

PROGRESS

Water wise



A flood of high-tech innovations propels irrigators to a new age.

In olden days, people could water to their heart's content without raising the ire of neighbors and city officials. With today's increasing water restrictions, that's not true anymore. Replacing the garden hose of yore are high-tech irrigation tools that are changing the shape of the irrigation industry and the way people water.

"When you're wasting water — watering when it's raining and those sorts of things, it's very visible," says Keith Shepersky, senior product and marketing manager for Irritrol, which in February released a wireless smart controller that adjusts water run times based on weather.

"Those things used to drive the Parks and Rec people crazy. They'd be saying, 'Why are you sprinkling when it's raining?'"

Fortunately for today's irrigators and water conservationists, we don't water when it's raining as much anymore. That's because irrigation is becoming easier to control remotely. Consumers and irrigation workers now can turn sprinklers on and off from the office or install sensors that trigger water only when it's needed.

It's a growing reality that seemed unfathomable in the recent past.

Smart controllers, as those in the industry know, once programmed can adjust water's run time to conform to a plant's daily water needs. Word of their usefulness is spreading. And it's not just the timers.

"Advances in communications technology now allow access to irriga-

tion systems remotely, from anywhere in the world," explains Jeff Kremicki, CID, CIC, Hunter Industries' product marketing manager, citing central control hardware and software that can be added to controllers.

"Today," he says, "a controller can be connected to a customer's computer via a network, Internet, or cellular connection, providing customers complete access to the irrigation scheduling" and alerting them to problems.

Ultimately, smart controllers save water.

"If you go back far enough, Shepersky says, "you see systems where somebody walks out the front door on their porch and reaches down and turns on a sprinkler valve manually.

"And the sprinklers would have multiple heads. And then the guy goes in to watch a ballgame and has no idea that 12-16 gallons a minute is flowing out on that circuit and it's been running across the yard for two hours."

Thanks to smart timers, such waste-fulness isn't as big an issue.

But they're not perfect, says Jeffrey Knight, central region education manager and instructor at Ewing Irrigation.

"Here comes the smart timer and the promises you put in the data and it will measure how much water is in the soil. But it's not that simple," he says.

"I have to give it the soil type. And then I give it the type of heads I'm using. I got to give it the precipitation rate so it knows how fast water's being applied... You have to give it the data and then watch it a couple weeks and

make adjustments. You can't just input the data and forget it."

If there's any flaw in irrigation's new technological products at all, agrees Adolfo Meza, product manager, contractor controllers, for Rain Bird, it's that people need to "use them appropriately to obtain the desired results; along with new technologies should come an understanding of these products and how to use them to gain the ultimate benefit."

Smart controllers aren't the only cutting edge irrigation technology on the market. There are also soil moisture sensors, more uniform nozzles and flow sensors. And those new products do more than conserve water, says Meza. They save customers and workers time and money.

Hunter's Kremicki says flow sensors are useful because they "monitor irrigation system flow and demands, providing the customer with feedback and protection to the site when irrigation system problems occur."

Ultimately, water-saving irrigation technology must and will continue to advance, Shepersky says. Because "we don't get more water than the Earth already has."

Smart controllers like Rain Bird's help conserve water and change the way people irrigate today.



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