



The *New* American Farmer

Charles Johnson & family

Madison, South Dakota

Summary of Operation

- *Oats, corn, soybeans, spring wheat, rye and alfalfa grown organically on 1,600 acres*
- *150 head of beef*

Problem Addressed

Raising commodity crops organically. It runs in the Johnson genes to be chemical-averse. Not only do they wish to avoid inputs because of the annual expense, but Charlie and Allan Johnson also follow their late father's wish to improve the soil rather than harm it with non-organic substances.

“My dad was always of the strong belief that if he couldn't put it on the tip of his tongue, it wasn't going to go on his land either,” Charlie Johnson says. “That was his litmus test, literally, as to what was going to be used on the farm. He really had a strong belief that conventional fertilizers and chemicals were harming the soil and the life that was in the soil.”

Background

The Johnson brothers use tillage and diligent management to run their 2,400-acre grain and livestock farm. That means that the farm is self-sufficient in controlling pests and in producing what is needed for the nutrition of the soil.

“We don't think you have to bring lots of inputs onto the farm,” Charlie Johnson says. “So, we're not into buying seaweed or a lot of the so-called sustainable, organic products that are available. We believe that our farm management and our tillage practices, along with our rotations, will control the weeds and the pests, and provide fertility for us.”

The Johnson brothers' late father began farming in the mid-1950s. Bernard Johnson had been “tinkering around the edges” of using organic-only practices in the 1950s when he heard a speech from an Iowa group called Wonderlife. The group was promoting a farm fertility product, but “Dad bought more into the idea than he did the product,” Charlie Johnson recalls.

The senior Johnson converted the farm to an organic operation in 1976 when Charlie was just getting out of high school. He was way ahead of the pack, and his peers scoffed at his approach.

“It was a family decision that we were going to go organic cold turkey,” Johnson recalls. “There was no textbook. There was no manual. There were no organic premiums, there was no market. We basically did it for the philosophy of it.”

Focal Point of Operation — Organic crop management

The Johnsons use a balanced, well-managed six-year rotation to produce a wide variety of crops, with soybeans as their main cash crop on their tillable land. The first two years of the rotation are in alfalfa hay. Alfalfa controls weeds and fixes nitrogen, while its deep taproots loosen the soil to improve tith.

The alfalfa is harvested and baled both years. The Johnsons then chisel plow two or three times in the fall of the second year. They then broadcast rye in the fall for a green manure cover crop between the second and third year. The rye is disked under the next spring, when the Johnsons plant soybeans. The fourth-year crop of either corn or wheat is followed by another year of soybeans. The sixth year is sowed back to alfalfa with oats as a nurse crop. Only the crop of oats is harvested that year, with the alfalfa left to come through the following year, when the rotation begins again.

Johnson says they always try to have an equal number of acres of all the crops. So a third of the ground is in alfalfa, a third is in soybeans, and a third is in the mixture of oats, wheat and corn. There are approximately 60 different fields of six acres to 55 acres.

In addition to the cropland, 90 acres are listed in the federal water bank program. That usually is a ratio of one acre of water with one acre of upland ground. It has been sowed to permanent grasses. Johnson says they receive a small payment from the federal government to keep the land in the water bank.

A large, 5,000-acre watershed drains into Buffalo Creek, which cuts through the farm. The Johnsons maintain a 10- to 15-acre buffer seeded in switchgrass, bromegrass and alfalfa around the creek and other prairie potholes so the sensitive wetlands areas are in permanent grass.

“We don’t plant any crops into that buffer strip,” Johnson says. “It’s something we’ve just done on our own, not as part of any program. We are able to take a crop of hay off in the fall of the year when the other crops are all harvested.”

They also use that area for incidental grazing



USDA photo

For the last few years, the Johnsons have sold organic soybeans for between \$8 and \$14.50 a bushel.

for the 150 head of brood cows and their calves.

They have tried rotational grazing on land that is too wet and too rocky for crops. The cattle are divided into about six or seven different units of 20 to 30 head each. Breeding bulls are also run with the cows. The pastures are divided into paddocks, so the cattle will be on 10 to 15 acres for a couple of weeks before rotating to a new paddock.

The Johnsons invest more in personal labor than they would in a conventional operation.

“In our area, especially with the technology and equipment available today, a lot of farming units will take on anywhere from 3,000 to 5,000 acres,” Johnson says. “My brother and I operate 2,400 acres and actually that’s probably more than we should handle.”

On their 350 acres of soybeans, for example, they make one trip to rotary hoe, followed by three cultivations. “Beginning in late July, we walk soybean rows every morning with a machete or corn knife, cutting the wild sunflower, cocklebur and ragweed,” he says.

“My 15-year-old has a host of friends who work out there with us.”

Economics and Profitability

While their crop yields are comparable to other operations, and may even lag up to 15 percent behind for crops such as beans and corn, their organic premiums help them maintain profits. Organic soybeans are their main moneymaker. They sell their soybeans through a broker who sends the grain to an organic processor for cleaning and bagging and, in return for their dedicated management, earn impressive premiums. For the last three to four years, they have sold soybeans from \$8 a bushel up to \$14.50 a bushel. That’s a big improvement over conventional prices, which run about \$4.50 a bushel.

The Johnsons also sell some corn and spring wheat organically for as much as \$4 a bushel and \$6 a bushel, respectively. They are beginning to sell more of their products cooperatively through the National Farmers Organization in Ames, Iowa.

The alfalfa is all used to feed the cattle and the remainder of the organic grain is fed to

the hogs and calves. Although raised organically, the hogs and beef are primarily sold through conventional channels. They sell some beef on a “private treaty” basis, where individuals purchase an animal and have it butchered at a local locker.

Johnson’s neighbors can spray 200 or 300 acres in a day, either having it custom done or with their own spraying unit, he says. Most of them apply Roundup once and have weed control for the whole summer. That’s a material cost the Johnsons do not have to pay, but their bill comes in labor. Most workers are family members, although they hire school kids to help with weeding.

“Organic farming certainly does involve what I call both time and labor management,” Johnson says. “I’ve got to be able to sense when I need to cultivate, when I need to plant and when I need to rotary hoe. It’s not something you just strictly do by the calendar.”

Environmental Benefits

Like their father before them, the Johnsons have made a commitment to improving their soil. They feel that a healthy soil nurtures life: plants, animals and humans.

“If we take care of the life in the soil, in essence we take care of the life that lives on top of the soil, like the livestock for the farm and the wildlife,” Johnson says.

They have few problems with pests. “I always take the premise that God and Mother Nature gave us 100 percent. And if they need 10 or 20 percent for their own use you give that back to them,” he says. “As far as any major infestations, I really don’t usually have any problems, not any more than what our neighbors do.”

Creating permanent wetland buffers has helped wetlands water quality, according to a SARE-funded study at South Dakota State

University. Forage vegetation trapped half of the nitrogen and phosphorus that would otherwise have ended up in the wetland, the study found.

That wetlands management has made better habitat for wildlife. By enhancing the many wet areas on his farm — called prairie pot-holes in the upper Midwest — with vegetative buffers, Johnson has created wildlife havens that he thinks are badly needed.

“I really feel that we’ve lost a lot of our healthy wildlife since we’ve gone to more of a conventional approach in agriculture since World War II, with the prevalent use of harmful herbicides and fertilizers,” he says.

Community and Quality of Life Benefits

Johnson and his brother work closely together to continue the family partnerships begun by his father and uncle. As Johnson’s children become older, they also will become more involved in carrying out the family philosophy and traditions, while gaining valuable work experience for their futures.

It’s taken a long time, but the Johnsons are starting to attract notice in their community — and now not only because they’re viewed as kooky.

“I think there’s a quiet respect for what my brother and I are doing,” Johnson says. “Twenty-five years ago, others were laughing. Now, even though they’re not doing what we’re doing, they will ask questions once in a while.” Johnson tries to respond to that interest by speaking to farmer groups, especially during the winter when he has more time.

Transition Advice

Johnson recommends that farmers don’t make the transition “cold turkey” like they did 25 years ago because the profit will not come in the short term. However, “if you’re interested in a farming system that rewards

both your labor and your management, this is the way to go,” he says.

Producers who would like to convert to organic production can — and should — take advantage of informational resources, such as the Northern Plains Sustainable Agriculture Society. Johnson advises farmers to visit successful producers. “It really helps if you can get on someone else’s farm and see that it’s actually possible,” he says.

The Future

Johnson would like to improve his rotational grazing, breaking the practice into weekly — or even daily — units. Beyond his operation, Johnson sees a future agricultural system with two tracks: agribusiness farms and small, intensively managed farms. Because the first track “is the type of system where we take the farmer out of farming, having it all done on a custom basis,” family farms — employing rotation, tillage and site-specific measures — will shoulder the burden of preserving rural communities.

As each year passes, more farmers are getting into organic farming. “If we’re really interested in keeping our rural communities out here, we need to have people involved in agriculture,” he says. “We need more people. And the only way we are going to do that is with this type of farming and management.”

■ *Mary Friesen*

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