

Why Pasture-Raised Eggs Are Better for You and the Planet

An Interview with Chloe Nevarez of Happy Hens

In February, Steven Schindler, Price-Pottenger's executive director, and Ed Bennett, curator and long-time board member, visited the Happy Hens egg farm, which has been given a top rating on the Cornucopia Institute's Organic Egg Scorecard. In the following interview, Happy Hens co-owner Chloe Nevarez provided them with a personal look at the running of a family farm and shared a great deal of information on what makes organic pastured eggs superior to their conventional counterparts.

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Price-Pottenger: Would you give us some background on how Happy Hens got started and why you produce pasture-raised eggs?

Chloe Nevarez: My husband, Luie, started Happy Hens in 2012, and he's been providing pasture-raised organic eggs from the beginning. Prior to that, he worked with his family, who have had a conventional egg ranch since 1957. Luie was raised on that ranch, but he always had the desire to do things differently. Even as a kid, he raised free-range rabbits for meat.

In 2011, after getting an agriculture and business degree at Cal Poly, Luie returned to the family farm to help his parents. He's very innovative, and he wanted to switch over the farm to be completely free range because that was the best model he knew at the time. He helped them for about a year, during which time he converted three of their buildings to meet free-range standards.

After he started selling eggs to Whole Foods, one of their vendors asked if he would be interested in doing something called "pasture raised." He had never heard of that, so he began to look into it and eventually flew to Texas to see a pasture-raised farm in action. He spent about a week there

and became convinced that he could start his own pasture-raised egg business. He decided to learn to weld, make his own mobile barns, and do whatever was needed to produce tasty and nutritious eggs while leaving the lightest possible environmental footprint. That's how Happy Hens started out, and it just grew from there.

Price-Pottenger: How did you meet Luie and get involved with the business?

Chloe Nevarez: My family wanted to find local eggs, and my sister came across Luie's eggs at Whole Foods. When we realized how close his farm was to us, we started coming out to the farm to buy eggs directly from him.

Around that time, my grandfather, whom I had been taking care of, passed away, and I was trying to figure out what to do next. I came up with the idea that, if Luie would teach me how to raise chickens on land my family owned, I could produce eggs for him to sell. At that point, his biggest challenge was that he didn't have enough product. Then I found out that he also wasn't properly marketing his product because he didn't fully realize its value, and I offered my help with that, as well.

At first, he was completely dead set against working with me because I didn't look to him like somebody who would last long in chicken farming. I was persistent, though, and finally he let me try out a job on his farm. I believe he initially gave me really difficult tasks, thinking that I would wash out quickly. But I kept hanging in there, and I was very interested in learning, which surprised him. After a while, I started taking over our delivery routes, and then I started doing all the sales and marketing, and expanding

our reach. Eventually, we were able to get additional leases on adjoining land, which made everything easier.

It's rare to meet people who have integrity and great character, but Luie is such a person, and we developed a friendship. Neither of us had a romantic goal, and that allowed our relationship to grow really organically. Now, here we are, married with three kids and one on the way.

Price-Pottenger: Why do you refrain from feeding your chickens soy and corn?

Chloe Nevarez: When I was only 21 or 22, I developed an autoimmune disease. I started having weird symptoms that didn't make any sense to me because my diet was so clean. One doctor told me I probably had cancer, but I eventually learned that my condition was something called ulcerative colitis, which basically means the whole gut is inflamed. The doctors wanted to remove my colon, but I did not consider that an option. I also decided that I wasn't going to take any of the medications that they recommended. I figured that something was creating the dysfunction in my body, and there had to be some way I could heal it.

So I started seeing a functional medicine doctor, who said that I needed to stay away from a wide variety of foods, including corn and soy, both of which can create inflammation in the body. I went on such a limited diet that bone broth, avocado, coconut oil, and sardines were virtually the only things that I could eat. At that point, I wasn't even able to eat eggs from our farm. I realized that there had to be many other people with similar problems, and I wanted to do what I could to help us heal.

Luie and I started experimenting with a small test flock of about 200 chickens to see if altering parts of their diet would affect my ability to tolerate their eggs. I was working with a pastured poultry nutritionist and trying to figure out what ingredients I could use and what I couldn't. After about two years, we had a line of test birds that were corn- and soy-free, as well as our regular line, which produced at a higher rate. We wanted to enable our birds to produce really well and, at the same time, we wanted to create an egg that was superior and easier to tolerate for people with various health problems.

After removing corn and soy from the test birds' feed, I saw a huge difference in how their



Courtesy of Chloe Nevarez

Luie and Chloe Nevarez with their children at Happy Hens egg farm.

eggs affected me. I was able to eat those eggs without having any immune response. Then we started working with other people—cancer patients and people with egg allergies and autoimmune disorders—who found they were able to consume these eggs after being unable to eat eggs for a long time. It seemed clear that corn and soy were creating dysfunction in people's bodies, so we switched our whole flock over to be corn- and soy-free.

Price-Pottenger: Would you explain the difference between pasture raised, free range, cage-free, and other labels?

Chloe Nevarez: There's so much confusion around labeling, especially for a consumer going into the grocery store. The choices can include cage-free, free range, and pasture raised, as you mentioned, as well as organic, regenerative, and non-GMO. We are now labeling our eggs as "truly outdoors."

The cage-free label means that the birds live in a building. They're not inside cages, but they do not go outside at all. Most barns are temperature regulated, and the birds are not even getting fresh air. Basically, they're living in an apartment.

Free-range birds are allowed access to the outdoors. They might live in a big barn with an area called a porch that they can go out into, but whether or not they actually go there is another matter.

Right now, the term *pasture raised* is unregulated. If you go to a market and see pasture-

raised eggs, it's hard to know the farmer's practices. Do they have 20,000 birds in one stationary barn with open doors or do they have mobile barns and hens that actually spend time outdoors? There's no way to tell if all you have to go on is that term.

The Certified Humane standard for pasture-raised hens requires that they have access to a pasture area measuring at least two and a half acres per 1,000 birds. In comparison, Luie and I have 10,000 birds on about 65 acres—more than double those requirements. We label our eggs as "truly outdoors" because we want people to understand that our hens actually spend their waking hours outside. Their barn is just a place for them to sleep and find safety.

Price-Pottenger: What does the truly outdoors lifestyle look like for your hens?

Chloe Nevarez: Our birds live in mobile barns, which we rotate onto new pastures continually. There are 500 to 600 hens in each barn, and a whole flock run in the same pasture together. A flock consists of anywhere from 2,500 to 5,000 birds, depending on pasture size.

The hens get to roam free throughout the day in pastures, fields, or hillsides, enjoying a lifestyle that is natural for them. They don't want to hang out in a barn; they want to be outdoors. But when they are inside, roosting, they have the feeling of safety and security that hens need. If there are aerial predators, they're able to go inside or hide underneath the barn.



Courtesy of Chloe Nevarez

Mobile barns are rotated onto new pastures regularly.

Our goal is to have the birds stay outdoors in the daytime, getting sun and dining on bugs, native grasses, and the oats and barley we plant every year. This creates the nutrient density that you will find in our eggs, which surpasses that of standard egg operations. The hens also have the option to supplement their diet with the highest quality, organic, 100% corn- and soy-free feed, containing ingredients such as field peas, milo, alfalfa, sesame seeds, and wheat.

In addition to the feed, which is delivered automatically, their barns are equipped with fresh water from a gravity-fed tank, and the hens have a lot of perch and nesting space. We interfere with them as little as possible, so that they will truly exhibit their natural behaviors.

Price-Pottenger: Would you discuss the nutrient value of pastured versus conventional eggs?

Chloe Nevarez: Mother Earth News conducted an egg-testing project in 2007 that involved 14 farms across the United States. Their study found huge differences between the eggs from truly free-ranging (pasture-raised) hens and those raised in confinement. Compared to USDA nutrient data for commercial eggs, pasture-raised eggs contained, on average, one-third less cholesterol, one-quarter less saturated fat, two-thirds more vitamin A, two times more omega-3 fatty acids, three times more vitamin E, and seven times more beta carotene. Later Mother Earth News tests found that pastured eggs had four to six times as much vitamin D as typical supermarket eggs.

That all makes sense, because those are things that hens get from the outdoors. Pastured hens are exposed to direct sunlight, which their bodies use to manufacture vitamin D that is passed on to their

Pasture-Raised Chicken Is Movement Based

“Pasture-raised poultry describes a farming method that builds on the core idea of outdoor production and flock movement. The simplified version is that the chickens or turkeys are raised outside in portable shelters; the shelters and the flock are moved to fresh pasture regularly, allowing the previously grazed area to rest and regenerate....

It is the movement-based model that puts the birds outside on the grass in the sunshine. This builds nutrition in the chicken and eggs. Movement-based pastured poultry ensures healthy chicken that can be raised without coccidiostats or other antibiotics. The model of regular movement followed by a period of rest regenerates the land by building soil and improving fertility.”

—Excerpted from “Access to Pasture Is Not Enough to Make Pasture-Raised Chicken,” on the American Pastured Poultry Producers Association (APPPA) website. Learn more at: apppa.org and view the Pastured Poultry Consumer Buyers Guide at getrealchicken.com.



Courtesy of Chloe Nevarez

Pasture-raised organic eggs provide more nutrition than conventional eggs.

eggs. Beta carotene, some of which is converted to vitamin A, comes from grass and other vegetation. And with all the exercise the hens get while foraging, it's no surprise that they have a lot less LDL cholesterol.

However, among the fourteen farms, some produced eggs with substantially more nutritional value than others. I feel that really highlights the importance of knowing your farmer and how they raise their hens.

Price-Pottenger: Do the flavor, texture, and color of eggs differ based on how the hens are raised?

Chloe Nevarez: Definitely, according to my palate. When we travel, we usually don't even eat eggs because of the difference in texture and flavor. If you cracked one of our eggs and compared it to a standard conventional egg, you would see that our yolk stands up better and the white is fuller.

A lot of people seem to think that if an egg is dark orange, it is superior to other eggs—but that's not necessarily true. The color can easily be manipulated with food coloring or other feed additives. Luie and I don't want to deceive anybody. We follow nature's pattern. There's a lot of green grass right now, so the yolks are going to be much darker than they will be in the fall and winter. As the seasons change, so does yolk

color. I feel that consumers are coming back to the idea that variants in nature are normal. If you are buying locally grown and raised food and it doesn't vary based on the seasonal conditions, I would be skeptical because that doesn't follow the pattern of nature.

Of course, only about 2% of the population shop at farmer's markets and are concerned about where they can find local producers. Approximately 98% shop at grocery stores. So our goal has been to target grocery stores in order to bring quality eggs to the vast majority of people. We appreciate working with grocery stores like Whole Foods, Erewhon Market in Los Angeles, and Jimbo's Market—a local chain in San Diego County—which are really interested in providing healthful food.

Whole Foods actually has an egg rating system, and Outdoor Living is their highest grade. The others are Pasture Raised, Outdoor Access, and Cage-Free Plus. There are only six farms in the nation that meet their Outdoor Living standard, and we are one of them. I find this kind of thing, which serves to educate consumers, to be very encouraging.

Price-Pottenger: Would you talk about your relationship with the land and how you view your role as a steward to ensure its health and sustainability?

Chloe Nevarez: Everything starts with the land. Land, animals, people is always the progression, because whatever goes into the land is going to affect the health of the bird and the quality of the egg, which will then affect the person who eats it.

We don't till the ground; we use other farming methods in order to maintain the root systems, so that even in the hot summer, we still have vegetation. We still have plant matter on top of the ground, holding moisture in the soil. That moisture helps maintain



Courtesy of Chloe Nevarez

Abby Nevarez gathers eggs from a mobile barn without disturbing the hens.

the life of insects that the birds will feed on. Maintaining the root systems also prevents erosion and wash-outs.

In addition, rotating our mobile barns disperses the manure evenly across the fields. That manure creates more life in the soil and increases the nutrition in the plants because our birds' diet is clean and organic. As I mentioned, some people have 20,000 birds in one stationary building, and even if their chickens go outside, the majority will stay close to home. They are going to have a ton of manure all localized in one spot, which is going to be bad for the soil.

Around 2017, Luie and I started leasing a piece of land that had been overgrazed by cows for perhaps 50 years. It was incredible to see, from one year to the next, the difference made by our barn rotation pattern. Where we ran the barns, the grass was at least up to my husband's hip, and he's six foot four. In the other areas, the grass was only about five inches tall. Clearly, the land is thriving from the nutrients that our birds are putting into it.

Price-Pottenger: Do you raise your own chicks?

Chloe Nevarez: We don't hatch our own chicks, but we raise them from one day old. We work with a certified organic hatchery, and the birds come directly to us the day that they're hatched. At that point, they've never even had feed, so we determine what goes into them from the start. We give them everything we can to ensure that their gut health is exceptional. We feed them kelp to increase immunity, we add apple cider vinegar to their diet, and we provide additional nutrition that will create a really healthy gut microbiome, which will help the birds thrive.

We are also very selective in terms of their ancestry. I think that hybridization can create a lot of health issues, so we definitely steer clear of that. We try to stay with birds that are going to produce well and do well in our climate, such as Brown Leghorns or Rhode Island Reds, although we also have some Americanas and Easter Eggers, which lay different colored eggs. You get lower production from those birds—about 60 to 70%—but we normally maintain a production rate of about 90 to 92% among our flocks.



Courtesy of Steven Schindler



Courtesy of Steven Schindler

*Top: The mobile barns have ample room for roosting.
Bottom: Steven Schindler at Happy Hens.*

Cornucopia Institute's Organic Egg Report and Scorecard

The Cornucopia Institute has produced an indepth report titled “Scrambled Eggs: Separating Factory Farm Egg Production from Authentic Organic Agriculture” that examines the production models common in the organic egg industry today and assesses their relationship to the objectives intended by the organic label.

Their accompanying Organic Egg Scorecard rates certified organic brands based on criteria that are important to organic consumers, such as legal and legitimate outdoor access, humane animal care, and adherence to organic principles, including farm diversity and nutrient cycling.

This web-based rating tool, most recently updated in March 2023, can help consumers discover which brands of eggs found in their region are produced using the best organic farming practices and ethics.

Find the report and Organic Egg Scorecard at cornucopia.org.

Price-Pottenger: Is the purpose of your roosters to produce fertile eggs?

Chloe Nevarez: Our perspective on roosters is different from that of most people in commercial operations. They generally feel that there's no reason to keep roosters because they will eat a lot of feed and not produce anything for you. In contrast, we believe that roosters are a natural part of our flock.

We also find that roosters help a lot with aerial predators. There are golden eagles up on the mountain near us, and if an eagle or hawk flies over, the roosters will make a very specific cackle noise and all of the hens will run underneath the barn. The roosters will stay on the corners and all around the barn to keep the hens safe until they can come back out. It's pretty incredible to see that process as nature intended it to be.

As to the comparative nutritional value of fertile and infertile eggs, I've read two different perspectives. A variety of articles say that there's a huge difference in nutritional value, while others state that there is no difference. About 80% of our eggs are fertile (not to be confused with incubated), and I for certain think they taste better than any other eggs.

Price-Pottenger: Do you have a lot of problems with predators?

Chloe Nevarez: We had a lot of issues with predators when we first started out. Each barn had movable electric fences around it, but they were only four feet high, and coyotes could jump over them with no problem. When we heard that llamas are really low maintenance and great at keeping predators away, we got three females—but they didn't help at all. We found out later that was because they were so close together. I think that because llamas are pack animals, they were mostly concerned about protecting each other and weren't worried about the chickens. Today, we have only one llama, named Dolly. She keeps away some aerial predators, as well as strangers who come up to our fence line, but



Courtesy of Chloe Nevarez

she only works 10 to 15% of the time. If she's busy eating, she's not going to be bothered by a hawk. Because of that, our dogs really make the biggest difference.

We have Anatolian shepherds, a breed of dog known for protecting livestock. They remain in the pasture with the birds 100% of the time. They have their water, their feed, and their house set up there. The dogs do quite well at keeping the coyotes and bobcats away. They have brought our loss percentage down to less than 1% for predation, which is very good.

Price-Pottenger: Is avian flu a concern for you, given the good health of your chickens?

Chloe Nevarez: Avian influenza will impact an outdoor system more than it would an indoor one because it's spread by migratory birds and their manure. Our farm would therefore be at much greater risk than any standard operation. However, the degree of risk has a lot to do with birds' migratory patterns and whether there is a pond or other body of water nearby.

We have two friends in Northern California whose flocks ended up getting avian influenza because they're right in the migratory path of wild geese. Both have completely outdoor-based systems, and both had really healthy birds. One had a flock of 40,000 birds, half of which died from one day to the next. The other experienced a similar loss.

The USDA has said that anybody who has organic birds, or whose certifier requires outdoor access, can keep their birds indoors for the time being because of this situation. But there's no way we would ever leave our birds in their barns, because that is not what they're meant for. We're going to just do the best we can.

Price-Pottenger: What are the most important criteria to consider when choosing eggs?

Chloe Nevarez: If I were going to buy eggs from a store, I would want to vet the farmers in advance. If that was not an option, and I had to rely on labels, I would choose eggs that were 100% organic. At the very least, I would want them to be non-GMO.

Optimally, I would want to make sure that the hens have outdoor space and that the farms are either pasture-raised or regenerative operations, because generally the people who make those claims are following some kind of standard. The Cornucopia Institute does an amazing job of investigating such claims and providing consumers with transparency.

We often lose sight of the fact that what the birds eat will affect what's going on in our own bodies. Personally, I would purchase an organic egg over a pasture-raised, conventionally fed one. If the chicken is conventionally fed and pasture raised, what it consumes and what it puts back into the land will be toxic. I want my birds to eat things that will be beneficial to the land and will enable them to produce nutritious eggs that benefit our health. 📖

Chloe Nevarez is "Mother Hen" and co-owner (with her husband, Luie) of Happy Hens egg farm in Ramona, CA. Chloe and Luie operate a farm store at Happy Hens, and offer farm tours by appointment. They also distribute their eggs at markets and co-ops throughout San Diego, Orange, and Los Angeles counties. For more information and to see a list of stores that carry their eggs, visit happy-hens.com. You can also reach them at 760-870-5162.



Courtesy of Steven Schindler