs. That's starting to change."

He is also checking into fabric-wrapped drainage structures which are inserted into narrow, shallow trenches. "This type of drainage system requires much less handling of soil and fits our type of service well," he believes. By keeping on the lookout for new products that solve the main sports turf problems, Greenway can be relied upon by its customers to have the answers, the equipment and the expertise to keep their fields in shape.

"We've been travelling up to 60 miles each way to renovate fields and set up maintenance programs," McCarthy says with a sigh. "We could go further, but I'm afraid it would force us to grow more than I'd like. I like having a small business and dealing with people on that basis. It's time for others with sports turf knowledge to invest in the necessary equipment and go out on their own. The need is so great and the budgets are so tight, it's really one of the best ways to improve the worn-out, compacted fields in this country." 3



A rototiller with vertical blades breaks up the compacted topsoil.