Fumigation for Renovation

"It's like opening up a new sleeve of golf balls." That's how architect Craig Schreiner describes fumigation as a tool for golf course renovation. Schreiner means that fumigation leaves soil in virtually a "new" condition for reseeding greens, fairways and tees.

"Fumigation is a surgical way to clean up contaminated soil," says Schreiner, president of Kansas City, Kan.-based Craig Schreiner Golf Course Architects. "With fumigation, you get the most antiseptic way of preparing a site for seeding."

Schreiner points out that fumigation doesn't destroy the necessary microbials in soil that are vital in helping reseeded areas to grow into healthy turf. "Fumigation doesn't turn soil into a biological desert," he says. A renovated area that is properly fumigated and reseeded will grow into lush turfgrass.

There are several reasons to renovate golf courses using fumigation, but they differ according to region. Inevitably, superintendents and architects use fumigation to rid areas of disease, insects, weeds and unwanted turf varieties.

If country club members at a Midwestern golf course begin complaining about the inconsistent play of 50-year-old greens, it might be time for the superintendent to fumigate the greens and rid them of poa annua and other unwanted turf stands and weeds. If you're a Florida superintendent like Joe Boe, who tends the turf at Coral Oaks GC in Cape Coral, fumigation is an excellent way to control nematodes, which flourish in the sandy soils of courses in the deep south.

Schreiner stresses that golf courses are dynamic lands whose infrastructures are always changing. "A course changes in the time you start a round of golf and finish it," Schreiner explains. "Most people don't understand or appreciate that."

Over time, the action taking place on a golf course — from the thousands of players trekking on it to the fairway mowers and greens mowers bustling through it — eventually takes its toll. Also, it's difficult to keep different turfgrasses in their proper areas.

"Today, you have six to 12 different turf varieties on any given course," Schreiner says. "Trying to keep them separated is difficult. If you get this to point, you're managing several types of turfgrass, and it becomes a burden. So you want to start over with something that's more predictable and gives you more ease of control. There's no better way to wipe the blackboard clean than by fumigating."

Some superintendents only consider fumigation for greens, but it can also be used successfully on fairways and tees. Steve Godbehere, director of research for Hendrix and Dail, says many course renovation projects specify fumigation of the greens, but not of fairways, which can be damaged over time. Godbehere says fumigation of fairways comprises a small percentage of the total cost of renovation projects.