



The *New* American Farmer

Carmen Fernholz, A-Frame Farm

Madison, Minnesota

Summary of Operation

- *Diversified crops on 350 acres*
- *Barley, oats, wheat, flax, corn, soybeans and alfalfa grown organically*
- *Feeder-to-finish hog operation, 800 to 1,200 butchers sold annually*

Problems Addressed

Low prices. Compared with mega-sized cash grain and hog farms in the Midwest, Carmen Fernholz is small potatoes. The small size of his swine operation makes it challenging to find economical processing options, given that many buying stations in his area have closed.

Environmental impacts of agri-chemicals. Fernholz would like to see farmers reduce or eliminate their use of synthetic chemicals and make better use of natural controls for environmental reasons, too. “I’m concerned about what we may be doing to the environment, not only by our use of chemicals, but by our tillage practices and the size and weight of our equipment,” he says. He also worries that fewer and fewer people are managing more and more acres of land.

Background

When faced with choices to stay profitable, such as getting bigger or cutting his cost of production, Fernholz chose to trim his inputs, change to organic crop farming and revamp his marketing strategies.

“Even if you don’t sell as ‘certified organic,’ you generally have significantly fewer actual dollars expended to produce a crop,” he says. “You enhance the potential of making more profit that way. And if there is a premium, you’re that much farther ahead.”

Since harvesting his first crop in 1972, Fernholz has worked toward an organic farming operation. In 1994, he became certified after more than 20 years of experimenting and learning about which methods would work best. Now he grows diversified crops and raises feeder-to-finish hogs using organic methods. He has taken charge of marketing the crops and butcher pigs to keep his small farm competitive with larger operations. For example, he helped form an organic marketing agency to provide better market access for himself and his neighbors.

Focal Point of Operation — Efficient crop & livestock production

Fernholz manages his 350 acres of crops using a four-year rotation. In the first year, he plants and harvests a small grain such as barley, oats or wheat. Sometimes he substitutes the oilseed, flax, for the small grain. He under-seeds the grain or flax with alfalfa if he wants a cash crop or another legume to serve as a green manure. In the second year, he will harvest the alfalfa before tilling it under in late fall — or simply till in the alternative legume in the spring and shorten the rotation by planting corn. The field will be planted with corn in the third year and soybeans in the fourth. The entire process then starts over with small grain or flax.



Jim Scordahl

Carmen Fernholz receives a premium for organic soybeans, but says it's just one of many reasons to grow organically.

“With this kind of rotation, you divide those 350 acres roughly into fourths,” Fernholz says. “Then, I’m able to spread the workload throughout the season.”

Fernholz grows about 10 to 15 acres of flax each year for sales to specialty and health food stores. He is hoping to help fill a new niche, as flax has been touted as a source of omega-3 fatty acid, which helps reduce cholesterol. He yields about 15 to 20 bushels of cleaned flax per acre.

Without question, an organic system is more labor-intensive than a conventional one, Fernholz says. However, reducing the cost of production is more important than receiving premiums.

“I farmed organically and had organic production on some of my acreage for over 20

years before I sold anything organic,” he says. “Being able to cut those costs brought me through the ’80s when we had those really depressed prices.”

Fernholz has found he must compress certain tasks, primarily those with small windows of opportunity, into smaller units of time. For example, Fernholz watches the calendar carefully to control weeds. He monitors soil temperatures to predict the best time to plant and times harrowing and rotary hoeing to achieve the best results.

“If I’m going to be out there with a rotary hoe or a spring-tooth harrow, I’ve got to be there within a certain time period,” he says, “whereas with applying Roundup, for example, there’s a larger window of time.”

Fernholz hires a limited amount of labor each year. In the past, he hired high school students to pick stones and chop weeds. Recently, as his rotations have improved soil conditions and limited weeds, Fernholz has been able to manage most farm work himself. His primary labor expense is in hiring custom labor to cut and bale alfalfa.

Fernholz combines raising his crops with the production of 800 to 1,200 feeder-to-finish hogs each year. Fernholz works with his brother and nephew to pull off a successful feeder-to-finish operation. His brother owns and operates the breeding and the farrowing operation. His nephew does the same with a hot nursery and delivers the six- to eight-week-old pigs to Fernholz’ farm as needed. Fernholz raises his pigs in confinement with some limited access to outside pens, storing manure in pits underneath and alongside

the hog buildings. He hires a custom applicator to spread manure from his hogs.

Fernholz sells hogs on the conventional market — because the feeders come to him from a conventional hog nursery — through a buying station that he operates about 10 miles from his family farm. Between 1997 and 2000, the station served up to 50 farmers in a 30-mile radius. Under the arrangement, farmers let Fernholz know how many head they have to sell. He then coordinates truck transportation and works with a National Farmers Organization office in Ames, Iowa, to secure a buyer. Farmers bring up to 100 hogs to the station for shipping each week.

To obtain advance contracts, most producers need to raise 40,000 pounds of carcass, or 225 head, which can carve small producers out of the market. By pooling their product, the hog producers with whom Fernholz works are able to secure their market price in advance.

“We were losing market access, and that was critical,” Fernholz says. “If a group of us can each contribute 20 to 25 head toward a forward contract, then we can all price-protect ourselves.”

Economics and Profitability

Premiums for organic grain are a welcome bonus, but must not be the primary reason to grow organically, Fernholz says. He receives about \$16.50 per bushel for his organic soybeans, but he says he has not found a consistent market for organic oats, wheat and other grain crops.

Despite his demanding labor requirements, Fernholz says the organic system saves money because he spends less each season than his conventional counterparts who buy costly chemicals. What he would be spending on chemicals he can turn around and spend on labor — or do the work himself and avoid

\$20 to \$30 an acre for fertilizer and another \$20 or \$30 an acre for herbicides.

Fernholz likes the ability to spend input dollars differently than conventional producers. He usually budgets the \$40 to \$60 per acre that another grower might spend on fertilizer and chemicals for buying or retrofitting equipment or for mechanical weed management.

“The money I spend on equipment adds equity to my portfolio,” says Fernholz. “Where my organic system really shines is that I don’t need to borrow operating capital.”

Fernholz also has taken charge of marketing his grain to insulate himself against loss or nonpayment. Many organic buyers, smaller in size and more vulnerable to market forces, renege on contracts. Fernholz does not take that chance. The Organic Farmers Agency for Relationship Marketing coordinates the efforts of area producers, and Fernholz sells all of his crops through the umbrella group.

Flax is a particular challenge that Fernholz has tried to meet head-on. Prices for organic flax have thus far soared above conventional; he sells flax seeds for human consumption at \$1 a pound, which translates into about \$50 to \$60 dollars a bushel — compared to \$5 to \$8 a bushel for conventional varieties.

Environmental Benefits

Fernholz’ four-year rotation enriches the soil with nitrogen from growing legumes as green manure. He practices ecological weed management, crowding out most weeds during the first year of his rotation when the small grain is under-seeded, and, in ensuing years, through timely use of a rotary hoe and spring-tooth harrow.

Fernholz is proud to be an organic farmer, both for improving the soil on his small farm and for what his system represents in the world’s food production system. He is very

aware of his impact on natural resources, the regional economy and his community — and knows that most other organic farmers feel the same.

Community and Quality of Life Benefits

Fernholz works very closely with the University of Minnesota and its Southwest Research and Outreach Center at Lamberton, with whom he is cooperating on a research project on organic conversion. He is a guest lecturer at the university’s St. Paul campus several times each year and participates in other events throughout the state.

In addition to helping area farmers with the buying station, Fernholz serves as a willing mentor. In the spring, he averages three to four lengthy phone calls with other farmers every week. Over the years, he estimates, he has reached thousands of farmers, many of them at summer field days he has hosted for the last 15 years in conjunction with the university research project.

Fernholz is active in his community, too. He serves as chairman of the Sustainable Farming Association of Minnesota, was a charter member of the board of directors for the Minnesota Institute for Sustainable Agriculture and spent one year holding the University of Minnesota School of Agriculture Endowed Chair in Agricultural Systems.

Transition Advice

Fernholz enthusiastically recommends organic farming. It’s important, he says, to draw upon self-confidence and a belief in the value of eliminating purchased chemicals.

“Go into it not for the market, but for the philosophy of environmental enhancement and cutting costs of production,” he says. “The premiums should only be an afterthought. You have to believe in yourself and that you’re doing the right thing.”

Each year is variable, and what worked last year will not necessarily apply in subsequent years, he says. However, small grain farmers planning to switch to organic methods should be able to do so with little expense because they can use the same equipment.

“If you’re willing to put in the time, it’s definitely not expensive,” he says. “You might have a failure here and there and, because of the learning curve, you might temporarily suffer a little in yield. But you have significantly less capital outlay. Consequently, your economic exposure is less.”

Seeking out information and resources makes transitions easier, he says.

The Future

Fernholz continues in his quest for better ways to farm organically and improve his profit margin. He and other growers have formed a “marketing agency in common” to pool organic grain production. “It is one more thing we are trying to do to develop an economic power base for marketing,” he says.

Fernholz also is considering raising organic poultry. He likes the quick transition period, which is just a matter of weeks. “I’ve started to toy with the possibility,” he says.

■ *Mary Friesen*

For more information:

Carmen Fernholz
A-Frame Farms
2484 Highway 40
Madison, MN 56256
(320) 598-3010
fernholz@frontiernet.net

Editor’s note: This profile, originally published in 2001, was updated in 2004.