Meeting Coaches’ Needs
Is the Game at Penn State

Beaver Stadium is packed for the annual Homecoming Game. The top-ranked Nittany Lions play on one of the few natural fields in their conference.

Auto pioneer Henry Ford once decreed that his customers could have their cars in any color they wanted—as long as it was black. That may have kept prices down, but Ford would have flopped if he’d been in charge of turf maintenance at Pennsylvania State University—better known, of course, as Penn State—in University Park, Pa. Every coach there wants the grass on his or her playing field to be a different length from all the others, it seems, and Bob Hudzik accommodates every last one of them. To him it’s all in the game.

At a surprisingly young 30 years of age, he looks as though he could still be hurrying across that same campus from one agronomy class to another, as he did a scant decade ago. In those days, however, he hardly noticed the turf. Certainly he had no idea that one day he would be responsible for every blade of grass around him—plus the field at Beaver Stadium—plus the University’s two golf courses.

Hudzik’s rapid rise in turfdom at Penn State, a school justly famous for its turf expertise, began with a job on the campus grounds staff. A real grass-roots beginning, if you will. When the head of campus maintenance retired, Hudzik was hired to replace him.

Campus and athletic field maintenance were separate at the time. Then the head of athletic field maintenance also retired, and the departments were combined under Hudzik. The next thing he knew, the golf course superintendent had also left and that job was added to his double duties. Of course, it wasn’t just a case of filling various vacancies. Talent and performance were the determining factors that made him Penn State’s grounds maintenance superintendent.

Now a triple threat, Hudzik has to hustle to keep up with all his duties. “My day usually starts with a bang and ends in a flash,” he confides. “There’s never a dull moment when you’re constantly challenged.”

Of all his responsibilities, Hudzik admits that the athletic fields are the most challenging and enjoyable. Willingly he ticks off the reasons. “Maintaining a golf course to high standards is an art,” he allows, “but the challenges are fairly predictable. The resources and time are adequate. Golfers pay a greens fee and expect groomed fairways, tees and greens.

"However," he says firmly, “it’s about time we reacted to the needs of players and coaches of other sports played on turf.”

Athletic field maintenance involves challenges that push both man and nature to their outer limits, says Hudzik, who seems to thrive on renovating 65 acres of intramural fields in less than one short month each spring.

In order to accommodate his campus clients, this busy young man has different maintenance specifications for each area of responsibility. Just keeping them all straight is a job in itself.

For instance, the ladies’ field hockey pitches are mowed at one inch. The soccer fields are mowed at 1-1/2 inches. The intramural fields have to be 1-5/8 inches. Each height is based upon the request of the coach in charge of that particular sport.

continued on page 14
It's no wonder that Hudzik's mowing crews have to stop frequently to change the mowing height on their Toro Parkmaster and their Jacobsen F-10.

"Each sport has its own special characteristics that can be helped by the height and density of the turf," he points out. "What is right for rugby may not be right for field hockey. The only way to find out is to ask the coach."

To provide turf feedback on Beaver Stadium, one member of Penn State's Nittany Lions coaching staff collects comments about the field from players and other coaches and presents them to Hudzik. Conflicting comments are discussed by the coaching staff before being passed on to him.

Hudzik's year begins when the calendar year is about to end—at the conclusion of the football season. Whether or not the ground is frozen, his crew cuts the sod out of the endzones. By that time, weeks of painting and one-yard stands have taken their toll on the mixture of Kentucky bluegrass and perennial ryegrass, so he resods the areas even if it has to be done in the snow.

Sometimes the endzones are not enough. Beaver Stadium was totally resodded in 1978. After he had consulted with fellow Penn State turf specialists Joe Duich and Tom Watsche, Hudzik selected a sod from Sporting Valley Turf. It contained Touchdown, Adelphi and Majestic Kentucky bluegrasses and Manhattan and Pennfine perennial ryegrasses.

Hudzik bases his maintenance of the Beaver Stadium field on comments collected by one coach instead of conflicting remarks from various players and coaches.

Why that particular mixture? "Even though some people say that Touchdown is a heavy thatch producer, I find that its aggressiveness aids in quick recovery," Hudzik explains. "The last sod we purchased for the endzones contained Touchdown, Baron and Fylking."

He resods in the fall instead of the spring because that's when he has the time. Spring is when his crews renovate virtually every sports field on campus—more than 65 acres of playing surface.

The action begins when all the fields are aerified eight to ten times with an Arien Renovator with 3/4-inch hollow tines. "The tines penetrate an average of two to 2-1/2 inches into the surface," Hudzik says. The fields are dragged with chain-link fence to distribute the cores. Five lbs. per 1,000 sq. ft. of triple superphosphate (0-46-0) is applied.

Springtime also finds the perennial ryegrass fields being overseeded with more Pennfine and Manhattan from a Jacobsen 548 Aeroseeder. This is followed by an application of 1-1/2 lbs. per 1,000 sq. ft. of nitrogen from sulfur-coated urea (SCU).

"Our experience proves that perennial ryegrass is tough to beat in this area for intramural and practice fields," Hudzik explains.

Next he gives the grass a good drink: Over two miles of portable aluminum irrigation pipe are moved from one field to another until all the fields have been soaked to a depth of five inches. The result is a nearly miraculous recovery of 65 acres of sports turf in less than four weeks.

As Hudzik's crew removes the irrigation pipe from the fields, intramural soccer, football and field hockey teams take over.

continued on page 16
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The stadium field is mowed at 7/8-inch three times per week using a Ransomes 230D with vacuum for clippings.

Penn State
continued from page 14

When the spring semester is winding to a close, soccer and football camps begin. Although a big believer in aerification, Hudzik doesn't like to aerify during the playing season. Aerification during the season appears to encourage surface damage, he has discovered: "The cleats seem to rip up recently aerified areas more easily."

In September the fields receive another 1-1/4 lbs. of nitrogen per 1,000 sq. ft. of sulfur-coated urea before intramurals begin again.

If the intramural fields are pampered, the field at Beaver Stadium receives an even higher level of care. The crew does everything humanly possible for Penn State except win the football games.

After the spring scrimmages the field is aerified eight to ten times. Then it is overseeded in two directions with a Jacobsen Aeroseeder. Three Kentucky bluegrasses (Touchdown, Baron and Fylking) and two perennial ryegrasses (Manhattan and Pennfine) are cut into the topsoil.

The groove seeder removes nearly all thatch built up during the previous season. Three dump trucks full of thatch were swept up by a Rogers Sweeper last spring.

At that point the field looks like a disaster area to the casual observer—brown and very thin.

Hudzik's crew finishes the spring work with two lbs. of phosphorus per 1,000 sq. ft.; 3/4 lb. of nitrogen in the form of an 18:5:9 fertilizer containing urea and sulfur-coated urea; and 12 lbs. of active ingredient per acre of Tupsersan (siduron) to keep crabgrass seed brought up during cultivation from germinating.

Two four-inch Wade Rain aluminum irrigation lines are laid parallel from endzone to endzone. Three-inch laterals branch off the main lines and Rain Bird impact sprinkler heads are attached to these. The field is soaked to a depth of five inches. Fertilizer and preemergence herbicide are also watered into the rootzone.

A 1-1/2-lbs.-per-sq.-ft. application of straight sulfur-coated urea is made in late May. Hudzik doesn't want to risk problems with diseases —especially pythium—so he uses preventive applications of fungicides throughout the summer. He alternates between Boyleton, Chipco 26019, Daconil 2787 and Subdue.

The work goes on. In mid-June Hudzik applies a tank mix of MCP, 2,4-D, and dicamba to the field to control any broadleaf weeds. The field is watered as needed and mowed three times a week at 7/8 of an inch, using a Ransomes 230D with grass catcher.

In August, having done all he can, Hudzik surrenders the field to the Nittany Lions football team for scrimmages. Divots made during these practices are topdressed with a mix of 70 percent sand, 20 percent peat moss and 10 percent topsoil.

Since most of Penn State's rivals have artificial turf fields, Hudzik must also maintain an 80-yard field of Astroturf at the team's practice facility. The squad will practice on plastic for two or three hours a week before the game. However, the majority of their workouts are still on natural turf.

With so many balls in the air at one time, it's impossible for Hudzik to specialize in any one area. "I call on extension very often for advice and counsel," he explains. "A turf education certainly has come in handy. To avoid surprises I keep in close touch with the coaches and with Herb Schmidt, the assistant to the dean. This allows me to get the most out of my budget and crew in scheduling my work."

Having one person in charge of both campus and athletic turf eliminates duplication of machinery and effort, he points out: "The set-up at Penn State wasn't originally planned to be this way, but it seems to work out best."

It does when the Numero Uno of turf is named Hudzik, because the man has a class act. When it comes to maintaining Penn State's sod in mint condition, he has shown that he is a Cadillac, not a Ford.