

Dean and Mary Dickel, New Century Farm
Shullsburg, Wisconsin



Dean Dickel takes his eggs to Madison, Wisconsin, each Thursday in this refrigerated truck.

“Traditional” Doesn’t Mean “Old-fashioned” on Dickel Farm

In 2003, Dean and Mary Dickel’s Southern Wisconsin New Century Farm sold more than a million organic eggs from 4,500 laying hens housed in a handful of small, renovated buildings that once held hogs, cattle, and horses. Ten years after starting by selling turkeys and a few eggs to neighbors, egg sales provide the Dickels with the majority of their family income.

They had no experience with poultry when Dean began managing a small laying flock for his landlord in the early 1990s. Dean had grown up on a conventional Iowa livestock and crop farm, but couldn’t make it financially in the 1980s

with a 600-acre hog and cash crop operation of his own. Dean went back to school for a degree in journalism, and for a decade worked at newspapers in Iowa and Illinois, sometimes writing articles about farmers. He clearly remembers visiting a Wisconsin dairyman who relied on management-intensive grazing for his cattle and tried to avoid “farming” because he couldn’t afford to “farm.” “That was the most profound thing I ever did,” Dean describes. He started doing more articles about farmers who were successfully employing alternative production and marketing methods. Dean, who was becoming tired of working for someone else, started plotting his return to agriculture.

Dean and Mary, who also worked for the newspaper, developed two goals. One is to be “economically viable,” which to Dean means setting his own price for his products while adopting production strategies that control costs. The other is to be environmentally and ecologically sustainable, and thus provide a legacy of stewardship for future generations. The Dickels wanted a good environment in which to raise their two children.

While still working their newspaper jobs and living at the rented farmstead, the Dickels gradually expanded their laying flock to 900 hens as local demand for their eggs grew steadily with relatively little marketing effort. In 1996 they purchased seven acres that had a house and several older outbuildings, and started building the egg business toward a goal of 3,000 laying hens. Dean quit the newspaper that year, and Mary quit two years later, although she still does part-time writing and editing work.

Facilities and operations

From the start, Dean’s production model was driven by his goal of developing egg marketing into a year-round enterprise that could provide a full-time family living. Dean felt that a pasture-based production system that kept groups of layers housed in portable buildings regularly rotated among grass paddocks, would not meet his marketing goals. He said the farm is too small for pasture programs that have capacities of 250 to 450 birds per acre. Also, weather conditions in southern Wisconsin normally allow layers to be pastured for little more than six months each year. Dean views pastured poultry as fitting within a diversified marketing program in which eggs are a seasonal product.



New Century Farm’s new egg processing and storage building under construction.

However, the Dickels felt they needed to differentiate their eggs from larger competitors. They decided to certify their operation under organic standards, which require organic feed and access to the outdoors when weather conditions permit. Dean considered building a new facility capable of housing at least 3,000 birds while also providing an outdoor run, but did not like the prospect of paying for it. “And I wasn’t sure I would have the markets for that many eggs right away,” he explains.

So he decided to pursue a strategy of gradually renovating the farmstead’s existing buildings by clearing inside spaces of obstructions and adding heating, insulation, and ventilation. Two smaller sheds hold about 750 laying hens, while a third houses 1,500. Each provides about one-and-a-half square feet of free-roaming interior space per bird, while the outdoor lots offer at least ten square feet during about half the year. Dean recently started contracting about 30 percent of his production out to an Amish farmer who manages the hens in similar fashion.

Three times a year, the Dickels purchase a group of 1,500 day-old chicks from a proprietary breeding firm. They prefer a breed that lays brown eggs because the shells tend to be thicker and less likely to break during transport, and because their customers prefer brown eggs. The young birds spend 17 weeks in one of two renovated starter barns heated with gas-fired brooders and bedded with about four inches of wood shavings. Laying buildings are also bedded with shavings. “The big thing you learn about chickens is that you have to keep them dry,” Dean emphasizes.

With a portable mill, Dean mixes a laying ration that includes organic-certified corn, soy meal, a small grain, a vitamin-mineral pre-mix, and a free-flow calcium product. He struggled to find affordable feeding equipment that could be converted for use in his cage-free buildings. “It’s real tough to automate these small buildings in Wisconsin,” he warns. “With 98 percent of the laying in this country done in cages, you’re kind of on your own if you want to do things differently.” Eventually Dean found a used, push-button feeding system from a pheasant barn that includes flexible augers within 1.5-inch diameter piping. He suspended the auger 18 inches above the floor, and it drops feed into pans below. Water is supplied by a low-pressure valve system fed by overhead pipe. The laying buildings are kept at 50 to 60 degrees through the winter months.

Each spring, Dean waits until warm weather has settled in before opening the doors to dirt lots bounded by 4-ft high wire mesh that is topped with a single electric wire to keep predators from climbing over the top. He said egg production decreases about five percent when the move is made. “But they definitely are healthier from being outside,” he said. The building lights are left on after sundown to draw the hens indoors each night, although the access doors remain open during warm nights. The facilities are cleaned once a year with a skid loader. Dean composts the material and sells it to local farmers.

Dean said he used to worry about major death losses since organic rules prohibit antibiotics. However, predators and suffocation caused by flocks crowding into corners have proven to be more serious problems. “Compared to disease, we lose five times more chickens to smothering and accidental death,” Dean said.



Layers have access to an outdoor run for about half the year.

Egg processing

Old-fashion laying boxes hang from the walls, and eggs are gathered each afternoon and placed in plastic milk crates. The boxes are bedded with wood shavings, which keep eggs cleaner than straw bedding. Cleaning, sorting, and packing take place in a converted one-car garage attached to the farmhouse. Dean found a used processor for \$2,000. Dean places the eggs on a conveyor chain at one end of the unit. They pass over a high-sodium light to be candled for cracks before going through a hot water wash. After washing, the eggs are automatically sorted by size at the other end of the processor. Mary places the eggs into cartons with a bar code and "New Century Farm" labels. Most are then packed in boxes holding 15 cartons, and placed in a cooler. Dean then loads many of the cartons into a refrigerated panel truck for delivery to customers. Daily tasks normally take Dean and Mary about one-and-one-half hours to complete.

Marketing

"What makes this whole thing work is the sales," Dean asserts. "I enjoy sales. If I have something I believe in, I can sell it." About 80 percent of New Century Farm eggs are sold in Madison, Wisconsin. Restaurants buy 30 percent of the total volume, with groceries and food cooperatives accounting for most of the rest. Each Tuesday Dean spends two or three hours on the telephone with his regular customers to determine how many eggs they need. Each Thursday he makes the 90-minute drive to Madison. With 30 stops throughout the city, the trip usually requires at least 12 hours to complete.

The farm's wholesale price is \$2.25 per dozen. Sales have steadily increased even though in 2003 Dean raised the price 25 cents to cover rising feed costs. He said this increase was easier to make because general egg sales and wholesale prices have risen sharply, driven by the popularity of high-protein, low-carbohydrate diets. Dean also credits the relationships he has developed with store and restaurant managers, and the flexibility he is willing to offer in helping these customers balance their inventories. "They get the eggs they want, when they want them," he explains. Dean believes that such service, along with low overhead, will keep his business competitive.

The farm's sales vary seasonally, with demand peaking during the Thanksgiving-Christmas baking season, and falling sharply during hot summer weather. The Dickels were forced to dump eggs during the summer of 2002, but in 2003-04, more often than not, they did not produce enough eggs to meet demand. In early 2004, Dean was purchasing 25 percent of his total egg supply from an Amish group in Iowa. Although this was cost-effective, Dean was not excited about making the 300-mile round-trip to obtain these eggs. "We've turned the corner from being just a producer to being more of a marketer," he said.

Organic production

In early 2004, Dean struggled with whether to maintain organic certification in the face of rapidly escalating feed costs, including soy meal that had reached \$800 per ton. He said organic certification was important in developing his customer base, but may not be necessary to maintain that business. "Organic eggs have become a commodity, so customer service and cost are important," Dean said. "Organic gets you in the store, but quality and freshness keeps you there."



Until the new processing building is ready, eggs are manually candled for deformities and sorted for size in the Dickels' garage.

Growth concerns

The Dickels are also debating growth. In early 2004, the Dickels were making plans to build a new processing and egg loading facility that would provide the option of handling at least twice as many eggs with their current processing equipment. Dean said he and Mary do not want to put any additional labor into the business, but also need to face the reality that sales must increase to match rising expenses. "I hate to say that, because I used to say that's what's wrong with agriculture," he said. They hire help to gather eggs two days a week, and Dean is considering expanding contract production to more growers. "Rather than giving up my customers, I would rather hire someone to take care of my chickens," he explains. "I don't think integration is bad. It's just who's doing it."



Inexpensive laying facilities include wall-mounted egg boxes and a recycled feeding system housed in an old hog building.

The farm may also diversify its offerings rather than greatly increasing egg sales. The Dickels have provided some restaurant customers with vegetables from their market garden, and Dean would like to offer pasture-raised pork produced on contract. He is also thinking about starting a specialty breeding and hatchery business to produce hens that would do a better job of maintaining body condition and producing thick-shelled eggs under non-cage, organic production management.

Words of advice

The lack of automated equipment scaled to smaller poultry operations is a problem, Dean said. The organic egg market has become more competitive, and finding sales outlets is getting more difficult as major retail chains assume a larger share of the organic market. These stores want track records and prefer to deal with wholesalers who can provide a variety of products with each shipment. Dean said start-up egg producers need to realize that they are not going to automatically have markets for all the eggs they produce at the prices they want to receive. It is better to grow slowly as the markets allow, rather than cutting prices on a large volume of eggs produced in the early stages. Overproduction is an unnecessary burden and financial drain. While producing too little for the marketplace is a lesser financial problem, it can be frustrating to both producer and customers.

Dean said that he learned from his first farming experience that financial management must not be neglected. Either the manager must be proficient in all aspects of accounting and finance, or these tasks should be farmed out to an expert. Most important, he urges prospective egg producers to gauge whether they would enjoy operating such an enterprise, and have the skills to be successful. "Just because something is profitable on paper doesn't mean it will work for everyone," he said.