

FROM MAJOR POLLUTANT TO MONEY SAVING PRODUCT, CHICKEN LITTER MAKES A BENEFICIAL FERTILIZER

By Candace Krebs, published in the Ag Journal, July 14, 2006

Drummond OK – Greg Roquet says there's fertile interest in chicken litter and it appears to be spreading. The poultry farmer, horse and cattle breeder from Vinita, OK is networking with farmers and rural cooperatives to move litter from poultry houses in Arkansas and Northwest Oklahoma to farms where it can be an asset instead of a liability.

With mounting public pressure on poultry farms to move litter out of heavily concentrated areas, the time is ripe for Roquet's efforts. With help from farmers, the state, the Natural Resources Conservation Service and other organizations, an increasing amount of poultry litter is being applied as a fertilizer to wheat fields and pastures further west.

"Commercial fertilizer is a lot higher in price than it used to be," points out Bart Cardwell, ag agent for Garfield County Extension Service, based in Enid, OK. "Seven years ago, we put a pencil to it and poultry litter just wouldn't work. Now that gap has narrowed quite a bit."

Applying litter is very enriching for soils. Not only does it add organic matter and help correct soil acidity but it also results in a slow release of nitrogen which extends the residual benefits longer.

But there are some sticking points. The biggest is the cost of shipping. Roquet estimates that litter in his local area sells for about \$25/ton before adding freight. Buy the time it gets to Central Oklahoma it costs about \$38/ton and farmers will likely add another \$5/ton for application.

What often makes it much more doable is a series of financial incentives, according to Josh Payne, area animal waste management specialist with Oklahoma State University Extension Service. Hauling subsidies are in

place to help move litter out of certain watersheds. Those add up to about \$10 per ton which is shared between the poultry producer and the hauler but hopefully gets passed on to the buyer in lower costs, he says.

In addition, there are environmental incentives through the Natural Resources Conservation Service that range from \$4.50 to \$12 a ton, though Payne says the program currently lacks sufficient funding.

"The priority has been given to just a handful of producers," he explains.

Tax credits that can be applied against the state income tax – and carried over from one year to another – can potentially add another \$5 a ton.

Payne admits farmers may need to put more than one subsidy together in order to make poultry litter economically competitive with commercial fertilizer.

There are different types of litter as well as wide variation in prices and nutrient content, experts say.

In addition, litter can only be spread by specially licensed applicators who buy a state permit for \$15 annually and receive training and continuing education each year. Licensed chicken litter applicators are rare to nonexistent in Western Oklahoma.

James Wilson, the branch manager of the farm cooperative in Drummond, is out to change that. He thinks he can attract enough participation to host a local applicator training workshop after seeing the interest expressed at a farmer informational meeting in late June. He was also advised that he could help farmers cut their costs by purchasing a litter spreader truck

that he could loan out to farmers under a single applicator's license.

Roquet says a truck can spread 175 tons of litter in a day. The South Central region of the country produces an estimated 44,000 tons of litter annually.

Storage is another issue for farmers. Payne says litter needs to be covered with a tarp and can be stored on the ground. However, it is best applied fresh and as soon as possible to avoid volatilization, the process by which nitrogen vaporizes into the air.

Northwest Area Extension Agronomist Roger Gribble says poultry litter will probably work best on very poor soils and be most effective as a way to meet soil phosphorous needs in combination with some additional commercial fertilizer for nitrogen. In that scenario, depending on their specific formula, farmers can afford to pay around \$30 a ton for it, he says. Use of litter will help maintain better soil pH but it won't necessarily raise the pH without a full-scale liming program, he adds.

"If you've done a good job maintaining your soils, poultry litter probably isn't going to help you very much," he says.

Roquet says he is finding that wheat farmers need to apply about 3 tons of litter an acre. However, once applied, they often find they can harvest a second or even a third crop without an additional application.

"It's a one-time deal," he says.

BMPs, Inc. is a nonprofit entity formed as part of a settlement in a Tulsa lawsuit against poultry companies to help distribute litter. The goal of the program is to keep the cost of litter comparable to commercial fertilizer by helping coordinate various subsidies. Executive Director Sheri Herron says she is working with roughly 125 buyers, four trucking companies and at least 30 poultry growers. The litter is being hauled an average of 100 miles.

Recently eased restrictions on moving litter across state lines – out of Arkansas and into Oklahoma – are helping expand the program.

"We have a huge market in Oklahoma begging to get the litter," Herron says.

"Everybody has to evaluate their own situation," says Kyle Hohmann, president of Farm Credit of Enid, who attended a recent informational meeting on the topic along with about 50 other farmers, "Economies will drive it. The concept is interesting. At least it's getting people thinking."

To locate a litter buyer, seller or hauler, visit www.ok-littermarket.org or call 1-800-583-7131. Sheri Herron can be reached toll-free at 1-866-304-2784. She works for BMPs, Inc., a company that coordinates litter clean-out, loading and hauling, based in Farmington, AR.