



PROFILE NOZZLE CASE STUDY

ILLAHE HILLS COUNTRY CLUB



Bill Swancutt, Superintendent

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Swancutt has been the Illahe Hills Country Club superintendent for 31 years. The course, which was designed by Billy Bell, recently celebrated its 50th anniversary.

TOO WET, TOO DRY... BATTLING INCONSISTENT DU



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Illahe Hills Country Club is among the Pacific Northwest’s golfing jewels. The scenic Willamette River adjoins the course, adding excitement to play on the 11th and 12th holes, and providing a reliable source of irrigation for the holding ponds.

“We’re putting down 300,000 gallons a day during our busy summer months from mid-June to mid-September,” says Bill Swancutt, GCSA and Illahe’s superintendent for 31 years.

SOGGY TURF AND BROWN SPOTS

The course, which recently celebrated its 50th anniversary, is located near Salem, Oregon, and was originally designed by Billy Bell Jr, who also planned San Diego’s Torrey Pines Golf Course.

During a major renovation 10 years ago, Rain Bird Eagle 700s were installed, along with new mainlines, laterals and controllers. Bunkers were re-designed in the last couple years by the late John Harbottle III.

Even with easy access to water and a top system, Illahe Hills faced frustrating problems with distribution uniformity. Some areas were always too wet, others always too dry.

“We checked out the usual suspects . . . water pressure, spacing, head adjustments,” says Swancutt.

“Nothing helped.”

Anywhere you went on the course, the turf was soggy in the short-range perimeter, 10 to 12 feet from the head.

SPIKES IN THE PRECIPITATION PATTERNS

“There was a spike in the precipitation pattern. Too much water was being applied by the rear nozzles,” said Swancutt.

The crew tried various strategies, including cutting back on the watering, which cured the wet areas, but created dry patches everywhere else.

Finally they tried plugging the Rain Bird smaller rear nozzles with plugs specifically designed for this purpose.

“That helped minimize the wet spots, but then we had burn out everywhere else. So we’d spend hours hand-watering every day – not the most productive use of labor.”

Frustration spurred his quest for a solution. Swancutt started investigating alternative options.

PROFILES COMPARED WITH OEM NOZZLES

“I’d read about solid metal Profile nozzles and was ready to try an entirely new approach,” he said.

He ordered 40 Profiles two years ago, switched out a complete fairway and started meticulous record keeping. He noted irrigation dates, run times and results, comparing the performance of Profile nozzle sprinklers with heads working with OEM nozzles.

In less than two weeks, he found that sprinklers with Profile nozzles produced more uniform coverage from the head to the far edge of the throw.

And the soggy areas started to disappear.

Over the last two summers, Swancutt has installed more than 300 Profile nozzles in the Rain Bird Eagles and plans to switch out the entire course.

“We were extremely pleased with the results,” he says.



“We recorded irrigation dates, run times and results. In two weeks we found that the Profile nozzles produced more uniform coverage from the head to the far edge of the throw.”



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SPRINKLER PERFORMANCE: A CRITICAL COMPONENT

“I would definitely recommend Profile nozzles to any superintendent with DU problems. And I would recommend they conduct a similar test . . . evaluate the performance of their OEM nozzles against Profiles to see the difference.”

Swancutt also offered another suggestion to courses considering a new irrigation system or renovation.

“Major manufacturers promote their software programs, but for me the really critical component is sprinkler performance. The DU has to be exact and consistent, otherwise it’s an exercise in frustration to try and correct it.

“If I’d known about Profile nozzles when we were updating the system, I would have first tested them against the OEMs. And if I’d seen the same results, I would have installed Profiles right from the beginning.

“That would mean asking manufacturers to prepare bids without nozzles . . . which could happen in the future.”

HEALTHY TURF YEAR-ROUND

Meanwhile Swancutt relies on the Willamette, and Profile nozzles, to keep his course fast, firm and playable throughout the year.

“This last winter the river slapped us around a little bit by overflowing its banks and flooding a couple holes. We just shortened the play to 16 holes for a couple days.

“The golfers didn’t mind. Their scores were better!”



ILLAHE HILLS COUNTRY CLUB, SALEM, OREGON