No Objection The technology has changed and more superintendents are sold on the benefits of fertigation

By Anthony Pioppi, Contributing Editor he way Allen Olson sees it, there's just no reason for superintendents to be living without fertigation.

"It's got a lot of things going for it. If a superintendent is squeezed for time, squeezed for manpower, he'll be getting a better job," Olson says.

OK, so Olson may be more than a little biased since he's the product manager of fertigation systems for Dallas-based Flowtronex PSI. All favoritism aside, the numbers bolster Olson's enthusiastic endorsement. More than 50 percent of all irrigation systems being installed in the United States, whether in a new course or for an upgrade on existing layouts, have fertigation equipment as part of the package. In some areas of the country, such as the Southwest and Southern California, more than 90 percent of the systems are now fertigationfriendly.

The systems have long been a favorite of grow-in superintendents, while superintendents at existing courses have been slower to come around. Olson says that has changed.

"It's best use is for color and growth maintenance through the growing season," Olson says. "It's a beautiful tool for that."

Fertigation made its debut in Florida during the mid 1970s, but it took awhile to catch *Continued on page 80*

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Some superintendents have found turf to be disease suppressive as the result of fertigation.

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on in other regions. Initially the technology and fertilizers held the concept back.

"Strange things happened. There were problems with the equipment, and combos of fertilizers did not blend well," says Dave Davis, owner of David D. Davis Associates, an irrigation-consulting firm based in Crestline, Calif.

According to Davis, fertigation took steps forward about 20 years ago.

"The technology started to change," he says. "Fertigation had always been a tool for agriculture and it became one for turf, as the golf course business truly became a business."

The fertigation equipment came with automatic controls and metering that changed as flow rates changed.

In the middle 1990s the industry saw an influx of new companies, which Davis says were often run by retired college professors. As this happened the systems continued to improve and turned out to be a labor-saving device for the golf course.

Running between \$6,000 and \$20,000, fertigation for most superintendents is a needed

hand that pays itself off in a short period of time. The low-end price is for a one-pump system while the high end is for three pumps that each work at their own rates.

Besides never having to delay play (lost revenue) and never having to commit a worker to spraying, the proper fertigation technique can also reduce the amount of fertilizer used.

"It's a great tool for saving labor," says Greg Bergwin, a superintendent who is now chief operating officer of Liquigistics, a manufacturer of fertigation and water treatment systems.

Olson says even a reduced amount of nitrogen can be used more efficiently by the plant, with some superintendents finding disease suppression as a result of fertigation. As Olson points out, using less fertilizer has benefits other than saving money. "If we can be more environmentally sensitive, we should be," he says.

Part of that equation, according to Bergwin, is to make sure the spray program used by a course is site specific. For some superin-*Continued on page 82*

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tendents, that means using fertigation on fairways but continuing to put down nutrients on greens using a sprayer or spreader.

Superintendents are not constrained by the equipment with a 0-0-40 application going on as easily as 18-24-6, and all points in between.

And there is still another benefit.

"We can also control the pH of water," Bergwin says.

Even in states that have not traditionally used fertigation, it is getting great reviews.

In 2001 Mike Stachowicz grew in The Ranch in Southwick, Mass. It was his first time using the technology, but when he looked into fertigation, it was an easy choice.

"I did the math on it, and I could pay for a fertigation system out of my fertilizer budget," says Stachowicz, now superintendent at Dedham (Mass.) "You manage your highs and lows with fertigation. Then you get your evenness."

MIKE STACHOWICZ SUPERINTENDENT

Country and Polo Club. He even went so far as to research the technology and built his own system for The Ranch.

By spoonfeeding with light and frequent rates, Stachowicz says his turf grew in better than he expected. He also kept tabs on two other courses in the region that were growing in at the same time and found his course came in better and faster than the other two. He continued using fertigation to maintain his 40 acres of fairways. Because of the density of the new varieties of bentgrasses, which in some cases require greens-grade fertilizers to penetrate the dense canopy, Stachowicz says the savings are substantial, as much as \$2,000 an application.

"It's a daily-fee golf course and you do what you can to save money," he adds.

Even though he is now at a private club, Stachowicz is once again looking to build his own system, one that is a little more sophisticated than his first. He also has become more adept at using fertigation.

Stachowicz says his plan is to continue to use standard application procedures on greens as well as on fairways a couple of times during the season.

"You manage the highs and lows with fertigation," he says. "Then you get your evenness."

