Getting Handle On Manure, Looking At N Tests, Help Swine Grower Manage Nutrients

ANDY ANDREWS
Lancaster Farming Staff

MARIETTA (Lancaster Co.) — Before the "big snow," Bob Hess recalls a regular plan, even during some mild winters, of emptying the hog manure pit and spreading the nutrients on the ground.

It was all done to "get a good handle on the manure level in the pit," Hess said.

But along came the "Blizzard of '93," which brought one to three feet of snow in mid-March 1993 to areas of the Northeast.

And Hess was stuck, unable to drain the pit. This caused some real problems.

"The pit got full," said Hess. "I vowed to never let it to get that full again."

So in 1994, Hess purchased a 5,000-gallon manure storage tank on a truck, allowing him to apply manure where and when it was needed.

But to get a handle on compaction, he switched to a pull-type tank.

Hess worked closely with the Lancaster County Conservation District to improve soil and water retention through a system of field contours at the farm. This was 1997 — the same year he worked with a local commercial crops consulting firm to develop a nutrient management plan.

Marietta swine farmer Bob Hess noted that with the purchase of a tank spreader, he can get a better handle on pit manure and soil compaction. ***Photo by Andy Andrews***

Hess raises about 5,200 hogs under contract for Hershey Ag. Using the truck has proved beneficial, and Hess can finally get a handle on swine manure.

Hess operates a wean-to-finish farm on an all-in, all-out basis. The hogs are weaned at 12 pounds and are finished at the Marietta-based farm at 250-270 pounds each.

Hess, who obtains hogs selected by Hershey, are fed with autofeeding system. They get the feed in the amounts they want, when they want it.

The whole barn is totally concrete slatted, with a six-foot deep pit underneath the slats.

Because air quality is very important for the pigs, fans pull gasses out of the pit and also help to reduce odors in the barn.

Hess never agitates the pits, so adding bacteria is a "must," he noted, and is a big part ot odor reduction. This keeps manure consistent, so it can be pumped and spread.

Hess farms about 350 acres, included rented ground. About 8,000 gallons of swine slurry are applied to corn ground, about 5,000 gallons to the soybeans, and about 3,000- 5,000 gallons per acre to wheat. The barley gets no swine manure.

Steer manure is applied to ground where corn was chopped for silage. Rye is no-tilled at a one bushel per acre rate for a cover crop.

Hess has tested the manure for nitrogen values. It tests at 5.9 percent N (59 units per 1,000).

He soil tests every year. All nutrient applications are made to test recommendations.

Hess manages 160 acres of corn, 140 acres of soybeans, 40 acres of wheat, and 10 acres of barley.

At one time Hess, in partnership with his cousin Joe Hess, produced tomatoes, but abandoned the project because of an insufficient water supply for irrigation. Though at one time Hess managed about 60 acres in tomatoes, he never stopped considering ways to diversify.

He has expanded his farm operation to include steers. Hess finishes 150- 170 head of lightweight feeder cattle for cousin Dwight Hess, also of Marietta.

With the depressed market price outlook for grain, Hess built a feed room with a TMR mixer and updated the barn on his parents' farm, Andrew and Dorothy Hess. Bob noted that feeding corn to cattle was better than simply cash-cropping the grain.

Proactive Solution

(Continued from Page 20)

According to Steve, it's the farmer's responsibility to manage their manure and avoid violations. With nitrogen-based planning, Steve believes that animal agriculture took a proactive approach to the problem.

"It doesn't matter how many people are to blame, " said Steve. "If you're part of the problem, you need to take your share of the blame and not point the finger. Animal agriculture did that with nitrogen-based planning."

Steve hopes that the industry will do the same with phosphorus-based planning.

"Right now, on a nitrogen-based plan, we can utilize four times as much manure on our ground than I am told we could on a phosphorus-based plan."

In Steve's opinion, different feeding strategies and cropping patterns could be the solution to managing phosphorus.

"Most dairy farmers have the goal to increase cow numbers, and as we increase cow numbers, we have to make sure we're in compliance," said Steve. "A phosphorus-based plan could make it very difficult."

"I just hope the industry comes up with a proactive solution before we have to be reactive."