

## **Bringing resilient systems to isolated farms Kentucky State University**

The Kentucky School of Craft at the Hindman Settlement School was the site of one of the most novel farmer and homesteader outreach events in the South. With the assistance of foundation grants, the Kentucky State University Farm Extension Service has been travelling the state equipping small farmers with the equipment and education to start livestock enterprises. They have a whole series, though this series in Hindman focuses on two workshops: rabbit production and poultry production. Both were outdoor workshops, occurring in the school's parking lot- with educational sessions and lunches in the School of Craft building.

A flatbed trailer attached to a big farm truck is parked alongside all of the activity. It is loaded down with lumber, thick gauge fencing, PVC pipe, rolls of wire fencing, tools, and boxes and boxes of feeders, valves, and othersuch. It held enough to start a whole farm operation, but for good reason. They were going to give every attending family or individual a constructed rabbit hutch as well as all of the materials to make a chicken tractor big enough to house 40-70 birds. Laura Rogers is working the table. She's a kindly and quiet woman with a small brown hat to shade her face and shoulders from the summer sun. Appearances can be deceiving. She is a juggernaut. Her charge is to organize and educate farmers throughout eastern Kentucky- one of America's poorest and most difficulty-fraught regions in the United States. For her relaxed demeanor, one wouldn't think that she spent her days travelling between 10-12 counties at any given time. Her concentration is bees and pastured poultry. She had been working around the county the whole week to locate homesteaders and small farmers to attend the weekend's courses. She is also charged with all of the follow-up visits.

The lot was lined with tables stacked with supplies, each table lined out with everything needed to construct a 3-compartment rabbit hutch. Valued in the \$300 range, these are going to go home to the people at the tables constructing them. Two big and very friendly energetic men work their way between the tables making sure everybody understands and are able to complete each stage of the construction. These men are Steve Skelton and Tehran Jewell, or TJ. Also workers, educators, and organizers with the extension program. They travel the state and sometimes other states with this programming, intended to equip poor and beginning farmers with the tools they need to go as far as they want. They can use these rabbit hutches for personal consumption or they can begin brooding rabbits and build more cages to start a commercial livestock operation.

There are people of every age, from a thin lone grandmother to a middle aged couple and their two children. A group of local children also arrive on a van charged with assisting people wherever the need arises. There are homesteaders here- such as the Gearharts, the aforementioned couple. They have been living in the Hindman area for about six months now. They lived out of state for much of their lives but returned to Kentucky to the husband's family's old farm. This farm, as with many in Eastern Kentucky, has been in the same family for countless generations. The Gearharts resolved to provide a simpler, more honest life for their children. They've been hard at work renovating and rehabilitating the farm house and have made enough progress for it to be liveable. They've also planted enough seed to provide for themselves throughout the summer growing season as well as the winter.

Others live on small plots and are primarily subsistence farmers. Some are new to farming, having lost the great wealth of knowledge that was once commonplace in the minds and lives of their grandparents and great-grandparents. They are here to recapture lost knowledge. There are others who are laid-off coal miners or miners who sense that their trade will soon be coming to an end. They are here to learn ways to grow their own meat, to make living without the wages and lifestyle that they had become so

accustomed to.

As the sturdy mesh panels are fastened together, people start chatting across tables- meeting new neighbors and talking about their gardens- stopping to walk over and ask the other about how many panels to snip out for the doors or feed trough mounts. A couple folks polished theirs off quickly, down to the trim and the little hay feed mounts and feed troughs. Both the rabbit hutches and the chicken tractors were designed by Steve Skelton. They meet all of the necessary space requirements and have every creature comfort needed, including watering systems that can be attached to fairly large tanks and tied into multi-unit systems.

As build projects progressed, there were enough newly trained helpers to free up Tehran, or TJ's time to be able to talk. Like the other organizers of the event, he wears many hats. For over a decade he has been hard at work in the area around Bowling Green creating a producer cooperative comprised of 15 farmers. They have a small amount of livestock but vegetables are their passion and concentration. Like many Kentucky farmers, he maintains a balance of sustainable and organic farming practices and conventional. They use mainly natural fertilizers and crop rotation systems to ensure soil health. They will, however, use conventional antifungals if it means being able to keep a viable squash crop. His dreams are lofty, but not untenable. They are working to address many of the problems inherent in commercial food systems. One of their critiques of locally grown produce is that the unit prices are prohibitively high for working people to consume regularly. One of the objectives of the Bowling Green cooperative is to produce enough of a bumper crop to be able to drive their prices down. They hope to be able to offer fully ripe food for similar prices that one can see in a local Wal-Mart. TJ sees the job of the Kentucky farmer to be one of addressing public health crises that not many people even consider. One major one is that big box stores and conventional marketplaces don't sell food that has been able to stay in the field long enough to develop any truly substantial nutritional value. His major example is tomatoes. They are picked and shipped green. Produce like tomatoes are shipped that way because they can then be gassed before being put on market shelves. He sees it as a form of starvation. He mentioned that we are eating food that is nutritionally bankrupt. So even if we are eating lots of calories, and patting his tummy mentions that we can even grow bellies, but we aren't getting the nutrient density that we had access to generations ago. These gassed green tomatoes don't contain the levels of lycopene and vitamin C present in crops that are allowed to come to full term on the plant.

Lunch time arrives and everybody files into the old school building to where Steve's wife has prepared chicken and vegetables. In true Southern fashion, there is plenty for everybody to get their pick with plenty left over for anybody who is interested to indulge in seconds. After the meal we all gather around for the rabbit production workshop where everybody is given paper copies of care guides and breeding schedules. Gestation times, breeding rules, and recommended breeds among other things. They are very interested in encouraging prospective producers to be able to stay in touch, so their contact information is readily available at the header of almost every article.

He recommends first of that the best breeds to grow for meat are New Zealand Whites and Californians. He reminds people to stay away from the giant breeds because their bone structure is so much bigger that they don't have much in the way of meat. The giant breeds such as the chinchilla also take so many more resources to get to weight. He recommends 18% protein feed and mentions that he gets his feed for \$10.40 a bag. He mentions this because he had heard from other people in the group who already had a few rabbits that they were paying \$15 a bag for 16% protein feed. He makes recommendation against feeding rabbits straight alfalfa or red clover that has already bloomed and suggests something like Tennessee Orchard grass would be preferable. He tells the group to keep an eye on rabbits just as one would chickens, and if one gets the sniffles it is best to remove them from a cage near any of the other rabbits and to clean it's water line to prevent transmission. To help them

recuperate, he recommends a single capful of regular household peroxide mixed into their drinking water for a week. Rabbits get colds just like humans do. Peroxide helps to flush out pathogens. He says the same can be done with chickens who get colds. He also treats his rabbits every month with apple cider vinegar. It's not a medication, but more of a health tonic for them and it stabilizes their red and white blood cells as well as a fortifier for their immune systems. Steve usually mixes a gallon of apple cider vinegar to a hundred gallons of water. Many of these treatments work for other animals. He mentions other livestock that can make good use of apple cider vinegar; chickens, sheep and goats. It's said that if you give apple cider vinegar to sheep and goats, you'll see more females being born. He doesn't confirm or deny that, but still gives them the vinegar to fortify their immune systems. "Because a live animal is better than a dead one."

He recommends against treating them with any medications. If anybody has a hutch with wood in the framing, there are good chances of getting mites. These will infect the ears of the rabbits. Steve says the best treatment for mites is a mineral oil or vegetable oil. Put it in the top of their ears and let it run down and cover the ear really well. If the rabbit is chewing a lot of fur off, chances are that it has fur mites. The best way to treat them makes them unsellable on commercial markets- which is putting a wormer at the base of their neck. It removes mites and worms. Mites can be transferred from one rabbit to another quickly. For sore feet, it's cheapest and easiest to put cheap ceramic tile down. Those can be cleaned regularly and they also provide cool surfaces for them to rest on when it is hot. Steve covers so many aspects of rabbit care...even touching on rabbit boredom. If a rabbit is seen chewing on a lot of stuff "Chances are, it's bored." He recommends putting a piece of 2x4 wood in for them to chew on. Non-treated, of course. Ash limbs are also good options and apparently rabbits love grape vines. "they get that sap and sugar outta them, they love them grape vines."

He mentions the many many resources online and books but has a very sensible and silly warning: "if you do everything that these professionals tell you, you're gonna be livin' in that rabbit cage and he's gonna be sitting up in your chair watching your t.v." Care is important, however. He mentions feeding them every day at the same time. His are fed between 5 and 5:30 every day. They come right to the front of the cage and he can see their eyes and ears and check on their health. Six ounces is the max you should feed them. If you feed them too much, they'll get too fat and won't breed. Freezing a water bottle and keep it in the cage with them in hot weather. This will prevent heat stroke and combined with the ceramic tile will make quite a comfy cage.

This workshop is definitely a quick course but he covers every aspect of care, even breeding. A man speaks up and asks about gestation. Steve replies 28-35 days. He reminds people of the importance of keeping breeding cards to track their fertility as well as their lineage. He says when checking for successful breeding, "you know that it took when that buck falls off." If the buck is brought in the next day and she resist, then chances are she's pregnant and Steve recommends marking it on the card and watching her. At fourteen days, you should be able to reach under her stomach and be able to gently squeeze and feel nodules. For market viability, a doe should successfully produce eight babies per litter. It takes four to pay for the overhead of breeding and feeding and then the next four are the profit margin. He encourages anybody who is buying from a breeder to be able to get a copy of the breeding card.

Steve is quick to engage potential market farmers. "If y'all start raising rabbits and get more than you can handle, I'll buy 'em." These Kentucky extension agents are exceptional because many of them are farmers themselves. They are testing their ideas and developing the markets with their own labor which they do in addition to any extension service office or field work. He'll pay \$1.50 a pound. The only other buyer will offer \$1.50 for white rabbits, \$1.25 for colored rabbits, and \$.85 for bucks or

older does. He offers \$1.50 to be able to not only offer a solid price across the board but also to make his accounting work, which is mainly undertaken by his wife.

After a solid lunch and a good educational session, everybody filed back outside to complete the last of the workshop. People went around helping each other to cut and fit trim and people began to load out for the day. Every person was issued a ticket which they redeem at the end of the day to be able to take all of the supplies that have been offered home. This ensures that everybody is registered for followup and that people are getting their allotted amounts. As trucks were loaded and secured, you can see the excitement in their faces. This is not only a jump-start on being able to start small rabbit operations, but it has also been an exciting and empowering learning experience. The people slowly trickled out of the parking lot and onto the road to make their way out of Hindman to their small homesteads to put their rabbit hutches in their new homes.

The next day was a bit less hands on, but that is because it was a pastured poultry workshop where the chicken tractors are too large to be hauled in any normal-capacity trucks. So for this workshop, people sat in rows of chairs as Steve and TJ assemble the chicken tractor. It is a very straight-forward construction. As with the rabbit hutches, there are detailed handouts given which not only cover the construction of the chicken houses but also care, market prices, and of course contact information. It is a very durable, but very simple construction, mainly comprised of 2x4s, chicken wire, and a thicker guage fencing that is folded over the top. The whole assembly is light enough for one person to be able to move and the doorway is high and wide enough for anybody to pass through. As they make the cuts and assemble the frame, they field questions and joke with each other and the spectators. Some spectators even get in on the fun and folks find themselves giggling almost as much as they are learning. A lot of people who had come to the rabbit workshop the day before are present, but there are also a few new faces. One is an older woman who has numerous chickens of differing breeds- both egg chickens and meat breeds. She offers to sell or trade a few to anybody who needs startup stock. Since this session isn't hands-on, there isn't the bustle and work of the day before. We all take a leisurely lunch and mingle and get to know the broader context of the Kentucky State work.

Our host is the Hindman Settlement School. One of the people who has been doing so much of the behind-the-scenes work is Jacob Mack-Boll. Jacob is a younger fellow, in his twenties. He strikes us as intelligent and intentional about the life he is living and the work he is doing. However, he isn't the type of person to wear that on his sleeve and he patiently works in conversation to meet people halfway. He is a very recent transplant to Kentucky and it is his unique perspective and warm personality that makes him a good ambassador and educator. He is from an hour west from Lancaster county Pennsylvania. He was raised by Mennonites, and considers himself in many ways still culturally and ethnically Mennonite. He is an organizer with the Grow Appalachia initiative. The group of children that came to the rabbit workshop were from a Grow Appalachia partner, the Laurel County African American Heritage Center. Their chaperone was Wayne Riley, an active organizer with both initiatives. They've been building programming together for the last seven years.

John Paul DeJoria, the founder and owner of Paul Mitchell hair products had an employee from Eastern Kentucky who was very concerned with food security issues. They resolved to build a program that gave a hand up, and not a handout to people in need in Appalachia. They are working in five or six states. They've been able to sink a couple million dollars into organizations that already have a base and relationships in the community. The program in Knott county has some fifty families. They are building community information sharing to help to grow organic subsistence gardens. They are using applications from commercial operations to be able to effectively optimize garden production. Whether it's organic pesticides or plastic netting which can be used easily and effectively at home for

multiple years. Hortinova plastic netting is good to grow beans. They call it tech-assisted small production. They have informational workshops on planning, food preservation, maintenance and pest control. They also set up volunteer crews to come out and aid elderly and disabled people with tillage or raised beds depending on their needs.

Eastern Kentucky is one of the most biodiverse areas in the U.S. And one of the most biodiverse temperate rainforests in the world. Jacob thinks that some of the things that lead to the ecological resilience of Kentucky food systems is its isolation. There are bee populations in Eastern Kentucky that aren't exposed to industrial ag at the level that is seen elsewhere in rural states. But with tight mountains and a bunch of people living in low tiny hollows, there are lots of socially tight groups of people but not many actual economic ties.

Jacob sees that Eastern Kentucky has been the focus of a lot of outside funding, a lot of charity, a lot of federal aid. So much of the region has been so dependent on an "unemployer" instead of finding ways to create a livelihood for themselves. He's interested to see how this will play out in a post-coal economy. A lot of this aid isn't rooted in the areas that they are being dispersed. Farmers are a minority and culturally are so completely different from a large portion of the populace. They are driven by autonomy and self-sufficiency. Tools that a lot of the rest of the populace don't have access to. However, there are very few CSAs. There are a number of farmers markets to supplement farmer income but there is still a distinct lack of market support infrastructure. He recalls talking to a family down the road who were ordering CSA shares from Pennsylvania. There are even people who drive two hours to pick up fresh produce and to go on grocery runs. The markets in Knott county are small, but they are slowly growing. The market that Jacob is helping to coordinate is just being set up. They haven't yet been able to institute SNAP and WIC programs and Jacob is excited to see how the attendance changes and how people's perception of the market changes. In so many other places, the great bulk of income in farmers markets come from food voucher programs.

The two markets in Hindman occur twice a week. Once at the sports complex and one at the extension office. He has concerns that there isn't a high level of visibility for these locations. They are considering finding a more central location. Neither of the market locations they have are visible from the road. The one upside is that everything that people bring to market sells out. The difficulty with this is that sometimes they run out by the time a customer comes to shop. They are working on locking down a couple of consistent weekly growers. They have a tough time because as with most food system workers and organizers, they all have full time jobs on the side. With most of the resilience studies, this usually signifies that a farm is in trouble, but it is the norm in Kentucky.

Coal jobs have been dropping drastically, so it is a scary time for a lot of people. The positive side to Jacob is that there is an incredible amount of potential for building new enterprises and organizing opportunities. He saw the need for engagement in Eastern Kentucky and that is what drew him from PA. There's been a sea change in rhetoric, going from complete coal reliance to an acknowledgement that there needs to be diversified energy options. The overall tone has been changing in that aspect. He appreciates the sense of place and rootedness. Most people in Kentucky wouldn't dream of leaving home and he is glad that he has been made to feel accepted, not only as a person, but as a codeveloper and teacher.

As the afternoon progressed, the stack of metal and wood on the back of the big flatbed truck dwindled and dwindled. The kids ran down to splash around in the little creek next to the parking lot and some folks settled in the shade of the trees. This was once a high school, and there are still rooms upon rooms that have yet to be filled by folk school programs or settlement school workshops. In merging

cultural work, teaching food preservation and folkways, they are helping in their way to build a more resilient Kentucky. In their partnerships with Grow Appalachia and the university farm extension offices, they are planting the seeds to create a greater market.

Finally, with one last collective effort, the final truck has been loaded and strapped and the remaining people make for the dining area to rest. Steve Skelton is physically a bit fatigued but he is the type of man that has the passion and drive to be able to talk about farm systems and organizing even after days of workshopping and construction. Sitting down at the table, it only takes a few moments to get down to brass tacks.

When asked about what makes for a truly resilient food system from the farm level, he believes the main thing is having a good clean product and have a good presentation. Every time he goes to a restaurant to sell rabbit, or meets up with other farmers, he is sure to bring some rabbit to show the quality. He also brings along a printed "Kentucky Proud" certificate. This is a major incentive for restaurants especially because the state of Kentucky has an incentive program that reimburses food service industries for each purchase of Kentucky proud certified produce whether it is rabbits, beef, squash, or berries. Kentucky Proud status also puts you on the website as a producer, which brings extra buyers to you.

He'd like to get animal welfare certification but cannot because they require that the rabbits are pastured. "They want you to raise them on the grass and everything because they think that is humane, This is far from healthy for rabbits because they are prone to, but if they knew the whole story that these rabbits on the ground would get coccidiosis." If they are processing rabbits and the inspector sees a spotted liver, they will take a knife and split the ribs and toss it aside. Rabbits who have been infected with coccidiosis cannot be marketed. Steve a lot of the time will take them back to his own coolers for personal consumption. Cooked properly, it isn't a huge problem but it definitely isn't worth the risk of taking them to market.

He believes one key to a resilient farm is having a viable, clean product and being able to talk to people. He has a list of 35 restaurants in Louisville. If he can find other rabbit producers to outsource from who can consistently produce clean, healthy rabbits, he'd love to be able to reach into those markets. He is a fan of Kentucky's 30 day law, where you have a thirty day wait between receiving and processing livestock. He wants to be sure that any chemicals that may have been fed to the rabbits from other people has been flushed from their system. "The most they're gonna have in 'em from me is apple cider vinegar."

Steve buys many, but has had to start raising some because he has such a high demand. He's picked up three more growers, but they won't be ready for a few months. He has a guy from Virginia that he'll go on a four hour drive to visit. He'll pick up 200 rabbits. He's very careful in his process. He drives there and stays the night so he can drive directly home after picking up the rabbits. He'll stop on the side of the road and make sure that the rabbits are properly watered and immediately puts them up when he gets them to the farm and makes sure that they are healthy and stable. He'll sell between 300-350 rabbits a month, but he could more than double that if there are enough rabbit farmers.

Rabbits are healthy because they are low in cholesterol and fat. They are so lean that it is said that you would starve if you ate only rabbit because you wouldn't be getting the fats and other nutrients that are needed. There are several ways to cook them. The main obstacle is lost foodways. One time recently, Steve was talking to a friend of his at an Italian restaurant. He reminded his friend of how widely used rabbit has been historically in Italy. "Back in WWI, rabbit was the number one meat source in Italy."

His friend replied that he still didn't know of any recipes. "I keep pestering him. Everytime I go eat there I bring it up. Maybe I'll break him down." he says good humoredly.

There is only one other person that markets rabbits in Steve's area. When they run out, they call each other so it is a relationship built on economic cooperation. He has a meat locker at a country store where he only pays \$20 a month but hasn't been able to use it but once because of the bulk of demand.

"I am a very busy person." He says, laughing when asked about how he is able to do all of these poultry and rabbit workshops and extension agent work on top of running a successful rabbit company. He has the help of his neighbors. His neighbor comes out and makes sure that all of the cattle and livestock are fed and watered when he is out on the road doing deliveries, processing livestock, teaching, and organizing. A lot of the time when he makes day trips and comes back by five to feed the animals. He gets up at six in the morning every morning and isn't in bed until 1 or 1:30. His wife helps and the well developed watering system he has ensures that his rabbits are taken care of. He's had rabbits since he was a kid. Eleven years ago, when he started the mobile processing unit, he brought his rabbit operation from the dead.

When he started reviving the mobile processing unit, it was run down in a field. He cleaned it up and reached out to the Health Department, the Environmental Protection Agency, county health departments, and others. Having been a worker for the state of Kentucky, Steve already had working relationships with many of these agencies, so that certainly helped. There were 35 people interviewed for the mobile processing unit position. After it was whittled down to five, there were people who had a lot of political pull, but the one thing that got him hired. They said that he was the only one who had the knowledge to fix things if they ever broke down. He was the only person who didn't say that he would hire somebody.

He's made many more upgrades to the MPU. He bought a poultry slicer, a grinder, tenderizer, a two-stage vacuum packer. TJ, the farmer who works alongside Steve on so many of his projects was having trouble selling his boneless chicken breast. Steve suggested they get a grinder and try to market ground chicken meat like they had seen in the stores. He brought a grinder and some sausage sacks from home for trials, and it sold so well that they got a grinder for the unit. It took two years to work rabbits into production because Kentucky has the most stringent laws in the nation when it comes to processing regulations. Back when the State of the South was published recommending that local marketing and value-added processing should be embraced, it seemed that the state of Kentucky took a slightly divergent route when it came to livestock processing. Not that the state inspectors are impossible to work with, Steve clarifies. "The state health inspectors that I deal with, they are great people. They contact with me if something comes up or changes." If there are any changes, he takes it to the board, then to the state and is able to keep going. The danger comes when small producers don't stay in compliance with state regulations. Steve says that there are a lot of people doing rabbits on small scale. There was one person who was processing and smoking them and taking them to the farmers market...but his operation was shut down because he wasn't presenting the proper paperwork.

There have been times when Steve has stepped in to preserve the rabbit industry. There was an older man who had the largest volume of rabbits that Steve bought from. He was getting too old to continue so Steve reached out to five other farmers to buy out and continue the enterprise. There was a huge family farm in Cynthiana who had conflicts, so he bought them out. He's been setting the goal to be sure that he sets other people up as producers instead of trying to carry the load himself. He has to do more travelling to get the rabbits but has been organizing farmers from all over Kentucky.

There were three places in the state of Kentucky that would process. Two way in the South.. so it wasn't very accesible. The do not only chickens, but rabbits and aquaculture with the mobile processing unit. With aquaculture, he can bring the unit to the actual farm. With chickens and other things, it has to be parked in an area where they can keep the wast products from re-entering the watershed because of e. coli risks.

He went to Tennessee. As TJ says "it's the wild wild west there." They don't have rules and regulations in place. Steve and TJ went there and displayed how they do it. They are building stipulations now for more sanitary processing to mitigate risks. They went to Cleveland and were processing chickens. "Within ten minutes, where we had plucked them and started eviscerating them, the ground had flies all over it." He reminded them that's why they work within the unit with the door shut to where the bugs can get in. They are trying to help other states build health regulations that ensure that there isn't transmission of pathogens or spoiled watersheds. Kentucky has what some may call overly-stringent regulations, but these Kentucky extension service workers have been using the skills that they have gained under such requirements to improve livestock processing standards wherever they go.

It's been eleven years of building the unit. They have grown to 186 people that are trained and licensed to use the mobile unit now. A lot of them only use it for a couple of days a year though. There is a group that uses the unit every year and takes the chicken home. They'll boil it down and then can the meat and the broth. There are others that just come and process enough meat to get it through the year. So some of the purpose is commercial development, but some is also providing a sanitary space to be able to provide people with affordable food.

Heifer International, UK and K State, Partners for Families and Farms, and other groups were in charge of the unit before Steve was managing it. The unit wasn't meeting state rules and regulations so the state and health department shut it down. Sue Wendt was a member of Partners for Families and Farms. She got a grant to hire Steve. "I brought life back to the Frankenstein." He's had calls from all over the country and all over the world asking for consultation on construction of a MPU. Washington state is one other place that had one, and it went strong for a while but isn't being used. Steve went to Arkansas to promote the production of a mobile unit. \$70,000 is the original cost which is steep. That is with subcontracting the work out to other contractors. The reason that Kentucky has been able to make it work is because Steve can do the work himself. "Most of everything that unit started out with, I've done got rid of." He's replaced corroded copper lines with pvc and nonbreakable pex line, changed tables, shackle systems, he's added lights, air conditioning, racks, digital scales, and many other things to make it more user-friendly. He's been offered jobs in other places like Maryland but his family and roots lie in Kentucky...and as a classic Kentucky man, he holds fast to familial roots. He's doing consulting to build a more centrally located plant with a sliding price structure with education and available personnel. They've purchased some land between I-65, 31-E, and a lot of other major commerce routes. The USDA plants charge \$3.65 a bird plus other things such as quartering the birds cost so much more. It becomes prohibitively expensive to process poultry and other small livestock for small producers. Steve and crew are doing everything they can to even the playing field. This is crucial for the future success of Kentucky farms and food systems. "What I wanna do with this new facility if it gets started is to have a blanket cost. If the farmer comes in and does it, it's gonna cost him so much per bird. If he wants to come in and pay someone to do it, it's gonna cost so much per bird...I think that's where a lot of the farmers are getting ripped."

When asked as to whether he will still be managing the mobile processing unit on top of building the central processing center, he said that he'd probably do both for a while. "I'd like to see somebody come



in who cares about it as much as I do. I carry my logbook with me even when I go on vacation in case one of my farmers call and wanna set up a date that they wanna process something. My wife gets really upset with me but I feel that's part of my duty.” Even when his wife had open heart surgery, he was still scheduling farmers. Steve's an excellent multitasker and he should be able to float the work. When speaking about finding that person to replace him, he made the admission that it would be hard now. They've had college help but they were too squeamish to handle the reality of livestock processing. The other guy at the farm is thinking of retiring soon. He and Steve can process 65 birds an hour alone. As for the other people at the farm “if that was the only meal they had they would starve to death because they wouldn't come back there and help you.”

A recent study was done on the resilience of food systems throughout the South. In areas where there were long lasting farms, where there were really healthy and adaptable food systems, there were two trends that came to the forefront. In areas of high agroecological resilience, there is relatively low poverty. There are also much higher health outcomes in areas with resilient food systems. Eastern Kentucky is one of very few exceptions to that rule. There are farms in Kentucky that have withstood the test of time. They have survived the end of tobacco, climate shifts, and economic slumps and still keep on farming. However, there are some of the poorest and unhealthiest counties in the nation here...where farms are so tough. When asked about this trend, Steve had pretty sensible reflections. Steve has worked all over Kentucky. He sees that there's not a lot of jobs, and not a lot of ground that can even be farmed on. The farms that are in Eastern Kentucky are old, old family farms. Doing the workshops that they've done, they've seen a lot of people with lots of drive and ambition. Even where they thought it was gonna be a bust like at Jennie Wiley, they had highly engaged participants in the event. By the end of the week, most of the people who had attended the chicken tractor workshop had already built their chicken tractors. “Those people, they listen. They talked and asked a lot of questions.” He did another workshop for Wayne Riley. A lot of the people that were at Cumberland Falls came out to Wayne Riley's operation to help teach other people. He recalls a little boy whose grandmother had attended the workshop. The boy wanted to do it, since he was going to be the one raising the chickens...so his dad stepped in. They sent pictures to Steve and the extension agents where you could see that all the father had to do was cut the wood, and the little boy assembled the rest.

With coal jobs disappearing, they have had so many people who were laid off workers who are coming to these workshops to help and make ends meet. There are a lot of people going back to raising meat and gardening for subsistence. Steve gives most of the credit to his success and his family's lifestyle to his grandfather, who raised him from the time he was 8 on a dairy. The only thing they went to town for was sugar, flour, tea, and coca cola. Steve's family today processes their own beef, rabbit, and hogs and do their own canning. He acknowledges that there are lots of people now who were raised on farms who haven't had the opportunities or the land access to raise their own means of subsistence.

If there was more of a market in place, there would be more demand. Steve mentions a man named David Fisher, who has been given an old school building in Whitesburg Kentucky who is organizing farmers and producers in his area because he sees the need. David has attended many of the sessions that UK has held to learn more to take back and teach. Steve admits that there are inevitably a few people who come to the workshops just to get things for free. They minimize that by following up with people. If the equipment that is paid for by extension services isn't being used, they take it back and pass it on to somebody else who is wanting to use it but don't have the means to do so. Laura and TJ and Steve do farm visits to follow up with everybody to be sure that they are learning how to use the equipment. For the farmers that are actively trying to use what they have learned, they will go out and invite them to more courses and supply them with more equipment. Laura takes care of all of Eastern Kentucky, TJ works the Bowling Green area, and Steve works throughout the state. A lot of the people

they have helped along stay in touch. Sending them pictures and asking questions about problems. They keep lists of everybody who attends sessions and when they see people who repeatedly return, they reach out to them to be sure that they can thrive in their endeavors. There are also other groups that are working to ensure a future for Kentucky farms. One such that Steve mentions is Locust Trace Agriscience Center in Lexington, Kentucky. It's a public high school with a focus on agriculture. They teach animal husbandry, welding, small engine repair, as well as businesses and the fundamental tools needed to build a successful farm. The students have to apply to attend as if it were a college. Though Kentucky is a relative void economically in many regions, these extension agents and educators are going beyond the call of duty to build a food future in Kentucky.