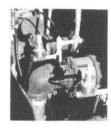
"We estimated that if Midland Hills had the program in 1987, we would have saved \$7,200."



Golfers looking down the barrel of the fairway on the seventh hole of Midland Hills Country Club golf course see a picturesque little pond backing a putting green. "Now there's a good lookin' hole," many of them joke. Here's the challenge: Do you play it safe with a lesser iron? Or do you go right for the pin and risk sail-

ing over the green and raising the level of that pond with your golf ball — just another dimpled ice cube to supplement the drink.

Scott Austin assures us that no matter how many golf balls hit the pond, it will never overflow and dampen any nearby basements in Falcon Heights.

"The Department of Natural Resources requires Midland Hills to maintain the current level of the pond. At night we pump water out to irrigate the course, and during the day we pump it back in from a 230-foot well. We keep the pond's level pretty constant."

Austin has worked at Midland Hills for four years, the past two as golf course superintendent. He has a degree from Penn State in turf-grass management and has worked at various clubs — including Hazeltine, of U.S. Open fame — for 17 years. "I've been golfing since I was 8 years

old. I used to play every day in high school and I wanted to be a club pro. I got into maintenance instead."

But Austin still keeps the rhythm in his swing. An eight-iron rests against the passenger seat of the cart he uses to tour Midland as he supervises his crew. "I take a few practice swings when I'm changing the cups early in the morning," he says.

Midland Hills is a private country club nestled in a wooded lot not far from the University of Minnesota-St. Paul campus. It was founded nearly 60 years ago and has about 325 golfing members. The hills in the course's name are not mere wishful thinking. This course rolls, climbs and dips like a state fair ride. When you're not in the trees, you've got a sidehill lie. And when you don't have a sidehill lie, well, there's that pond.

The water hazard does more than haunt golfers. "It supplies a double-row irrigation system," says Austin. "There's a pipe running down both sides of each fairway. The sprinkler heads throw water into both the rough and the fairway.

"Three pumps pull water from the pond into the system.

We use a 25- and a 40-horsepower pump to water the greens and tees, and a 60-horse for the fairways.

"It's all fully automatic," says Austin. "All I've got to do is put a pin in the control box here in the shop, and the course waters itself."

On any given summer day as much as 600,000 gallons of water are sprayed over Midland Hills. In the course of a year, that's more than 43 million gallons, enough to fill more than 1,100 Olympic-sized swimming pools. The energy bills to pump the water add up just as fast as the gallons.

In March of last year, Jim Absey, an NSP customer representative, called Austin. They discussed a limited off-peak electric rate. The rate allows a consumer to use energy only

between the hours of 10 p.m. and 6:30 a.m. A clock on the meter automatically shuts off the power in the morning and kicks it back on at night. "It offers the customer a very attractive rate," says Absey. "There's no demand charge, which during the summer can amount to \$8.13 per kilowatt of electricity."

Since there are few golfers foolish enough to compound their miseries by hacking away in the dark, it seemed to Austin that it was a perfect time to open those sprinklers full-throttle.

"Because of the rate's unique time constraints, not

everyone can take advantage of it," says Absey. "Not everyone can have power shut off during daytime business hours. But this seemed like a perfect application."

"When I found out what sort of savings I could get," says Austin, "I signed on. We're reducing our costs nearly 65 percent with this rate. We estimated that if Midland Hills had the program in 1987, we would have saved \$7,200."

Not bad, when you consider all those thirsty greens and fairways in the middle of last summer's drought. Golf courses were exempt from the watering ban, and Austin would occasionally have to supplement the nightly watering by using pumps hooked to other meters to irrigate greens and tees. "But," he says, "we didn't have to switch our watering cycle too much with the off-peak rate. We're not giving up a lot for the amount of savings we're receiving."

And if you're on the seventh tee and have chosen to hit for the flag, just remember: That pond doesn't give up much either. •



Water pumps, above left, the lifeline of the golf course, pump about 1,300 gallons per minute to maintain Midland Hills' plush greens and fairways. Scott Austin, golf course superintendent, above, tends the course and supervises his summer crew, which includes up to 25 college and high school students.