

Will Bowling: 140 years of transformation in Clay County, Kentucky

There is a patch of farmland in Clay County, Kentucky where if one were to visit at any given point of time in the past 140 years, you would find somebody from the same bloodline growing crops or tending cattle. It is large by Eastern Kentucky standards, with a decent amount of flat land, but also some fairly gentle slopes. Today, the farm is well groomed and teeming with life. Beyond the barn is a little greenhouse which is full of luscious blossoming plants. Beyond that is a wide pasture, where sheep, cows, and goats are grazing together in their little cliques. A young goat wildly rampages between the species on some youthful adventure. A truck pulls along the drive and a young man steps out and makes his way towards the barn. He's got the comfortable smile of somebody who has known the deep, lasting comfort of building a good life. His way of speaking is slow and easy, with a distinct accent that is shared by many people that have spent their lives in the small hollows of Eastern Kentucky.

Will Bowling's people acquired the land in the 1870s when Squire Hensley bought a sizeable plot in 1870. The Bowling part of the tribe has just recently returned to these ancestral grounds. His mom and dad had the opportunity to buy it from one of their cousins "He was getting out of farming right as my parents were getting in." Will and his wife Maggie initially partnered with his parents doing meat for a few years now but more recently, they have been growing vegetables as well. They have a few goats and sheep, though they've transitioned away from having as many goats in recent years. They've had goats since 2006 and they did really well. They got sheep on 2009 and they seem to work better with their climate and management style. One of the reasons that you'll see more sheep in the fields is that they are hardier in the first year. The first year of a goat is fairly fragile, and they are much more prone to premature death than sheep. "Seems like they (sheep) are pretty well bulletproof." The first three weeks of a goat kid's life is really tough, but as for lambs, Will remarks; "When they get up and get that first drink of colostrum, they're, like I said, they're bulletproof." They are low maintenance and are easily sold on direct markets. They still keep a few goats in stock as well because of continued demand, primarily of Kiko stock, which he says don't really get up in weight very much. The other downside to goats is that processing fees are such that they really couldn't charge what they thought to be a fair price to the customers. They would bring in goats which were aged long enough and provided ample feed and finish, but after processing would only be able to procure around thirty pounds of meat per head.

We made our way from beside the little shed across the yard to their expansive front porch, which has seen generation upon generation of people resting their feet and backs from the Kentucky summer sun. The house is the home of his parents, and is a classic southern colonial style home. Built back when homes weren't built with production volume in mind, but were constructed to last for generations. It's been in his mom's side of the family for at least five generations. The farm that Will bought down by the river is actually the other end of the old family farm, purchased originally by Squire Hensley in the late 1800s. Squire Hensley had 7 daughters, and as they grew up, he gave them each a parcel of land to be able to start a life for themselves. Will was able to purchase the plot that he and his wife own from a distant cousin. "It got broke up in the second generation, but we have either end of it anyway...but it's mostly my cousins, distant cousins, that own all of the adjacent land." Most of it is still in farm land, but most aren't farming themselves. The bulk of all of the old familial landholdings are producing corn and soybeans. The plots are leased out to yet more cousins while the landowner cousins have other jobs. It's really good soil and there is a massive amount of arable flat land as compared to many other areas in Eastern Appalachia. They consistently get 180-200 bushels an acre off of this rich riverbottom land.

When it comes to vegetables, “We do about everything.” It's a 2 acre market garden. “We're raising everything you would expect to see in a well-stocked farmers market stands. They are thinking of giving up a few crops because they only have limited time and personell and don't want to overextend themselves. They'll be transitioning away from sweet corn for instance because it takes up a lot of space for the amount of crop that they actually yield. They grow mostly annuals, but Will and his wife Maggie have planted about 15 apple trees that they hope to be able to market in a few years and his parents have apples, peaches, and pears. Many of the perennials, such as his father's blueberry bushes, are mainly being used within the household but they are definitely looking in the direction of growing more such crops to market in the future. Two notable future perennial crops to will would be asparagus and rhubarb.

They have a really good customer base and getting rid of products has not been a problem so far. The biggest problem has been not being able to produce enough to meet the demand of their loyal customer base. They direct market almost everything. The biggest outlet is their online farm store. They update the store weekly throughout the season, selling both veggies and meat products. They have around 200 people on the email list who will make online purchases. The Bowlings have central dropoff locations throughout the area and their customers will meet up with them there weekly to pick up their produce. There are no minimums or limits on what people can buy. Some order weekly, biweekly, some spend \$5, some spend \$65. “A pretty good mix” he comments. They sell in farmers markets as well. Maggie wasn't able to be present because she was out selling at the Hazard farmers market. They do a bit of wholesale tomatoes, peppers, and melons; things that they can produce easily and in large quantities while being able to take at least a small hit. They sell to a few restaurants as well as to Manchester Memorial Hospital. “We like to have a good mix of folks and a good mix of customers, it's what makes us more comfortable...to have a wide variety of folks purchasing from us rather than us just being tied to one market.” He would have a hard time sleeping so easily if they didn't have such a diverse marketing mix. His idea for the buying club was a bit of a mashup between Joel Salatin's Metro Buying Club and what this group in the Bowling Green Kentucky area called The Weedeaters do. “The Weedeaters are doing straight-up email lists.” He was worried about not being able to keep track of emails so he set up a subscriber list but has the customer make the purchase on the website to track it better.

On the first year that they started growing vegetables, the didn't start a CSA because they live in an area where people don't have a whole lot of money. They pictured the commitment to a CSA subscription to be an undue burden on people. They were also worried that they wouldn't be able to produce on a time schedule dependable enough to do weekly subscription based sales. His wife Maggie grew up on a market garden and had been working as a site coordinator for Grow Appalachia. They were on a new piece of property that had grown up and they didn't want to overcommit themselves. They did have the buying club set up out of the gates. A few months before the season, they started advertising between facebook and word of mouth. The farmers market in the county also started that year so they had access to two outlets as they “muddled their way” through the first season. In recent seasons, they prefer to concentrate on wholesale and they buyer's club. The amount of time that it takes to set up and travel to and from the markets. With such a small number of workers, it takes a lot of the time that they could be spending out in the fields. They get more volume with the buyers club than with any farmer's market in the area and they can have the bags pre-packed, so they can show up at the site, hang out a little while, and be able to get back to the farm in timely fashion.

In the field past the house a lone little goat is running around and trying to get the sheep to play. The sheep are content to placidly graze and look up in indifference, minor annoyance at most. They use a surprisingly low amount of hay because they have a pretty decent rotational grazing plan. When they

first came to the farm, they really didn't know much at all “which was probably a good thing” Will says, looking out at the sheep and cattle. They had always had a big garden and a milk goats, and a few chickens. “I grew up fur up'na head of a holler, you had to pipe sunshine down to it.” It's where his dad's family had been for a while, mainly doing subsistence agriculture...but they had certainly never done anything on a commercial scale so they “didn't have a lot of knowledge but we didn't have a lot of bad habits to break, either.” They came in without much bias and without any preconceived notions about what is best practices for livestock management. They did a lot of reseach before they launched the livestock operation and were able to look at practices and policies of farmers everywhere. They went to their neighbors and had talks with the county extension agent and the contacted other people in other regions via the internet. In 2005, only the second year of having grazing animals, they broke the field up into paddocks and started a rotational grazing schedule. Their cousin had the fields broken into three pastures, but they broke them into considerably more. Generally, they move the cattle every day. The goats, because they aren't such a strain on the land and require less food, are rotated every week and a half to two weeks. Their goal in rotational grazing is to be able to reach a point where they don't have to bring any hay in from outside the farm. They've transitioned away from making hay for the cows in the past five years. In the beginning, they were feeding their livestock hay for 180 days out of the year. They had really dry years then and also didn't really know what they were doing. They overgrazed initially because they didn't know what to look for. “We were grazing just like everybody else around was grazing but they were also still feeding their cattle hay for 180 days, which ain't a good way to make money- I can tell you that real quick.” They started really looking into the economics of the operation and realized that if they managed in such a way that they could grow more grass on the farm, they'd be able to save all of the hay money and actually see a decent profit margin. Last year was a long winter in Eastern Kentucky and there wasn't as much spring grass growth as the Bowling crew would have hoped so they had to use more hay, but the year before was a marked improvement from when they had started. There was only seventy days of the deepest part of winter and the driest, hottest summer days in which they had to haul in hay from other farms. They've almost tripled their stock density since '04 when they started, but have learned how to manage their herds for maximum soil fertility and minimum negative impact.

They have just finished the fencing work on the new farm plot on Will and Maggie's land and they'll be moving a lot of the herd over there. Between opening that new property and planting native warm seasons grass in next couple of days, they're hoping to be able to depend solely on their own grass stock. The field behind the farmhouse is low and a bit dry but Will is hoping that by next season, it will never look very bare again. They'll be putting in a blue indian grass mix on nine acres. This is a much hotter weather grass than what is currently growing out in their pastureland and he hopes that by diversifying the feedstock mix, they'll be able to weather drought years more smoothly and affordably. Everything they have in the fields as of yet is cool season pasture grass. He's hoping that the warm season grass will be “...something that should be kicking in right about now and taking us through the summer slump.” If the nine acre test plot works, they'll probably plant some more. The farmland isn't vast, with only 90 acres of pastureland between Will and Maggie and his parents, but there is a limited amount of bottomland on the two parcels. His main concern about changing the hay types too quickly is that it takes the land out of production for nearly two years to establish the grasses. 6 acres out of 40 is a significant hit to take, so they're hoping to gradually improve grasslands over time. Opening the pasture up this year will definitely give them an opportunity to be able to convert pasture on their parent's farm without taking as much of a hit as they would have otherwise had to suffer in the short run.

Fifteen to twenty years ago, tobacco was the primary crop in Clay county, as with many others. Since the 1930's the tobacco allotment program which stabilized the price of tobacco and ensured that

farmers could receive vouchers and have more secure access to markets. As the voucher program was done away with, many farmers in Eastern Kentucky scrambled to find a means to make a living. Many of them, including some of Will's cousins, started raising beef. The Bowling family started growing beef as well because that is what they saw many people doing, but they quickly adapted their operation as their skills grew and they saw better markets for other types of livestock. When Will was a kid, he helped his dad grow tobacco, but almost every time he went out to work in the tobacco fields, he would get nicotine poisoning. It was naturally a better choice for him to concentrate on livestock and vegetables, especially with the tobacco program ending.

Many farmers transitioned to cattle to try to fill the void left by tobacco, but the Bowlings had land limitations. "It didn't take long to figure out that you weren't gonna make a go at it with 60 acres of pasture trying to run a cow/calf herd." They started out trying to cut back on input cost to make up for the lack of land to support a sizeable enough herd. They got into rotational grazing, but then they also started experimenting with multi-species grazing. They began direct marketing in 2006 and went completely in with a fully diversified range of meats in 2011.

This diversification of livestock was part of the land stewardship experiment that Will has taken a big part in conducting. "We tried to substitute biology and animal impact for inputs and tractor time." Will says in his thick Kentucky accent. Many people mistake the slow, easy way that Southern people speak for lack of intellect, but Will is a true Southern iconoclast with a solid background in the sciences and a few years of conservation under his belt. His day job is an elk researcher.

His knowledge of elk and animal populations spurred him on to be mindful of possible deer pressure on his vegetable crops. The first thing he did was design and build a highly economical electric fence setup to dissuade deer from getting into the garden and destroying the produce. "We've got stupid high deer density up at our place, but it (the fence) is going really good." They were doing a bunch of elk trapping and collaring. They were sitting in a blind with other researchers on his property with thermal goggles on and he says he counted 22 deer walking all around his garden. Somehow, he hasn't had problems yet. He built a 6 foot high fence with high tensile wire. Four strands of high tensile electric wire wrap along the six foot posts which surround the garden. Then mounted two lines of poly-tape, the kind he uses for livestock paddocks at a 24-inch distance from the fence at 36 and sixty inches. He nailed two fiberglass posts to each fencepost and put an insulator on it to build an offset fence without having to drive more fenceposts into the ground. The polytape dances and shines in the wind and it works well to disorient the deer. At 36 and 60 inches, the deer get confused as to how to get past these moving lines and still clear the high tensile wire and apparently haven't succeeded in jumping the fence. They had some of the tools to build the garden fence, but for all of the supplies, they only had to spend about \$350-400. Two acres is a lot of land to cover with so little money, and Will is very happy that they were able to pull it off. Their success was dependent on protecting the crop from wildlife. He loves high tensile cable. "It's cheap, and it goes up fast."

He sees more people in the area getting into market gardening and farming and direct marketing their crops, though they seem to have one of the larger operations. "There seem to be one or two people in about every county who are trying to direct market." Home gardening has always been a big thing in Central Appalachia, but a lot of more gardens going in in '08-'09 from Will's perspective. "which is really interesting, the financial markets were melting down but there were places getting plowed up and planted that I'd never seen being planted before. But there's also been a lot of push by some folks like Grow Appalachia...going around and spreading the idea of growing a garden, and if you are already gardening, teaching you how to increase your production." On a commercial scale, he's seen more people doing it now than five years ago. There aren't as many people doing meat. They were about the

only ones farming on any sizeable scale back in 2011.

Most of their clientele shops with them because it's local food. The local food movement has been late in arriving to Kentucky, but the last couple of years has seen an upsurge in people wanting locally produced, naturally grown food. "If you didn't grow up in a garden, chances are your grandparents gardened or something like that. For the most part, some people still remember what real food tastes like...they know what you are buying at Wal-Mart in February may look like a real tomato but don't taste like it." There are also many local and regionally adapted varieties that can't be bought on the supermarket shelf. People recognize this and it lends to pretty enthusiastic support of locally produced veggies. Will doesn't solely grow heirlooms, however. If it makes sense economically to grow an heirloom, if it provides an appropriate yield and can be sold at a decent price, then he will naturally opt to grow a local heirloom variety. Their main motivation is taste. "A lot of the heirlooms, that's where they shine out." but they also order seeds from Johnny's seeds, a company that is a national favorite for market gardeners.

Will sees Kentucky food laws as "pretty draconian" though there have been some new laws passed in the past few years that allows for cottage foods. Will recalls a study that he saw of each state and how affable they are to cottage industries, and unfortunately, Kentucky was at the bottom of the list. Will's wife's family was from Ohio, where the farmer can process 2,000 chickens a year on-farm. In Arkansas, one can do 20,000, in Kentucky, 0. The closest poultry processor to the Bowling family is two hours away. Having to pay \$4 a head for processing and paying for gasoline and time to transport them so far makes it difficult to want to make any sort of living doing a small scale chicken operation. Fortunately, the Jackson County Regional Food Center is going to be bringing the mobile poultry processing center back. Will is pretty excited about the prospect of only needing to travel thirty minutes and being able to only have to pay a fraction of the price that he would be paying at other processing centers. This will make poultry profitable again, and he'll be able to pass some of the savings on to the consumer. He has been pre-selling chickens and has already sold a couple hundred.

Old Homeplace Farm's online market is appealing to younger people. So many farmers in Eastern Kentucky see that most of their customer base is middle-age and older. Will believes that this is possibly because younger people are too busy or preoccupied on weekend mornings to be interested in going to the farmers markets. He recalls that he would be more likely to be fishing or hiking on a Saturday morning than going shopping at the farmer's market. Will's customer base seems to be a bit younger. He credits this to the online farm store, where young people are more comfortable shopping online than many of the older generations. They use the online resources to make sure that they are providing appropriate products and services. Every fall when the field work slows down, they circulate a survey to all of their online customers. They can answer anonymously, so any feedback is going to be an honest, unfiltered representation of customer opinion. Nearly everybody in the surveys were asking for perennial crops, so they know that once they start growing perennials, they will be able to sell them. Before they even purchased the first seed for the first season, they put out a survey to see what kinds of crops that people want.

There is a growing number of younger farmers as well as development organizations that are building a future for Kentucky foodways. Will credits much of their success with the relationships that he and his wife have built with young farmers in the area. Before he was growing vegetables, he was able to visit with other young farmers that were already in production. One of the biggest helps was with price setting. He didn't have much of an idea of what prices to ask for with many of his products but he was able to reach out and get help from the other young farmers in the region. Another big help for farms

and food systems in Eastern Kentucky has been the Community Food Alliance. They have launched the Appal- TREE program which is responsible for the Farmacy program, cooking programs, lunch programs for school children, as well as farm development assistance. They've done a lot of farmers market support grants and done trainings for farmers market organizers. Will got involved in CFA in 2010. They're focused on direct marketing and produce/livestock production as opposed to commodity crop agriculture, so the group is still building sustainable farms today, some decades since their inception.

Eastern Kentucky has a culture that is very tied to family and place. Will's family and farm is evidence of this, eight generations later and there are still family members on the old homeplace, working the land. Will recognizes that in most places in the rural South falls victim to "brain drain." That is, many people who grow up in a rural setting end up moving off of the farm and towards city centers where they can get educations and jobs other than farming. Will went to college, but he knew that he would be coming back and a lot of what decided what he was going to major in. He wanted to get a job that would not only ensure that he was able to go back to Eastern Kentucky to work, but that he would be able to come back to the old home of his family and have a job. Wildlife conservation work was a suitable pick, and he feels very thankful that he was able to find employment. "several thousand graduates a year, but not that many jobs that come open." he mentions, referring to so many people that he grew up with that went on to college with hopes of returning home to be gainfully employed who weren't so fortunate. He grew up with extended family, where his dad's side of the family had lived since the 1800's. Having a community to come back to and family is important to him. He recognizes too that people around Eastern Kentucky also feel a sense of kinship to the land. Being able to make a living off of the land or at least to provide enough sustenance to make living easier is a cornerstone of Kentucky Appalachian culture. He sees this as a very important cultural characteristic. One that he sees only growing stronger in the future. He worries though that Eastern Kentucky may end up becoming like Missoula Montana or Eastern Tennessee, where well-to-do people see that there is cheap land and buy it up to build vacation homes. Will doesn't see this as being an imminent danger, but it is something that worries him a bit. He worries that there may come a time when people who are trying to cultivate crops on old family land will have a rough time of it because property prices would skyrocket if the hills were littered with timeshares and summer homes.

There is a tradition that Will takes part in that may be particular to his area. He said he didn't even know that it wasn't commonplace until he went to college. Most cemeteries have a meeting day once a year where the whole extended families and community members will get together and have sermons and musics to honor their dead relatives. They hold big gatherings in the cemeteries and then go on home to the old homeplaces to share a big dinner. People from surrounding states will come back to the family graveyard and visit the old ancestral homeplaces. Even people who have left feel deeply tied to the land. Will noticed that when he was in college, all of the Eastern Kentucky folks seemed to gravitate towards each other, so many of his friends were countrymen.

With his work, Will does a lot of data modeling. This gave him a few more insights into the situation with the agroecological resilience of Eastern Kentucky compared to their health and poverty outcomes. Looking at county-level data in farm and food systems throughout the Southern states, areas that show high levels of resilience- that is, areas where farms and food systems are able to survive and thrive in the face of disturbances- show much higher health outcomes and much lower poverty than areas that don't show high resilience scores. Eastern Kentucky is the exception to this strong trend. They have farms that have survived for over a hundred years, they have farmers that do a lot of direct marketing and don't use very many chemicals. Despite this, health outcomes are very low and it's one of the

poorest regions in the United States. He always tries to remember that “the map isn't the territory” or that a model isn't a perfect representation of reality. He's a fairly analytical thinker and before proffering any answers as to what makes Eastern Kentucky different than most of the other surveyed areas, he offers some potential explanations. One is whether the other highly resilient areas are more rural or urban. He believes that this may color the outcomes. He sees that there are lower average health outcomes and income in rural areas. He wonders if the indicators that show that Eastern Kentucky has a resilient food system are adequate to “tip the scales.” Will does see that even though there are people from all across the economic and social spectrum who buy from him...but the one unifying aspect is that most of them care about their health. They also see a lot of people who have SNAP and WIC benefits coming to the farmers markets. He does acknowledge that there is a large portion of the population in Eastern Kentucky who aren't concerned with healthy living and that can tip the scales. “a lot of people who are keyed in on public benefits as a lifestyle aren't going to be concerned with fresh food a lot of other folks who are on public assistance...those are the ones who are going to be gardening.”

Will gets a lot of information from the internet, but they also subscribe to trade journals and have a background in biology and research. They also look at things that SARE has done and they also try to make it to several conferences throughout the year. They have a passion for learning and farming goes hand in hand with that. He sees how it also helps him economically to be connected to other farmers, journals, and association. “On this farm, there are no sacred cows.” he said, acknowledging that one of the things that leads to the farm's success is that no single production practice is beyond question.

Maggie, his wife, is a full-time farmer as are his parents. He still has a day job and mentions that maybe some day, he'll take the leap to full time farming. They are at the scale that if he were to wake up one day and decide to leap headlong into farming full time “I wouldn't lose any sleep about it.” Their biggest obstacle right now is their inability to produce enough to meet demand. “It's blown my mind how receptive folks have been to buying food from us.” They aren't paying for any advertising but people are seeking them out. 75-80% of his customers can be tracked back to four or five other customers, who are very supportive and always recommend them. They've had folks drive 2-2 ½ hours to meet up with them. He sees this as a bad thing, because it means that there aren't strong farms where they are living. “You shouldn't have to drive 125 miles to buy from me.” They have more than enough opportunity to sell in their immediate area. They tried to stick to only selling within a 40 mile radius of where they are growing food. Since that time, they've added drop off points in other counties. Recently, they started delivering 55 miles away because several people were reaching out to them. There wasn't anybody else consistently selling year-round. Will finally relented and said that if they were able to get enough people to have a solid minimum volume to make it worth going out there. Within 24 hours, they had pulled together enough people to make Harlan a regular delivery spot.

One of the other advantages that they have is that they are able to provide almost any vegetable one would ever want, they also mill cornmeal and of course have meat and eggs. “You can do your grocery shopping with us.” They also have a friend who has bee hives, they wanted the bees for pollination. They've offered to sell the honey for them but they haven't been able to because their friends are already selling honey as fast as it can be produced. They may start doing molasses as well.

For Will and the Old Homeplace Farm family, the future is full of myriad possibilities. The communities around them embrace the hard work that they do and will likely support their every venture. Will and Maggie have young children now, and one can only hope that those kids decide to carry the family torch long into the 21st century.

