Pigs on pasture:

taking the 'green' approach to hog farming

by Allison Arikinstall

The old white school bus stood parked in the yard, its charter sign read "Pork Street Bacon Express", giving the impression that this hog operation was serious business.

``I live on Lot 12, Concession 3, South Easthope Township (Perth County) which, in the old days, was known as ` Pork Street'," says Melvin Zehr, who along with his son Steve, runs an 85 sow, farrow to finish operation on 100 acres near Tavistock, Ontario. Zehr has been farming there since he bought the family dairy farm in 1957. The farm remained dairy until 1970, when Zehr started into the hog business, farrowing up to 100 sows. A few years later, the operation expanded into finishing as well, and this is where , the bus fits in.

When we went into the finishing pasture in same management program business we only had a half-ton snuck to take the pigs to market and H took several trips" he added, and such frequent trips from the local assembly yard to Stratford caused severe scour problems in the pigs. When an old bus was put up for sale, Zehr took out the seats, bedded the floor, and adeptly converted the one-time transporter of school children to a spacious hog RV.

"I can bus up to 50 hogs at once and scours don't seem to be a problem anymore" Zehr says. The bus conjures up a vivid picture of 50 contented pigs riding express to Stratford, a good starting point to discover more about the Zehr's approach to swine production.

Computerization

Optimum animal welfare without sacrificing production best describes the Zehr's management scheme. When continued maintenance of conventional penning and feeding became too cumbersome, Zehr decided to make changes and he knew exactly what type of system he was heading for.

``I used to pasture hogs years ago and I really want to work back to that system, and this is one route" he explained. In March of 1990, Zehr installed a computerized feeding station and renovated his dry sow barn to comfortably accommodate about 85 sows. The open floor plan allows sows to move from the feeding station down an alley-way to a wellbedded rest area. Large doors at the end of the barn provide access to a 1.5 acre

alfalfa pasture which was established last year and he hopes that by the spring of 1991 he can start letting the sows pasture outside.

Zehr is extremely pleased with his computerized feeding system. The computer is programmed with each sow's identification, feeding record and fommulation, and with pregnancy and vaccination check dates.

Sows are bred using a Hampshire-Duroc cross which the Zehr's feel gives them better feed conversion, faster growth rates and improved milk quality for suckling piglets. Each sow wears a magnetic tag attached to a collar which is scanned' by a concealed antennae at the base of the feeding trough.

Feeding starts at 4:00 am and nuns on a 24 hour cycle. The computer monitors how much the sow eats each time it steps up to the trough, and once it has eaten its programmed amount, the automatic gate swings open directing the pig out of the feeding station, allowing another to enter. A water bowl is located at the corner of the cemented feeding area and water is also added to the feed to moisten it and make the pigs eat faster and waste less.

Automatic check

`'The average feeding time for a sow is 10 to 12 minutes and a sow will usually eat all of its portion at once instead of making several trips to the trough" says Steve Zehr, who is responsible for the day-to-day management of the herd.

The computer also alerts the manager as to individual sow pregnancy check dates. At 30 days past the breeding date, the gate swings open directing the sow to a different pen so that a check can be made.

At 110 days, again the gate swings open and the pig is guided aside; this time a farrowing vaccination is given. Every day, Steve Zehr examines a printout of the feeding information for every sow and makes adjustments in their schedules as necessary.

This harmonization of husbandry and technology would suggest that the workload has considerably decreased but, as Steve Zehr points out, labour savings are not that great.

"You still have to collar and tag each sow, and once a sow has had its first litter, it must be trained to learn to eat from the automatic feeder" he says. The greatest benefit is that the manager has more time to keep a watchful eye on the herd for any problems that might develop. It is still early to say whether overall sow health or performance has greatly improved since the new system was installed, yet Zehr is optimistic. He feels that by giving sows access to straw bedding, pasture and exercise to the feeding stall, sow longevity, and therefore production, can be improved. "I'm anticipating an extra year of life, hence an extra 2 litters per animal, because of this housing set-up" remarks Zehr.

Reduced mortality

Another goal of the Zehrs' is to improve the weaning facilities. Currently, the Zehrs average is 18 weaned piglets per sow per year. This average is comparatively lower than some producers, but with better facilities Steve expects that weaner fatalities will drop.

All grain (corn and mixed cereals) produced on the 100 acre farm is fed to the hogs, which has resumed in a steadier income for the operation. The Zehrs still have to buy in 50 percent more corn (150 tonnes), all of their roasted soybeans and premix in order to fulfill their feeding program requirements.

Zehr does not want to increase the acreage of the farm to grow more corn or soybeans, potentially decreasing feed expenses, because he wants to plant as few grains as possible so that more forage can be grown in the rotation.

Chris rotation is 2-3 years of corn followed by either winter wheat or spring grains which are usually underseeded to red clover or alfalfa. The red clover is plowed under in the fall, while alfalfa is usually established as a hay stand for a maximum of 2 years. The hay is sold to a neighbouring dairy farmer.

Manure handling

All hay stands, including the 1.5 acre alfalfa pasture, not only relaxes the demand for more row crop production on the Zehr farm, but also helps improve manure handling.

Current manure management practices in Ontario have been criticized lately, with reports indicating excessive nutrient pollution in water systems, and liquid manure has been tagged as a large contributor.

The real problem of liquid manure is that there is a lot of it produced, and if management on the farm can be directed to reduce that amount, then pollution claims can be lessened. By looking at the Zehr operation, you can recognize the changes that are slowly being made to address this problem.

Since the sows only go to the feeding station to eat and drink and then rest in the straw-bedded section, the quantity of liquid manure produced in the dry sow barn has been reduced. A 5-inch wide, 10-inch deep strip along the alleyway collects the liquid from this well-travelled zone as well as the Runoff from the cement feeding pad. The liquids drain into a 3-week capacity holding pit that also holds liquids from the finishing barn and is subsequently pumped to a covered, outside lagoon.

Solid manure is cleaned out every 3 or 4 days with a skid steer loader and is piled on a cement pad outside. It is spread in the fail on red clover before being plowed under and in the spring on an established hay stand. Liquid manure is spread on corn stubble at a rate of 40005000 gallons/acre before plowing. When the dry sows are moved onto pasture, this will again reduce the amount of liquid manure produced.

The Zehr operation is an example of how small changes to an existing system can improve its overall productivity. The new feeding system for dry sows has led to the development of better housing facilities, which in turn is improving manure management on the farm. The next time you see a white school bus driving down Hwy. No. 8 towards Stratford, you'll know what's happening on 'Pork Street'.