



# Small Farm Yields Big Results

## Pastured Poultry Central to Diversified Livestock Operation

The Stuarts have scaled up to produce 600 pastured meat chickens and 100 layers.

BY JILL HENDERSON

In the pastoral country near Gerald, Missouri, one hour southwest of the sprawling metropolis of St. Louis, Serena and Fred Stuart make the most of farming on 7 acres. Their enterprise is focused on poultry production and heritage hogs and cattle, but also includes beehives, a large garden and more. Serena said that their intent from the beginning has been to raise healthy, sustainable food for themselves and their community in the most holistic way possible.

Fred grew up on his family's farm, and after studying computer and electrical engineering in college found himself working in three-month stints in Antarctica as a computer tech assisting research scientists. After nine years of going back and forth between his job and the farm, Fred dreamed

of a farm of his own. It was around this time that Serena, trained as a forensic psychologist, was beginning to feel burned out by her 10-year career coordinating outreach programs for victims of domestic violence. She, too, had begun thinking about a simpler way of life. The two met, fell in love and together founded Stuart Farm in 2012.

Their early goal was to build a small-scale poultry operation, which they did with their first batch of 200 broilers. Each year the Stuarts increased the number of chickens in their pastured flock by a few hundred while slowly adding heritage breed hogs and cattle.

"When we started researching breeds to raise we knew we wanted livestock that did well in our climate and on the fescue forage so common here," said Serena. Today, the Stuarts

have scaled up to 600 pastured meat chickens and 100 layers.

### LIVESTOCK OF A DIFFERENT BREED

The Stuarts chose Freedom Ranger hybrids for their meat birds although the breed is slower to mature than the more traditional Cornish Cross. They typically start butchering roosters at 9-10 weeks and finish the hens at 11-12 weeks. Serena said that they have found the foraging ability and flavor of Freedom Rangers to be superior to all others. "Our older customers often say that our chicken is like the chicken they ate growing up – tender, but not mushy, with lots of chicken flavor."

The Stuart's laying hens are Delaware and New Hampshire, both heritage breeds.

"We keep about 100 hens and one to two roosters," said Serena. "They



do well in our climate and, while not as high in production as some of the hybrids, we like their steady egg laying and excellent foraging ability.”

Once the Stuarts had their poultry operation up and running, they slowly branched out into hogs and cattle. Fred always admired the Belted Galloway breed, and the couple started off with two breeder cows that were soon followed by an American Milking Devon cow/calf pair.

“The American Milking Devons (AMD) were exactly what we wanted – excellent quality beef and milk that could be raised on lower quality forage.” And since AMDs do better on a grass/hay-only diet, Serena says they were the perfect cattle for their needs.

“AMDs are incredibly versatile animals. In addition to meat and milk, they also make excellent oxen, which can be any sex or breed of cattle that have been trained to follow commands and generally serve as working animals. And while we did milk for a short time and trained a cow, a calf and our bull simple oxen commands, our focus right now is on beef production.”

It wasn’t long after the Stuarts zeroed in on AMDs that they learned of their endangered status as a heritage breed. “We didn’t start off trying to save a breed, but that’s what ended up happening. With their numbers down to fewer than 100 in the 1970s, this cattle breed, which once helped establish the 13 original colonies and settle the West, was the inspiration for the formation of The Livestock Conservancy. Today, our herd has 14 of the less than 2,000 registered AMDs in the world.”

The Stuarts found their heritage breeds to be such hardy and efficient foragers that when it came time to invest in hogs, they chose Tamworths.

“Our hogs were chosen for their foraging ability, long bacon sides and pork that is lean, yet well marbled and flavorful. A lot of specialty cured meats are made with pure Tam or Tam crosses, and Tams are also known for large litters, being great mothers and gentle keepers,” said Serena. “We have three to four breeders and a boar so we can raise our own feeders to our specifications.”



PHOTO BY KIM CARR PHOTOGRAPHY

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The Stuarts keep all of their livestock on pasture year-round, which they feel decreases the incidence of respiratory issues and makes their animals hardier. As the couple’s interest in heritage cattle and hogs grew, so did the amount of pasture they needed.

“We now utilize 50 acres of pasture and hay ground next door at Fred’s family’s farm,” said Serena. “On this, we can run eight cow/calf pairs, one bull, five to six yearlings, three breeder sows, one boar and 15 to 20 feeder pigs through large, subdivided paddocks. The hogs can utilize the wooded areas for shelter and additional foraging opportunities. We also keep between two and five cattle on the home place, depending on how much grass we have available.”

### SOIL, FEED & FORAGE

Seven years into farming, the Stuarts say that their main job is to feed, protect and heal the soil.

“The questions that we keep in the forefront of our farming practice include what needs to be amended, which animals need to go on or be taken off pasture and what land needs to rest. Poor soil and quick fixes will give you nothing in return,” Serena said. “We’re not just chicken farmers or hog farmers or cattle farmers – we’re soil farmers. If the soil is sick, so are we.”



PHOTO BY STUART FARM

Serena and Fred Stuart on their farm in Gerald, Missouri.

On Stuart farm, the animals are crucial to managing quality pasture.

“Chickens and cattle get rotated through pastures to balance feeding while not damaging forage or soil. Whatever the animals take off, they need to replenish with manure,” she said. “We designate certain pastures for hogs because of the rooting they are allowed to do. This year we are using them to till a pasture that does not produce much forage so it can be naturally fertilized, reseeded and rehabilitated into productive ground.”





Serena Stuart teaches two intensive, limited-attendance hands-on poultry workshops on the farm twice a year.



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They intentionally feed winter hay on poor pasture so the cattle can eat what they want and the rest is left to decompose and feed the soil.

"Each new bale is set close to the last to create a nice covering of spent hay, manure and urine. Some of our pastures have a lot of clay and are very rocky, so this practice adds organic matter to build the soil."

It is also important to the Stuarts to keep a portion of the land they farm in a natural state. This includes preserving both open and wooded areas as natural habitat for wildlife.

"We have a lot of goldenrod, milkweed, black-eyed Susan, sumac, brambles and other native plants that support the wildlife we need to help maintain pasture health. Poisonous plants like cocklebur are pulled by hand."

In addition to building quality pasture, the Stuarts are dedicated to providing their livestock with healthy non-GMO feed. When they started out, organic and non-GMO grain and other feed was hard to come by locally and often cost-prohibitive.

"We always ask our customers to support local farmers, so we have to put our money where our mouth is," said Serena. "We now buy non-GMO corn and wheat directly from our neighbors. The corn is grown next door, the majority of our wheat comes from a farm about 5 miles away and our non-GMO soybean meal comes from southern Missouri, just 3 hours away." The mineral and vitamin supplements they use come from the Fertrell Company in Pennsylvania, and the Stuarts are local authorized dealers.

Fred and Serena are also big believers in fermented grain rations.

"Fermenting feed is not a new thing," said Serena. "All my old-timer friends talk about the barrel of wet feed their grandparents gave the hogs. Soaking and fermenting the ground corn and wheat makes it easier for the animal to absorb more of the nutrients. Hogs process their food fairly quickly, so we ferment to make sure they are getting the most out of it. Fermented feed also acts as a probiotic for optimal gut health, and since they process more of their feed, that means less poop."

Serena says another benefit of feeding fermented grain is ensuring the animals take in enough water. "A bucket with 2 pounds of grain will also have about half a gallon of water soaked into it."

## POULTRY PROFITS

The majority of Stuart Farm's profits come from their poultry operation.

"Like most small farmers, we started by selling our products to family and friends," said Serena. "Then we were asked to produce chicken for a small CSA. We did that for two seasons, but it really wasn't for us because we were behind the scenes and not making a connection with the people buying our chicken. We started going to farmers' markets as a way to meet the people who bought our products and to help them understand what it is we do to produce their food."

Serena says that a lot of people ask to see the farm set-up and help with processing, so they started to offer classes.

"While it started as a way to increase the farm's income, after our first class we knew what we were really doing was passing on a lost skill. In our first three years of farming, we learned so many time-saving techniques and made so many mistakes that we wanted to help others start ahead of the curve by passing on helpful information."

Serena offers two intensive, limited-attendance hands-on poultry workshops on the farm twice a year. The

all-day Raising and Processing Meat Chickens Workshop is limited to just five students and includes a hands-on butchering session. The second all-day class is Raising Chickens – The Basics. This workshop is limited to 10 students and begins with a farm tour. A bonus is one year of direct personal support.

With the poultry operation making up roughly half of the farm's income, the Stuarts are studious and careful when it comes to processing, storing and delivering a quality product. At the time of writing, they and other poultry producer-processors like them across the state of Missouri are required to register with the Missouri Department of Agriculture.

As an on-farm poultry processor butchering 1,000 birds or less, the Stuarts are given permission to sell their processed birds off-farm. "Every year or so an inspector will come out and speak with us about our set-up and processes, answer any questions we have and inform us of any new regulation changes," said Serena. "Having the 1,000 or less exemption has allowed us to raise our meat chickens exactly the way we want to. We are one of the few producers we know of that do on-farm processing, and it's what sets us apart from our competition."

Over the last year or so the talk going around the region suggested that the Missouri Department of Agriculture was considering new regulations that would restrict on-farm processed chicken to being sold on-farm only. "If a change like this was made, it would close down our chicken production and cost us over a third of our income," said Serena. She stressed that a huge part of why they chose to process their own birds on-farm was to avoid stressing the birds.

"Besides not wanting to stress our chickens, the cost and time of driving to and from the processor multiple times, additional freezers to keep the product below 32°F during transport and the added cost of processing and packaging would make selling chicken an unprofitable situation for us."

When asked why she thought the MDA was considering this regulatory

move, Serena said that they had recently noticed an increase in the number of large poultry CAFOs going up in their area where there had been none before. She and other small producers in the region have heard talk that one of the mega-poultry corporations is planning to build a massive poultry processing facility in the area.

### MOVING FORWARD

Despite what may come in the future, the Stuarts stay focused on their customers.

"Maintaining our connection to the customer is what supports our business," said Serena. "We can produce all the pastured meat anyone could want, but without people knowing who we are, what we do and why we do it we wouldn't have made it this far." Fred adds, "It is very satisfying knowing that the work I have done that day directly affects our life and our business. Serena puts in just as much time working with the animals as she does at the computer writing blog posts, posting to social media and sending emails to customers shar-

ing recipes, health tips and farm stories."

Serena said a lot of her job is education and helping consumers reconnect to their food. "Explaining what we do, why we do it, and how it all fits together is some of the most important work I do. Talking to customers at the market, on Facebook, through my blog posts, gives people a peek into what farming really is – the not-so-picture-perfect real deal. Now that we've opened our own farm store, people can come out and shop when it's convenient for them, meet the animals and see what we do."

#### NEED MORE INFORMATION?

For hands-on learning at Stuart Farm, attend Raising Chickens – The Basics class on May 12 or the Raising and Processing Meat Chickens Workshop on June 9. Visit [stuartfarm.com](http://stuartfarm.com) or [facebook.com/stuartfarmllc](https://facebook.com/stuartfarmllc) or call 573-764-2324.

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