



November 14, 2005

Just Doo It!

How do you keep your golf course emerald green and not douse it with nasty chemicals? Dan O'Neill has the answer

By Franz Lidz

From the observation deck of the Perdue-AgriRecycle Micronutrient Plant in Seaford, Del., the towering heaps of chicken manure below look like the mountains of Mars. Thousands of tons of it are spread out in undulating drifts across the floor of the world's biggest crap house, a building so huge it can hold a line of 10 railcars. Unprocessed ordure is on the left; processed, on the right. Sitting between the piles, and taking the one on the left and turning it into the one the right, is a massive -- for lack of a better term -- Kakatron that looks like an exhibit left over from a science fair at Brobdingnag High.

Clutching a coffee mug that bears a picture of an anxious hen over the caption when you go, go with the best, director of sales and marketing Tom Ferguson guides us through the bowels of the facility, where signs have messages like pneumatic dust control. "Other companies turn out more poultry, but Perdue is the leader in turning poultry manure into money," Ferguson says. "We're number 1 in the number 2 business."

Every year up to a billion pounds of raw chicken litter from Perdue farmers in Delaware, Maryland and Virginia pass through the Kakatron. "The litter is a blend of manure and sawmill residue," says Ferguson, sounding like a proud chef in a four-star restaurant. "Our screening operation removes all the human-made debris from the mix -- the misplaced wrenches, the dropped hammer handles, the lost Timex watches."



O'Neill's fertilizer is used on 20% of the courses in New England. Jason Grow/SI

The filtered waste is baked into granules the size, shape and texture of Post Grape Nuts. "In our own way," Ferguson says, "we're turning chicken s --- into chicken salad." A conveyor system loads the delicacy onto dump trucks and railroad cars, on which it is shipped to distributors who package it as organic fertilizer for farms, gardens and, yes, golf courses.

Of the half-dozen companies that dole out Perdue dung to courses, the most evocatively named brand is Cockadoodle Doo. "We encourage course superintendents to 'doo' the right thing," says John Packard, president of Pure Barnyard, the Portsmouth, N.H., company that markets the stuff. "New England has 587 18-hole courses. We have supplied chicken crap to about 20 percent of them." That may sound like a dropping in the bucket, but Cockadoodle only began targeting courses 18 months ago. Now it is the region's doo-doo king. "The courses here spend roughly \$15 million a year on fertilizer," Packard says. "We're trying to change the marketplace one chicken at a time."

In a sense, course superintendents are farmers who grow a crop that's an eighth of an inch high and never harvested. Mowing robs the turf of vital nutrients and checks root development, which can mean that water percolates too quickly through the ground and dissolves precious lime from the soil. The turf can also rob greenkeepers of their livelihood. "A lot of country club members only want to play on links that are emerald green," says Cockadoodle Doo salesman Dan O'Neill. If a patch on the 14th fairway turns to thatch, the superintendent may soon be out on the street.

Over the last half century superintendents routinely doused their sod with herbicides, pesticides, fungicides and synthetic fertilizers. "You'd see little white flags on the fairways that warned stay off until dry and wonder how safe it was for children and pets," O'Neill says.

To conservationists the idea of spraying grass with toxic compounds is heresy. Artificial additives can leech into water supplies. Evidently they can also leech into greenkeepers. A 1994 University of Iowa Medical School study of superintendents with lengthy exposure to herbicides showed a 23% increase over the general population in non-Hodgkin's lymphoma, a 29% increase in prostate cancer, a 17% increase in cancer of the large intestine and a 20% increase in brain and nervous system cancers. Not surprisingly, many superintendents have abandoned chemicals for chicken manure.

On a recent drizzly afternoon, O'Neill walked the 11th fairway at Turner Hill Golf and Racquet Club in Ipswich, Mass. The ground squelched wetly underfoot. "It takes about 18 months to wean a course off chemicals," he said. "It's like heroin addiction: You have to slowly flush the poisons out of the system." At Turner Hill chicken manure has been embraced -- if that's the word -- by John Sadowski, the twentysomething super. "The new generation of superintendents tends to be more environmentally conscious," says Ferguson. "Some of them are organically minded. Some are such purists that they ought to wear a hemp shirt and become vegans." Sadowski applies rich dressings of nature's chocolate pudding (90 tons a year) on his course. He alternates Cockadoodle Doo's pasteurized poop with composted crap put out by Pearl Valley Organix of Pearl City, Ill. The latter has shot through the tailpipes of egg-layers and has three times the calcium of the waste produced by Perdue's broilers. "There's a lot of competition in this business," says Pearl Valley operations manager Andy Thompson. "My manure pretty much speaks for itself."

It also stinks for itself. The big drawback with chicken manure is the smell, which can be overpowering. "In the fertilizer world," says Ferguson, "everything has an odor." But not one that repels Essex County Club superintendent Pat Kriksceonaitis, a Cockadoodle Doo diehard. "I think chicken manure has a sweet aroma," he says. "To me, it's a real positive." That can quickly change if, during the dog days of summer, a golfer sticks his fertilizer-caked shoes in the trunk of his car and forgets about them for a few weeks. "Things could get a little ugly," Kriksceonaitis concedes, "but that's the price you pay for playing golf on chicken manure."

Animal waste is available to courses in almost infinite variety. Fertilizers feature everything from sheep scat (commonly called Ba -Ba Doo) to cow patties (Moo Doo). At its semiannual Fecal Fests, the zoo in Woodland Park, Wash., sells Zoo Doo, a mixed marriage of bedding straw and elephant, hippo, zebra, giraffe, gazelle and oryx manure. The tony North Shore Country Club in Mequon, Wis., douses its tee boxes with Father Don's Duck's Doo Compost, a food for the soil that includes duck manure, cranberries, rice hulls, wood shavings, vanilla beans and pickles. Founded by Roman Catholic priests from nearby Kenosha, the nonprofit outfit uses the slogan, Complete the loop -- buy duck poop!

But when it comes to wretched excess, nothing in the golfing universe trumps You Doo, the euphemism for the human excrement processed by Synagro in Houston. Selling sludge to country clubs may sound like the crappiest job in golf, but at least Synagro staffers have a sense of humor about it. Employees joke that when they go on bathroom breaks, they're simply adding to the company's bottom line.