

South-facing hills like this one near Scripps Hall have been terraced to minimize effects of the sun on the turf.

eight or nine "emergency" employees to prepare for graduation. And the university has a contract with a nearby workshop, which supplies retarded citizens to mow various areas.

Part of his funds come from an annual budget, but for purchases of special landscape materials, Stright relies on the Campus Beautification Fund, donations from alumni of \$2,000 to \$3,000 a year.

# **Busy backhoe-ing**

A full complement of equipment is necessary to tend this vast area, situated in the rolling hills of southeastern Ohio. The school owns about 20 Gravely mowers with 40inch cutting swaths, 10 Kut-Kwicks, a Gravely Pro 60 with a 60-inch swath, four John Deere riders and two Gravely riders. The school also uses 10 Ford tractors with threebladed 84-inch rotaries whose blades must be kept sharp to be effective. (Stright just bought a new one this year. Some of the Fords still in use date back to 1965.) Also available are a Massey-Ferguson loader, a grader, a ditcher, trucks, pick-ups, a bulldozer and 30 or so Weed-Eaters.

Yet the most valuable piece of equipment is the backhoe. "We have to buy a new one every four years," Stright notes. "We have it out every damn day on something or other." The day LANDSCAPE MANAGEMENT visited, the backhoe was on the East Green digging up a broken gas line into a dormitory. Digging alone is quite a problem.

"Places you dig, you run into lines that you don't know what the hell they are," Stright observes. "Most of this land used to be houses and just about everywhere you dig you run into 'Athens Block' bricks." Athens, home of Ohio U., used to have its own brick manufacturer.

Kentucky bluegrass is the dominant grass on campus. But it gets reseeded with 500 pounds of a 49% bluegrass/30% creeping red fescue/21% ryegrass mixture each year.

### Going to the well

Stright is in the process of hooking the university's irrigation systems (Toro on portions of the College Green and Rainbird in Peden Stadium) into a series of wells. Trautwein Field, where the Phillies' Mike Schmidt once helped the baseball Bobcats to the College World Series, is already hooked to an adjacent well.

Stright, a member of the Association of Physical Plant Administrators, was awarded the O.U. Outstanding Administrator Award in 1986. He is proud of his accomplishments.

"The president (Charles Ping) gets a lot of compliments from students," he smiles. "While most statesupported schools couldn't get enough students this year, we had to turn students away. And part of the reason is because the campus looks so nice.

"At least, that's what the president said the other day." LM

# FROM A(sh) TO Z(innias)

The campus at the University of Minnesota -Waseca is a horticultural smorgasbord. Students design and maintain most of the campus, learning the ins and outs of landscape management along the way.

by Heide Aungst, managing editor



Jerry Nelson: students help out

We like a golf green to come out with a snow mold problem," Pedersen says cooly. "We love it when it gets dollar spot and pythium."

Love dollar spot? Pythium? There's only one motive to the madness: education.

Pedersen is an associate professor at the the University of Minnesota Technical College-Waseca. His philosopy—as well as the school's is to give the students one focus: continued on page 22

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landscape management. The lab isn't an isolated farm, as it is at many schools. The lab is the entire campus...or, rather, the campus is the laboratory, open to the creativity, and occasional mistakes, of its students.

Waseca began as an agricultural high school in the heart of corn and soybean country. The University of Minnesota took over the facilities in the early 70s and started a 1200-acre experiment farm, along with the technical college.

The 110-acre campus may be one of the smallest campuses in the system, but with the recent decline of agriculture, it's a haven for landscape management students.

The campus currently is going through a re-design and students are involved in all aspects. In August 1986, students seeded 12 acres with a conventional rye and bluegrass mix. Last fall, students designed campus roadways and, in the spring, lined them with little leaf lindens and Summit ash.

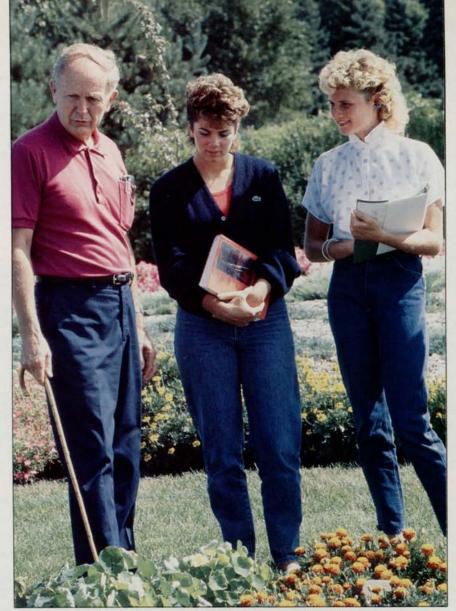
## Students or crew?

Despite the majority of work being done by students, a buildings and landscape crew of seven (superintendent, two gardeners, three buildings and grounds personnel, and a technician) oversees the campus. "There's no definite break-down," says landscape manager Jerry Nelson. "When they're not doing it, we do it."

The budgets are even kept separate. Plant materials used by students come from the educational budget, but plants used by the landscape crew come from maintenance budget.



John Ball: "In my class, I'm God"



The campus is the laboratory at UMW. Professor Phil Allen instructs students.

Nelson's crew is responsible for general maintenance of the campus and athletic fields, including a football field, two practice fields and two softball fields.

The crew concentrates on the athletic fields, horticultural gardens and front entrance, which is the focal point of the re-design. Only the entrance is irrigated, although some irrigation will go into the garden area as it's built.

"Usually a faculty member decides what needs to be done and when it needs to be done and coordinates it with the landscape supervisor," Pedersen explains.

When the two departments cross, they don't always agree. "There's a lot of plant material that I would not get if it weren't for the horticulture department being here." Nelson says. "There's a lot I don't think is real hardy. But we usually talk it over." Often, what a class leaves unfinished, the Horticulture Club picks up on, so students can gain even more experience. And, what the Hort Club leaves undone, workstudy students and the maintenance department will come in and finish.

Nursery students grow much of the plant materials used on campus in six on-site greenhouses. "We label everything someplace on campus," Pedersen says. "We try to duplicate it once or twice for testing."

An example is the juniper garden which incorporates three samples of several species, all pruned differently. "Quite frankly, you can lecture about these things forever and you can even demonstrate, but it's not until students stand out there by themselves that they really learn," says Pedersen.

During the two year technical program, students learn plant materials, landscape and hardscape continued on page 24

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design, equipment, and the business of bidding for jobs. Books and lectures, of course, are significant, but take a back seat to the hands-on training.

Students design and maintain what's known as the "free form" garden. The gardens blaze each spring with bright colored annuals mixed in with perennials and groundcovers. Students have learned hardscaping by installing different patio paving systems, a gazebo and retaining walls. Future plans include building a waterfall and installing nightlighting.

"The gardens were cornfields the year I came," Pedersen says. He started at UMW in 1973 as landscape supervisor. Only one class had gone through the program. Pedersen worked on a masters degree nights and became an instructor in '78.

Besides the gardens, students work extensively with turf. The campus has 32 turf plots (250 sq. ft.) and a golf green.

# **Trimmin' trees**

Students go so far as to prune trees on campus. UMW has at least 53 species of trees on campus, along with its own arboretum.

"Students start working on the sycamore or oak because they're forgiving trees," explains John Ball, a UMW professor who climbs trees along with his students. The liability crisis is threatening the arboriculture industry today. That can be a crisis to a college class.

"In my class, I'm God," Ball says. "They get one mistake...Well, they don't even get that.

"One way to control students' tree pruning is to use electric chain saws," Ball says. "They're lightweight, easy to start, and I can unplug them to get their attention."

Students also are assigned specific areas to maintain, which they work on about 20 hours a week. Most of the 65 acres of turf on the campus gets fertilized twice a year, spring and fall, with nitrogen. The landscape crew mows manicured areas twice a week at two inches in the spring and once a week at  $2^{1}/_{2}$ inches in the heat-stressed summer.

# Equitable equipment

The school buys equipment through a low-bid process, so it doesn't concentrate on one manufacturer. Most of the equipment is Jacobsen, Toro or Deere. UMW uses a fivegang Toro reel mower on the football field and a three-point hitch Woods tractor in low-maintenance area.

Most companies take an interest



Despite the liability crisis, UMW students still prune trees.

in exposing students, their future customers, to various equipment. Jacobsen has loaned equipment to the school, and Cushman gives UMW a three-wheel truckster each year. Toro, located in nearby Minneapolis, puts on irrigation seminars each year.

"I think it's good for students to



Brad Pedersen: education is the goal

get on different mowers," Nelson says. "When they get out, that's what they'll need to know about."

The school actively participates in its own Integrated Pest Management (IPM) program.

"We use very little insecticides," Nelson says. "We use nothing on a preventative basis. We spray only when there's a problem and we've been lucky."

Nelson uses Trimec for weed control twice a year, hitting areas harder with the fall application.

With the campus growth and redesign, Nelson's job is anything but boring. "The biggest challenge is the new construction going on," he says. "You can't concentrate on maintenance when you get extra projects thrown in."

But Nelson is quick to point that the students' help allows his crew the freedom to undertake more projects. The mutual efforts of the crew and the students gives a special feeling to the small campus. And students know that their personal involvement truly makes them a part of their school. LM