Chicken Compost Solves Problems And Makes Money

Mortalities and manure are facts of life when you keep 20,000 layer hens and roosters around. Disposing of 9 to 10-lb. dead chickens gets expensive, and Ed Rollins' fields couldn't handle any more chicken litter. When he looked into composting, he found answers to both problems and also discovered a new business opportunity.

"I was spending more than $3,700 each year on propane for an incinerator to dispose of the dead birds and another $600 each year on maintenance," says Rollins. "My fields had excess phosphate from years of spreading chicken litter on them."

Rollins produces fertile eggs under contract for the hatchery industry. Since he started composting, he also sells a trademarked product called R-Grow Organic Soil Conditioner. Sales through co-ops and Wal-Mart stores in Tennessee and neighboring states have added $30,000 to his gross income and $12,000 to his net income. It has also helped him employ a son and daughter in the business.

Another advantage of the composting operation is that Rollins can clean out his two laying buildings any time of the year. All chicken litter is stored in a 45 by 160-ft. composting facility. The roofed building has concrete floors and confinement walls. Eleven compost bins run down one side of the building, while separate areas are set aside for raw manure storage, aging compost staging, finished product storage and a bagging area.

"Each bin is 10 ft. wide, 5 1/2 ft. high and 12 ft. deep and holds 8 to 10 tons," says Rollins. "I premix the chicken litter and wood chips for the right carbon mix, and then every four days I layer it with about 300 lbs. of mortalities in a bin."

The exact recipe for the mix of manure, wood chips and dead chickens is not something Rollins shares, having achieved it only through lots of experimentation. Each batch of compost gets turned five times using a tractor and loader. It goes through four stages of cooking and cool downs, with the first reaching a temperature of 170º. The second stage hits 160º, the third 145º, and the final stage hits 140º. The compost cools to 130º in the first three stages and finally to 90º in the 25 by 50-ft. cooling bin before being chopped and bagged. The complete process lasts about 14 months with about 8 to 10 tons of finished compost produced every 20 days.

Before bagging, material is literally chopped into finer pieces by an old silage chopper that has been adapted to stationary use with a hopper feed. It blows the compost into the bagging area. A commercial bagging machine packages the compost in 22-lb. bags.

Rollins credits the University of Tennessee Center for Profitable Ag for helping him develop and fine-tune his process. He recommends people interested in developing an ag-related business, check with their state's university for a similar group.

Contact: FARM SHOW Followup, Ed Rollins, P.O. Box 324, Pulaski, Tenn. 38478 (ph 931 363-0265).

Ed Rollins operates a successful chicken compost business. All chicken litter is stored in a 45 by 160-ft. composting facility.

Eleven compost bins run down one side of building.

He also sells a trademarked product called R-Grow Organic Soil Conditioner.

Composter Bags A Bigger Market

When Carl Belohlavek turns his compost piles, he feels like he's turning leaves and grass clippings into dollar bills - lots of them.

The Mosinee, Wisconsin, entrepreneur got into the compost business as a way to generate more organic matter for his ginseng crop so he took in 80 truckloads of yard waste from the city that needed a home. It went so well he got rid of the ginseng crop and built a composting business that is growing bigger every year.

"I make about 1,200 cubic yards a year," says Belohlavek. "I sell most of it bulk, delivered anywhere in the state. We also sell by the bag. Some greenhouses take 400 to 800 bags at a time."

Belohlavek also sells compost through local hardware stores and services stations. These local sales have grown as people who try it come back for more.

""People who used to buy a half a yard or so, now want 4 to 8 yards after seeing how it helps their gardens," he says. He credits his master gardener wife Dorothy with creating the ultimate sales tool. "She has garden beds that are the envy of everyone who sees them, and they want the same for themselves."

It takes about three months to produce finished compost. Belohlavek stacks the material, sometimes using alfalfa for added nitrogen to meet the proper ratio of carbon to nitrogen. Once the compost is ready, he has a commercial screener come in to screen the compost. Material to be sold in 25-lb. bags is run through a home-built bagger. He can do 100 bags an hour by himself or 150 an hour with help.

The bagger bin holds 2 1/2 yards, more than needed to handle a 2-yard payloader bucket. It is made from 1/4-in. steel plate and supported on four 4-in. angle iron posts, ending in angle iron skids on the ground. The long sides of the bin slope to an auger mounted at the bottom.

"I cut a 6-in. diameter pipe in half, spread it and welded the bin sides to it and set the auger inside it," says Belohlavek.

A 4 by 8-ft. platform about 18 inches off the ground holds a 10 hp Honda motor and the hydraulic pump it powers, as well as a scale for weighing bags. Both the auger that runs along the bottom of the bin and a beater mounted about a foot above the auger to prevent bridging of material run on hydraulic motors. Both the beater and the auger can run in forward or reverse, and the auger has a speed control on it.

"Hydraulics are great to work with," says Belohlavek. "When I have a bag in place over the scale, I pull a lever to engage the auger and again to stop it when the scale hits 25 lbs."

Belohlavek bought the auger, but built the beater from 2-in. schedule 80 pipe with flat bars welded across it. Most of the bagger was built from scrap or used steel. Wheels that slide into place when one end of the bagger is lifted were cut down from a trailer house axle. They make it easier to move the bagger from a nearby shed.

"With the hydraulic motors and pump and a few other things, I probably have $600 to $700 in it, plus labor," says Belohlavek, who also built his own compost turner. "I like building things."

He's getting ready to expand his operation. A Wisconsin paper mill recently asked him to handle their wastes. He is busy building a new and larger composter to handle as much as 80,000 yards of compost per year. "I have a partnership with two guys to truck and sell the finished compost," he says. "We already have markets set up to sell a lot of it."

Contact: FARM SHOW Followup, Carl Belohlavek, RFD 3, Mosinee, Wis. 54455 (ph 715 693-3755).

Carl Belohlavek built a composting business that's growing bigger every year. Much of the material is sold in 25-lb. bags.

Illinois Wine-Makers Continue To Grow

Wally Furrow and his family have been farming since 1947 on their small farm north of El Paso, Ill. Though Illinois farmers are not known for their grape production, the Furrow family not only makes wine from their own vineyard, but they also buy grapes from neighboring vineyards as well. Furrow is president of the 200 member Grape Growers and Vintners Association and he and the other members of the Association encourage and help younger farmers with less acreage get into grape production and wine making.

Even though Illinois wine production may lag way behind other states, wine consumption is fourth highest in the country. This means there is a viable market right in the winemaker's back yard.

In addition to winemaking, the Furrows have operated a gift shop on their farm since 1999. It offers a welcome break from the corn and soybean fields.

Contact: FARM SHOW Followup, Wally D. Furrow, 24685 Hickory Ln., Hudson, Ill. 61748 (ph 309 726-1948; website: www.illinoiswine.org).

Wally Furrow and his family operate a sideline business growing grapes and making wine on their farm.