

DO-IT-YOURSELF IRRIGATION SYSTEMS

Maple Bluff's Tom Harrison improved his course 100 percent with an irrigation system combining Rain Bird valves and heads with Toro controls. He designed it himself.

by Jerry Roche, editor



Maple Bluff's par three, 11th hole.

Burly Tom Harrison, golf course superintendent at Maple Bluff Country Club in Madison, Wis., is the consummate do-it-yourselfer.

Harrison, his course in dire need of a new irrigation system a couple years ago, designed his own. Combining Rain Bird valves and heads with Toro VT3 and IBM PC controls, he replaced the old center-roll, quick-coupler system.

It worked.

The new system doubled the beauty and health of his course.

"Why did I hybrid the irrigation system?" Harrison rhetorically asks. "Because, when someone puts a package system together, it doesn't necessarily mean that all the components are the best."

Harrison, whose only turfgrass education has been on his hands and knees trying to figure out what makes grass grow best, didn't design the new irrigation system by himself. He enlisted the help of literally hundreds of friends and consultants. He had to. The system cost \$293,000, and even exclusive country clubs don't like to dump that much money out the window.

"We had people from California finding out we were spending that kind of money and breathing down our necks," Harrison remembers. "But I wanted to get people from this region because it's much easier to get replacement parts and service."

He initiated inquiries in August, 1983. Eleven months later—the day before Independence Day, 1984—the system was operational.

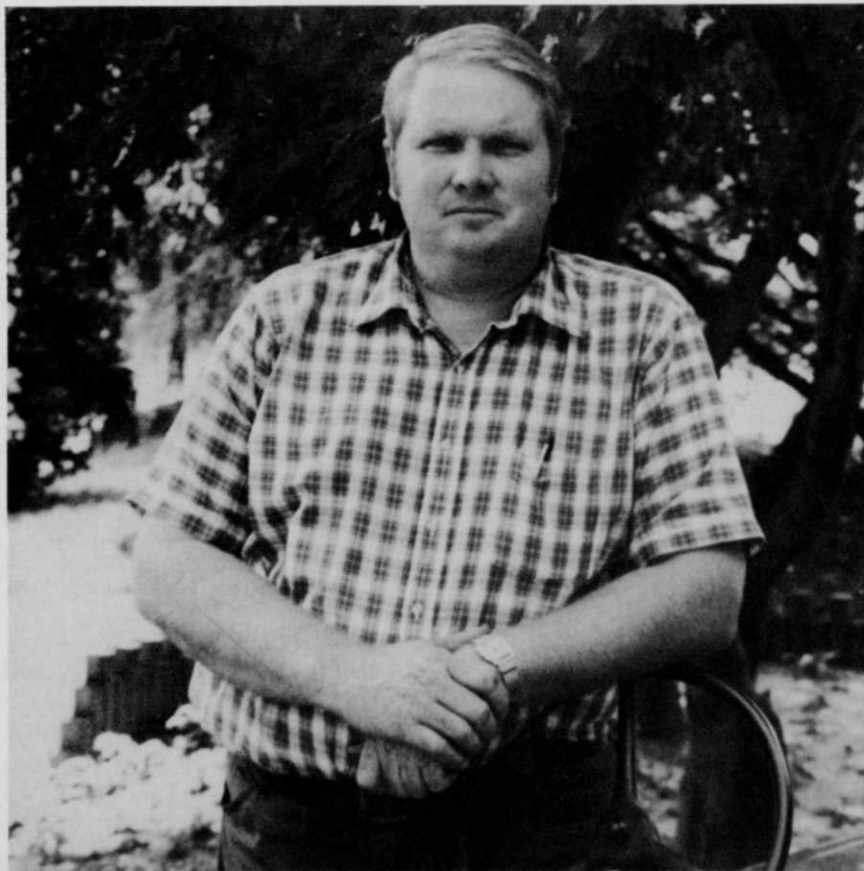
"First, you have to look around at what works and what doesn't work with other people," he notes.

Harrison's initial design was first approved by Peter Beaves of Midwest Irrigation, Dubuque, Iowa.

"I didn't put the job out to bid," Harrison says. "I investigated to see what the going rate was. Then I hired Midwest, the premier irrigation contractor in the country. It wasn't worth trying to go with a low-baller."

"Peter gave me a computerized printout of all the courses he's done in the last 20 years, and one of them was Augusta National. That was good enough for me."

Harrison's design then went into the computer of an irrigation consultant, who was paid \$2,000 to find any flaws. Finally, Harrison went to Reinders Brothers distributors, who agreed to put the



Tom Harrison, club superintendent, Maple Bluff County Club.

design through another computer in exchange for purchasing equipment from them.

"We ended up with four opinions," Harrison says. "Except for the size of the pipe—I had sized pipe bigger than it needed to be—there wasn't a single thing we changed."

Club members supported Harrison.

"The members don't expect poor business decisions or anything that isn't done right," Harrison observes. "Money is one of the hurdles that is easy to get over, compared to that. The members didn't see in the cost one big figure to pay a landscape architect, but I assured them that I had the best contractor and the best price. That's the way we do everything here."

Harrison and his staff designed and erected the pump building in January, 1984. L.W. Allen installed the three-pump systems capable of delivering 1,400 gallons per minute.

"Everything we did was geared toward saving energy," says Harrison. "We even put time-of-day use meters on the electrical system to get the cheapest rates."

In March, 1984, pipe went underground and pumps installed. Four months later, Harrison turned on the system.

"The biggest problem was that—when we started—we didn't put strainers on the pumps and they got clogged with a couple small bullheads," recalls Harrison.

But things are running perfectly today.

"We've had probably a 100 percent improvement in the course," the superintendent observes. "There is no more overwatering, there aren't any dry areas, and water usage is about 60 percent of what it was. The members are just delighted because there was no downtime."

"A dry year like this will bring out the bad in the system. We haven't had any problems."

Harrison received much of the experience necessary to tackle this job as a part-timer at Madison's Nakoma Golf Course. He then enlisted in the Navy and became a Seabee engineer.

"But I didn't like the indoor part of engineering," Harrison observes. "As a student working at Nakoma, I realized

I liked being outdoors better."

He started at Maple Bluff in 1967, became its superintendent in 1976.

During the 1970s, Maple Bluff hosted the Women's Western Open and the state amateur tournament. In 1987, it entertains the state amateur again. One state event is held there each year.

Harrison has four full-timers on his staff: two assistants and two mechanics. Five additional persons are hired in the spring; and from June 1 to September 1, the staff numbers 16. Besides the golf course, Harrison's crew maintains tennis courts, a pool, and the entire country club grounds.

Problems are minimal.

"The people working for me are a piece of cake because they're good kids who are tickled to have a job," says Harrison. "And the members aren't a problem compared to most clubs. They're understanding."

"The course itself isn't too much of a problem. Fairway management is now on a strictly preventative basis. We don't waste material. We're very, very picky. From being on the course, I know the cycles of problems."

"But I don't like surprises, and Mother Nature is always throwing them at you. It's the one thing that's hardest to deal with," he says.

There is another problem, too: "probably the biggest one is my own inner drive to survive a summer without losing any more grass than what's on my desktop," he says.

This same trait helped get the Wisconsin Turfgrass Association formed on Oct. 11, 1980. Harrison was one of 11 founding fathers, and is the current president. The organization donated \$30,000 to turf research last year.

"We're trying to create an awareness of turf at the University of Wisconsin," Harrison notes. "Turf research in Wisconsin was headed down the tubes before we got started. We're succeeding and getting a great reception from the ag department."

It probably helps that one of Maple Bluff's members is football Hall of Famer Elroy "Crazylegs" Hirsch, Wisconsin's athletic director. Not that help is needed: visitors to the course are often amazed at how beautiful turf can be.

It's truly a green monument to Tom Harrison, do-it-yourselfer extraordinaire. **WT&T**