## **OXFORD, MISSISSIPPI**

# Memory, Revolt and Resilience in an Emerging Local Food Network

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#### **Abstract**

This study examines the evolution of a local food system in Oxford, Mississippi, through the lens of ecological resilience. It draws on Holling's (2001) theory of panarchy, remembrance and revolt to analyze the interactions between layers of organization within Oxford and how their relationships may or may not result in ecological resilience. Based on interviews, observations, and supplementary research, this paper proposes a model of eight causal factors of ecological resilience: modular connectivity, local organization, ecological integration, building assets, redundancy, complementary diversity, conservative innovation, and periodic transformation. The case of Oxford is used as an illustration how this model can be applied at multiple scales to examine a system's or an individual actor's resilience. This study is one in a series of eight case studies of causal factors of ecological resilience of local food systems in areas of the Southern United States recalcitrant to development of local food systems.

#### I. Introduction

Ecological resilience is emerging as a framework for understanding how local food systems can adapt to unfriendly environments and withstand or evolve with unexpected obstacles. Holling, one of the foremost scholars on ecological resilience, characterizes resilience as a panarchy, where overarching, slow-changing systems interact with the smaller, more rapidly changing systems within them through the processes of remembrance and revolt. Overarching systems, which take longer and more energy to change, provide "remembrance," or tradition and stability, to the systems it envelops. Smaller systems, which at the smallest scale is composed of individuals, perpetuate "revolt," or the introduction of constant adaptation and change. Through the interaction of the two extremes, systems may achieve a balance between stability and adaptation. Or, to use Holling's more poetic words, systems may both remember and revolt. Oxford, Mississippi, itself a city of extremes, provides a stark illustration of these two processes and the need for balance between them in its attempt to establish a resilient local food system.

Oxford, Mississippi was established with the hopes of becoming a cultural mecca of the South. When the city was chartered in 1837, its founders named it in honor of Oxford, England, in the hopes that their town would become a cultural center of Mississippi. In 1841, when Oxford won the vote to host Mississippi's first university, that dream became reality. It is now home to the

University of Mississippi, affectionately nicknamed "Ole Miss." The town's population of approximately 21,000 is largely comprised of transient college students. Like other college towns, this gives Oxford a slightly progressive edge. Outside of its college population, Oxford is also a renowned literary hotspot and prides itself on that rich history. When the Civil War broke out in 1861, Oxford suffered immense destruction and the loss of many lives. It took decades to recover. In its recovery, Oxford has established a culture of education and a vivid memory of Southern resistance. This is evident in a mere glance around Oxford's central square, which is lined with stunning architecture, high-end boutiques, cutting-edge restaurants, and a tall statue dedicated to the confederate soldiers of the south.

However, despite its lavish centerpiece, Oxford is a city divided into the extremely wealth and the prevalent poor. A third of its population is below the poverty line, and most of the city is a food desert by federal standards. There is also a divide in the Oxford food shed between large-scale agriculture and small-scale independent farms. Many find Mississippi's regulations concerning agriculture frustrating for small farmers. "All the legislation that has been made in the state is geared towards large, corporate farms and it would seem has also been geared to eliminate the smaller operations," one interviewee told us. Other interviews echoed this opinion. Despite Mississippi's legacy as part of the agricultural heart of the United States, local food networks face many obstacles, both culturally and structurally. According to the opinion of some interviewees, Mississippi's history with agriculture has actually fostered the control of large-scale agribusinesses over state farm regulations.

Even with these constraints, a pioneering local food system is emerging in Oxford. The cities creation of a local food network is a story of remembrance and revolt. As Oxford's small farmers and vendors struggle against state policies that favor conventional agriculture, they incite change within the system. Above them, at the city scale, Oxford's municipal government makes slow changes while trying to steer the local food movement that will include both the wealthy and the impoverished. Oxford's panarchy is epitomized by the story of two farmer's markets, Mid-Town Market and Oxford City Market, who respectively represent the extremes of remembrance and revolt. Oxford's resilience is dependent on the balance of these two movements.

This article is an assessment of the ecological resilience of Oxford's local food system. It is one of eight case studies of resilient local food systems in areas recalcitrant to development of local food systems in the Southern United States. Ecological resilience is a measure of 1) how much change a system can undergo before fundamentally changing; 2) the extent to which a system can self-organize; and 3) an increasing capacity for adaptation. A resilient system goes through four phases based on natural cycles: 1) growth (r); 2) conservation (K); 3) release ( $\Omega$ ); and 4) reorganization ( $\alpha$ ).

Past literature on ecological resilience has identified indicators of resilient systems. This study seeks to further the discussion by examining the causal factors underlying ecological resilience. We suggest that there are eight components that must be present in order for a system or individual enterprise to be ecologically resilient: modular connectivity, local organization, ecological integration, building assets, redundancy, complementary diversity, conservative innovation, and periodic transformation. This article contains a description of interviews and

information we gathered in Oxford, followed by an analysis of the eight components of resilience and their presence or absence in both the work of individual actors and the overall local food system of Oxford. Finally, we conclude with reflections on Oxford's overall ecological resilience.

## II. Revolt: Individual Change in Oxford's Panarchy

At the basis of the panarchy, individuals perpetrate the most radical changes. This is certainly true in Oxford, where individuals and their enterprises are making the most radical changes. Within the local food system, farmers are at the heart of changing agricultural practices and the way a community thinks about food. This is very much the case in Oxford, where a handful of farms, such as Yokna Bottom Farms and Brown Family Dairy, have begun to change the city's local food landscape. Vendors can also be change agents. Liz Stagg's small grocery, known as The Farmer's' Market, was the first local food market in Oxford. The store aims to support local farmers while providing fresh food to the Oxford community in an affordable way. To gain insight into individual-led changes in Oxford, we interviewed Billy Ray Brown of Brown Family Dairy and Liz Stagg of the Farmer's Market.

## **Brown Family Dairy**

Local food systems require local farmers. Since Oxford is widely known as a literary hub, it's fitting that a ground-breaking producer of local Oxford food is a writer's son. Billy Ray Brown is Oxford's own local dairy producer. He is the son of Larry Brown, an acclaimed writer who published an essay about his son's struggle to become a cattle farmer in a book called Billy Ray's Farm. Billy Ray wanted to be a rancher for as long as he can remember, and worked as a farm hand for years before finally managing to get some land of his own. It's in part because of his father's literary reputation that Billy Ray has attracted so much attention, including from the New York Times. However, Billy Ray's true legacy is in bringing local milk back to Oxford.

For the past couple of decades, Mississippi has been losing dairies. According to Billy Ray, fifteen years ago there were a thousand dairies in the state. Now there are only a hundred. But the miracle, Billy Ray explains, is that for the first time in a long time, that trend is reversing. Billy Ray started a diary himself when he saw some organic milk for sale in a local grocery store and asked the clerk if it sold well. To his surprise, the clerk told him it was flying off the shelves. Though Billy Ray had been striving to start his own beef cattle business for years, it was in that moment he realized that a dairy might be his most viable business opportunity. Though local milk has been a huge hit, as Billy Ray suspected, he has little interest in receiving an organic certification. In fact, he has mixed feelings about the term "organic," which often means little in regard to the welfare of the cow. Instead of certifications, he lets the transparency of the farm speak for itself. Families and local school children take trips to the farm to see how it works, and Billy Ray typically welcomes passersby who have stopped at the farm out of curiosity.

Though Billy Ray can only sell his meat and milk in Mississippi since the closest USDA-inspected plant that will make his meat legally saleable across state lines is in Tennessee. The restrictions on where Billy Ray can sell prevents him from directly tapping into business from Memphis, but

most of his milk, pork, and beef is sold at a market in Hernando, a Mississippi suburb of Memphis. Business from Oxford alone is not yet strong enough to keep the dairy running.

Direct marketing is the only option for a small-scale dairy farmer like Billy Ray. His farm is only 60 acres, which has a maximum carrying capacity of about 40 cows. To sell the milk commercially on such a small scale he would go broke. As the price of milk declines relative to cost of production, farmers have to milk more and more cows just to maintain a steady living. Billy Ray attributes his own ability to sell locally to good geography: he is in a place with the demand for it. "If we wouldn't have had a market, it wouldn't have mattered," Billy Ray explained. "But luckily we were in an area where people supported it, and they have bought the milk from us."

The market is only part of how Brown Family Dairy has tailored their methods to their surroundings. They are also working to adapt to their ecological surroundings. Right now the farm milks 16 Jersey cows, which have among the highest butterfat of dairy cows. One of Brown Family Dairy's latest experiments in adaptation to the heat of Mississippi is cross-breeding Brahma and Jersey cows. Pinky, only a week old at the time of our visit, is the first of these crosses. "With that Jersey in her, she's going to be a tremendous milker," said Billy Ray. "She'll be able to take the heat. But it'll be her offspring, and her granddaughters, that I want. We were talking about controlling the environment? Well you know, that brahma, it doesn't matter if it's 120 degrees. The hotter it is, the more she likes it." Brahma cows also have close to the same buttermilk content as jerseys, which would make Pinky and her offspring ideal milking cows.

Billy Ray also uses rotational grazing to even out the burden and benefits of the cattle on the land. In this practice, he separates the pasture into multiple paddocks and moves the cows to a new paddock each day, keeping them there long enough to eat all the types of vegetation, but not so long that the grasses are eaten down too far to grow back. The different types of grasses, legumes and forbs provide a variety of nutrients to the cows. He and the family also personally comb the pasture for weeds that might be harmful to the cows, to the extent where they all know the property inside and out. Billy Ray tastes every batch of milk to check the quality before bottling it.

Billy Ray got into dairy because he realized it's what would make a more livable income, but he still keeps beef cattle, in addition to hogs. "I do like being diversified too," he said. "The dairy cattle's like you getting paid every day, and the beef cattle is like you getting paid once a year, but it's a big check, and you can start paying back the bankers with that, and the dairy kind of buys the groceries." While it would be possible for the Brown family to live modestly off of the dairy alone, Billy Ray said he likes the security of having multiple sources of income. "I think being diversified is not a bad idea. And I worry...what if something happened here? Some government thing changed, what if somebody drank some milk and got sick? I'm just being realistic here. I've always thought about that."

A major obstacle has been the glass bottles he uses. Though Brown Family Dairy milk costs seven dollars a gallon, three of those dollars cover the glass bottle it comes in. Customers can return their glass bottles to get their three dollars back or to get three dollars off their next

bottle of milk. However, over the past five years, 13,000 of these bottles have gone missing. Billy Ray finds that people often want to keep their first bottle or two, and then start bringing them back. However, it's about \$2,500 to buy a new pallet of bottles, which come from Canada, and since there's a high demand for the bottles, Billy Ray has to anticipate when he might run out so he can order the bottle early. If there's not enough money to buy the pallet, he might have to sell a calf. Brown Family Dairy accounts for this by making sure the customer always covers the price of the bottle.

Getting into dairy has helped Billy Ray make the profit he needs to support his family, but his original start in farming came from the support of older dairy farmers who took to Billy Ray's passion with their own enthusiasm. "When I started, I had six acres rented...or seven. And an old man in the community just helped me,' Billy Ray told us. "These old men were all running to help me, helping me pull pasture. I was just a kid, I didn't know. My daddy, he didn't know." Through his connections with an older generation of retiring dairy farmers, Billy Ray began to buy cows and land, as well as inherit the wise advice of those who had been in the business.

He is already beginning to think in terms of the next generation. When we ask how big he plans to grow Brown Family Dairy, Billy Ray said it will depend on his kids. Right now they're young, and they love the animals. He pays them two dollars an hour in exchange for the work they pick up around the farm, but he's conscious of not working them too hard. Though the growth of the farm hangs on whether the Brown children want to become more involved with the farm as they get older, and despite cattle having been his life's passion, Billy Ray is unwilling to push his children down a path they don't want to go.

However, keeping the farm running even as it is requires extra help. It's incredibly difficult to find a good farmhand, Billy Ray told us. Those who want to get into farming usually want their own farms, so getting hired help at all is competitive. Luckily, after one bad experience, Billy found Will, his sixteen-year-old farmhand. Billy Ray thinks that if his children decide not to go into farming, he would be able to help Will get started with a farm of his own.

Aside from the difficulty of finding helpers, Billy Ray found that eking out a new type of dairy market is mainly met with enthusiasm, both from the USDA and other dairy producers. "These big companies, they don't want to see nobody like me," said Billy Ray. "But since we've started, five more [small-scale dairies] have started in that state. And a lot of them came up here to see what we're doing." Most of those that have followed in Billy Ray's footsteps are dairy farmers who used to sell commercially, but realized that in order to survive, they would need to adopt a new economic model—selling locally.

The main reason that any of these farmers, including Billy Ray, are able to succeed in selling local dairy products is because there's a demand for it within the community. "If it weren't for the customers, we wouldn't be sitting here talking," Billy Rays says. At the farmer's markets, customers come rain or shine, often from as far as half an hour or forty-five minutes away. "You think about this certain person that buys this milk," Billy Ray continues. "And it's not. It's a wide variety of ages, it's a wide variety of races, it's a wide variety of income, it's all over the board. And the number one thing, I honestly believe, is knowing where it comes from."

## "The Farmer's Market" in the City

The same philosophy that Billy Rays customers have about knowing where their food comes from holds true for many vendors that Billy Ray sells to. It certainly does for one vendor in Oxford, Liz Stagg, who runs The Farmer's Market, Oxford's first local food store. "The Farmer's Market" began ten years ago, when Liz Stagg and her husband moved to Oxford. They had worked in food service for ten years in North Carolina, where her husband was a chef and she was a server. Liz grew up in Louisiana, where her family always grew a big garden and her extended family owned large farms producing row crops like sugar cane. This first sparked Liz's interest in food and gave her an understanding of farming. When the opportunity arose to buy an empty storefront in Oxford, Mississippi, Liz and her husband decided to launch their own farmer-driven local food store.

Since they didn't know much about the area, Liz immediately started connecting with the community to find farmers and discover what the community wanted. Liz fills orders, connects with customers, and handles issues within the market, while her husband makes his own sausages and meats to sell at the store. It took a lot of time and effort to develop the Farmer's Market as it is today: a small wooden store at the fringes of Oxford filled with ripe fruits, piles of vegetables and potatoes, eco-conscious soaps and toiletries, and a section of imported international foods to meet the needs of the diverse range of customers the Farmer's Market serves.

At the core of the Farmer's Market are the relationships Liz has built with both her customers and her farmers. Liz tries to take most things that farmers offer to sell her and to experiment with new items that are brought in whether it's five pounds of extra okra from a back yard, acres worth of beans, or soap from a small scale producer. She's even willing to pay a higher dollar for the first purchase, though whether she continues buying at that price is up to her customer's willingness to pay. However, if something doesn't sell, Liz is sure not to buy it again. The diversity of Liz's clientele makes it difficult to say what will sell and what won't. Some of her customers balk at a seven-dollar watermelon weighing forty pounds, where others find it a marvelous deal. The Farmer's Market must constantly find the balance between matching the price point of farmers with customers' expectations.

Liz works to overcome this and other challenges by offering unique products that can't be found anywhere else nearby. This is especially important in Oxford, where students come to University of Mississippi from all over the world. Liz tries to provide items from home that international students would otherwise have trouble finding. For instance, a recent addition to the store has been the plantain-based fufu flour, which some students from Uganda had been unable to find anywhere closer than Memphis. Items like fufu flour, local milk, fair trade certified coffee, and other affordable yet high quality products make her store worth stopping by. The Farmer's Market strives to eventually become a place where customers can get all their weekly necessities, including household items like toilet paper and cleaning supplies, but at the moment it must still work to convince customers that it's worth the extra trip on top of their accustomed trip to a big box store.

However, relationships at the Farmer's Market are about more than buying and selling. Liz tries to make interactions personal. Some of her customers have been coming to her store through the entire ten years they've been open. At this point in her business, Liz has seen children grow up, marriages turn to divorce, death, and new born children. Sometimes mothers come in, leaving their children in the car, and Liz watches the children through the window checking on them. From pointing regular customers to new items she knows they'll like, to carrying heavy watermelons out to peoples cars, Liz seeks to make the store a warm experience, not just an errand. "If you treat people with respect and kindness," Liz said, "in large part people will do the same for you."

Relationships with farmers are just as important to creating a robust supply chain for the market. Sometimes, Liz finds that this means being a resource for farmers during their hard times. For instance, Liz and her husband have been supportive of Billy Ray since his farm began five years ago. Liz doesn't claim any credit for getting him going, but when Billy Ray was having doubts about starting the business, she was on the phone with him encouraging him to do it. "If he needs something, he's got it. If we need something, we got it," Liz told us.

Billy Ray provides the store with both milk and meat. Liz tries to source beef and pork completely locally, a demand that Billy Ray can't fulfill all by himself. Most of her meat at the Farmer's Market comes from a plant in Kansas City, Missouri that offers her a high quality at a doable price. Her husband processes the meat into sausages at a second location they've obtained across the street. He combines knowledge he gained growing up in a Sicilian family with a taste for experimentation that results in unique, high-quality products.

Through its local, unique, and high-quality goods and its personable owners, the Farmer's Market has garnered a lot of popularity. Until recently, the only advertising the store had was word of mouth. However, it came to Liz's attention recently that some people who had lived in Oxford for years and looking for the goods she sold are only just now hearing about the business. To start spreading the word to other potential customers, Liz and her husband have created T-shirts and a new logo to jumpstart an ad campaign. They also have a presence on Instagram and Facebook, and will soon start running some print ads in Oxford. The store is close to Oxford's central square, but one of Liz's main struggles right now is that the Farmer's Market can't be open as often as customers would like it to be.

Liz's efforts are complemented by the two other farmer's markets that have cropped up in Oxford. The Mid-Town Market was among the first traditional farmer's markets in Mississippi. It has flourished as a new market for Oxford's farming community and as an additional way to fulfill the growing demand for local food in Oxford. However, in 2011, a grant for Mid-Town Market resulted in the creation of Oxford City Market, and since then the relationship between the two markets has been wrought with friction. The story of the two markets lends sharp insight into the emergence, obstacles, and resilience of Oxford's local food system.

## III. Memory versus Revolt: A Tale of Two Farmer's Markets

The story of Oxford's farmer's markets is a dynamic one. Mid-Town Market, Oxford's traditional market, hosts the same handful of vendors that it has for years, and tries not to let farmers

overlap too much in the goods they sell. In the past two years, its dominant voice has been challenged by Oxford City Market. The City Market, legally owned by the City of Oxford, revolts from Mid-Town's model. It attempts to make space for as many farmers as possible, regardless of overlapping functions, and actively works to change the clientele the market serves. We interviewed actors with a variety of standpoints in the struggle between memory and revolt in Oxford's farmer's markets. John T Edge and Daniel Doyle were pre-eminent in creating the farmers markets in Oxford and offer us a framework to understand how the markets came to be the way they are today.

## John T Edge and the Southern Foodways Alliance – Contributor to the Movement

John T. Edge, Founder and Director of the Southern Foodways Alliance, who was involved in the creation of both farmer's markets, has been a mover and shaker in the Oxford local food movement since the 1990s. The Southern Foodways Alliance was the first regional cultural studies center in the United States. From its home base in a former observatory at the heart of the University of Mississippi campus, the SFA reaches into the nooks and crannies of the Southern states to find the stories of individuals and their relationship to food. The SFA then records these stories and posts them in a free online archive. It also stages events, publishes written works, creates mini-documentaries, and conducts an annual symposium with pricey tickets that sell out quickly. At these events, up-and-coming chefs see and hear stories of farmers and other food producers. "Chefs buy into those stories," said John T. "In telling their story, we help build value in them because we see value in their stories."

One of the primary functions the SFA serves in collecting and showcasing stories is to drive cultural tourism. They seek out places and communities that are rich in human resources and poor in economic resources. Essentially, the SFA drives cultural tourism. However, despite its emphasis on localism and community, the SFA does not necessarily document the stories churning in its own neighborhood. Oxford is a college town, and as a result, it already has a lot of people telling its story, John T. told us. And although the SFA does not usually collect Oxford's stories (with the notable exception of a piece on Liz Stagg), it has been instrumental in writing them.

John T. and the SFA helped launch Mid-Town Market, the city's first farmer's market. More recently, in light of diverging visions of who the market should serve, the SFA also played a role in starting the Oxford City Market. The Oxford City Market is more focused on food access equality and accepting food stamps, SNAP and EBT, John T. tells us. He believes that inclusive farmer's markets are necessary for the local food movement to continue to grow in Oxford. "We are surrounded by poverty," he told us. "This is not that wealthy of a community either."

## Daniel Doyle Lights the Spark for a New Market

Daniel Doyle, Executive Director of Mississippi Agricultural Network, has also played key roles in Oxford's local food movement, and was influential in the creation of Oxford City Market. Daniel,

originally from Massachusetts, attended the University of Mississippi and remains in Oxford. Daniel's deep involvement in the local agricultural scene began when a professor at the University of Mississippi asked him to help start an organic farm in Oxford, which would come to be known as Yokna Bottom Farm. The professor was frustrated at the lack of local organic produce in Oxford, despite a wealthy and collegiate potential market. On land purchased by the professor, Daniel launched a CSA, or Community Supported Agriculture. However, Daniel struggled to find a space to distribute his shares.

At the time, the only available farmer's markets were Mid-Town Market, located just outside of Oxford's central square, and a market in Taylor, Mississippi, Although the market in Taylor was further away for most customers, Daniel chose not to sell at Mid-Town because the market did not accept the format he was trying to sell (that is, CSA shares), and because he found the market to be chaotic, in an unattractive location, and mainly used by wholesale growers with no interest in organic agriculture. However, neither location was optimal. Daniel and some farmers in similar situations began to imagine a new farmer's market, potentially located in an open green space on University Avenue, the main strip through town.

After two years building momentum, a Mid-Town Market Board Member and city employee Katrina Hernandez offered to set up a meeting between Daniel and Mayor Pat Patterson to pitch the idea. The Mayor was won over by Daniel's idea, and recommended Daniel talk to Rob Boyd of the Oxford Parks Commission to get final permission. By this time, however, Daniel was preparing to move to a nearby city, and sought someone else to run the potential farmer's market. In his meeting with Rob Boyd, Daniel brought along Michelle McAnally and passed off to her the contacts and information necessary to get a new farmer's market off the ground.

#### The Forming of a New Market

Michelle McAnally developed a council to help create the farmer's market, which was mainly comprised of a broad selection of local stakeholders. Critically, though, this group of stakeholders did not include a representative from Mid-Town Market. Michelle had once been a vendor at Mid-Town herself, and left because of frustrations with the market. Without Mid-Town Market at the table, friction quickly escalated between Mid-Town and what would come to be known as Oxford City Market.

In 2011, the City of Oxford accepted a grant of \$61,258 from the U.S. Department of Agriculture to start a local farmer's market. Initially, according to one interviewee, the grant was going to be used to help Mid-Town Market build the necessary infrastructure to accept EBT and WIC. Allegedly, Mid-Town did not want to become a market which EBT and WIC recipients frequented, and turned down the money. However, the grant still needed to go toward a farmer's market, and so Oxford City Market was born.

As these events unfolded, Michelle McAnally had left Oxford City Market, and the city appointed Katie Morrison to manage the market. Katie set out to form more positive relationships with both the farming community and Mid-Town Market. She reached out to Daniel Doyle, who had just moved back to Oxford, to ask for his help building relationships with the web of farmers he knew and to seek his advice on how to proceed. Katie also worked hard

to create partnerships with Mid-Town by opening the Oxford City Market on days that wouldn't conflict with Mid-Town's, offering to sponsor dual advertising, and encouraging farmers to sell at both markets. However, Mid-Town has not reciprocated these efforts, and this past year Katie has worked less on partnering with Mid-Town and focused more on satisfying the needs of customers and farmers at Oxford City Market.

One of the aims of Oxford City Market is to both provide space to as many farmers as possible and to be a source of fresh food in a food desert. One of the ways City Market brings in new customers is by accepting EBT and WIC. When Katie Morrison was appointed manager, one of her first orders of business was to contact both the EBT and WIC programs to see how this could be done. WIC responded that it had redistributed all of the funding for Lafayette County to other counties after Mid-Town Market turned it down. Eventually, Katie was able to recover some WIC funding for Oxford City Market with the understanding that WIC vouchers were not to be used of accepted at Mid-Town Market—although as Katie pointed out, this is something she has no control over. EBT has been remarkably easier to instate. The use of EBT has become more fluid at the market as people use their cards to purchase tokens to spend at the market, instead of setting up an EBT machine for each farmer. Katie is also hoping to bolster WIC and EBT participation by asking the local hospital to sponsor a matching program, where if someone spends five dollars on their EBT card, they could purchase \$10 of produce. However, with limited funds and help, Oxford City Market may need to direct its attention to more pressing issues.

Oxford City Market is now facing two imminent struggles. The first is the question of location. City Market originally began in the green park on University Avenue that Daniel Doyle had originally set his eye on. However, while Michelle McAnally was still acting as manager, City Market was asked to leave the space because it had failed to gain state approval to use the park. According to Katie, this site also has insufficient parking space. Currently, the market's large tent sits on a donated site right off of Highway 6, a main thoroughfare in Oxford. This area has developed dramatically in recent years, but it contains few grocery stores or public parks among the gas stations and retail outlets. Though Oxford City Market sought to be a fresh food resource in the western part of Oxford, it is not very accessible for pedestrians and cyclists. The market must also figure out what to do with the large tent Katie initially purchased for vendors. Although the tent did help foster feelings of inclusiveness at first, as Katie had hoped, the market soon grew too big for all farmers to fit under it, and it became a divider between original vendors and newcomers. The tent has also created flooding issues during rain and created an enormous patch of dead grass. On top of all of this, the developer has plans to sell the lot.

The other impending obstacle is the question of funding. The market brings in about \$10,000 a year in vendor fees, drink sales, and t-shirts. The vendor fee is \$10 a day for farmers and \$20 a day for craft vendors. Despite this, Oxford City Market is not yet financially self-sufficient. Katie feels it will be important to have paid staff to grow the market past where it is now. She has the support of some volunteers through the season, mostly retired or college age students who have availability on Tuesdays through the school year. During the summer, she has had a few

high school students volunteer time. Even the tables farmers use during market were donations--contributed by the University of Mississippi which was going to throw them out.

In general, Oxford City Market has strong ties to the University of Mississippi. Its volunteers include not only university students, but also professors and their families. Most of its instigators, such as John T. Edge and Daniel Doyle, are connected to the university as well. Though Ole Miss, like most college campuses, can be isolated from the community around it, it's harboring its own largely student-driven local food movement internally. While the effects of the changes on campus as of yet seem mostly limited to university life, the growing enthusiasm of students and faculty have provided an eager volunteer force for the City Market.

Although the Oxford City Market is controlled by the city under Buildings and Grounds, the market itself receives little funding from the city, with the exception of Katie's salary. This stands in contrast to some of the more successful markets in the region, such as the Hernando, Mississippi market, approximately an hour away, where the city provides substantial funding, attention and support. The Hernando Market, as Billy Ray informed us, is considered a much stronger market for most farmers. As grant money comes to an end, the Oxford City Market will have to establish a way to become financially independent or garner more support from the city government. To do this, Katie has finally received city approval to create an advisory board to help find funding and contribute to the weighty decisions facing the market.

One of those decisions is how to continue to be an inclusive market with such limited resources. Farmer's markets often struggle to find the balance between serving farmers and serving customers. A key difference between Mid-Town Market and Oxford City Market is how they handle this balance. In Mid-Town City Market, a small number of farmers are given priority over both other farmers and customers. The number of farmers allowed to sell produce was kept small for decades in order to reduce competition with those already selling. According to one interview, farmers are also not allowed to sell anything that the farmer's market manager is already selling. While the reduced competition worked well for the handful of farmers that were allowed to sell at the market, with most of the produce sold by 9 A.M., many customers were frustrated. By deciding not to provide access for EBT and WIC recipients, Mid-Town Market does not prioritize serving a large or diverse range of customers. Since the opening of Oxford City Market, however, Mid-Town has become more receptive to new farmers selling at the market.

Oxford City Market, on the other hand, tries to incorporate as many farmers as it can. It also seeks to attract a diverse customer base by advertising in multiple venues and languages, and by accepting EBT and WIC. Oxford City Market also actively works to make sure that EBT and WIC users know about Oxford City Market. However, building and maintaining an inclusive market takes a lot of energy, and it isn't always successful. The market sometimes finds that striving to incorporate all farmers means that farmers selling the same types of goods may be competing with each other. While this generally results in a better price for the customer, it sometimes means that farmers' sales are low, especially on slow days. Reaching out to EBT and WIC recipients can be time-consuming and challenging. Despite how much of the early grant money went into advertising the Oxford City Market and its acceptance of EBT/WIC, Katie has found that more effort is necessary. Next year, City Market will receive two Garden Corps

members whose main task will likely be to foster more participation from residents who use EBT or WIC. Inclusivity is not an easy path, but Katie maintains that it's at the heart of Oxford City Market's mission.

Despite the obstacles, the immediate future of Oxford City Market looks promising. The city will continue to provide a salary for the position of farmer's market manager, and an advisory board is in the making. A new canning series has also started that builds awareness of the Oxford City Market around the city as Katie's friends conduct classes in a variety of kitchens. There is also the hope of including more culinary professionals to conduct cooking demos on site, though the current weekly time of the market, from 3 P.M. to 6:30 P.M. on Tuesdays, may be an inconvenient time for customers to stop and watch a demo. Nevertheless, it is one of many potential innovations, or revolts, that the City Market brings to the table.

Oxford was one of the first cities in Mississippi to have a farmer's market, largely thanks to the support of John T. Edge and the SFA. At the time, the Oxford community wasn't paying attention to the food growing just outside of town, and Mid-Town Market helped change that. However, practices at Mid-Town have sunk into a pattern of remembrance, serving the same cluster of farmers and customers each week. Inciting revolt, the SFA became involved once again to help create Oxford City Market, with the hopes that it could meet needs of sectors of the Oxford community that Mid-Town has not reached out to. According to John T. Edge, Oxford City Market entered the scene with the intention of serving the entire Oxford community. What that looks like, however, is something that is still under contention. In the time since the Southern Foodways Alliance was founded in 1999, Oxford's interest in local food has rapidly grown and blossomed. "I've seen a lot of change, and I've seen an awareness change," John T. Edge told us. "But I haven't seen that much policy change in how we function as a community. I think there's good work to be done."

#### IV. The Next Wave: Local Food Infrastructure

Policy change may well be the next step for Oxford. Good Food for Oxford Schools, Oxford's emerging Farm to School program, is evidence of this. As of this year, Oxford has seven Farm to School programs throughout its network of public schools, and four of these schools also have gardens. Sunny Young, Program Director of Good Food for Oxford Schools, runs her own consulting business implementing Farm-to-School programs in Mississippi. Aside from Oxford, she works in Tupelo, Clarksdale, and the Choctaw Nation, though of these Oxford is the furthest along. "It was ideal to be partnered with Oxford," said Sunny. "They really wanted to see this work happen here." She began discussing the possibility of a Farm-to-School program with Oxford in early 2012, when the USDA was issuing the first Farm-to-School grants. They applied for a grant by May, and Sunny moved to Oxford that August. Lynn Wilkins, a member of the Oxford community known for her grant writing skills, helped them write the application. Plus, adds Sunny, Mississippi has an edge over most other states in applying for grants. Oxford was awarded the grant, and in January of 2013, the Oxford's first Farm-to-School program took off, right in the cafeteria of Della Davidson Elementary.

Della Davidson was the first school to be included, and as a result, its program is the most developed. That being said, it is still a young program. Last year local food was typically served

only once a month, which the school advertised as "Harvest of the Month." Sunny and Lauren would buy surpluses from farmers, such as watermelon or collard greens. While the food was being served, the farmers were given their own table in the cafeteria to talk about the food with the students. Della Davidson also has a garden, although not much of the produce for the program comes from the few small plots outside the cafeteria windows. They're mostly there for the kids to learn about food in a hands-on way, Sunny said, and to get them excited about produce.

Students play a crucial role in the success of Oxford's Farm-to-School program. Students and their teachers primarily run the gardens, and now they're starting to get involved in the kitchen, too. Della Davidson partners with the University of Mississippi's Department of Nutrition and Hospitality Management to allow students to do cooking demonstrations. The programs promotion is also in student hands. The school depends on children to bring information back to their parents about how school lunches are changing, and to ask to buy school lunch. The school has noticed significantly more students buying lunch on farm days. "We think that kids won't eat fruits and vegetables, but I actually find it very easy to convince a kid to eat fruits and vegetables, especially if they helped cook it or grow it," said Sunny.

The program sees schools as a key way to making Oxford healthier as a whole. Another part of Sunny and Lauren's job is community advocacy and education. The school hosts canning and cooking classes to engage other Oxfordian's on the skillset needed for a healthy diet. It also seeks to get parents involved. Sunny and Lauren tell us that since parents usually make decisions about when their children can buy lunch at school, it's critical for them to know when local food is being served. Right now 50 percent of students at Della Davidson are on free or reduced lunch, and therefore are first exposed to local food at their schools. The current challenge, said Sunny, is to attract kids who have the option to bring or buy lunch. And that means appealing to their parents. "We found out that word was not getting out to parents in the way that we thought it was," Sunny told us. "That's something we need to work on for next year, making sure parents know."

Getting parents involved with school lunches is just one of many changes involved in creating a Farm-to-School program. By drastically changing not only the ingredients of the menu, but the menu itself, Sunny and Lauren are finding that implementing the program has been a struggle between selling things that kids want to buy and providing local, fresh, and increasingly seasonal meals. To cope with this, they set up an area for all kids- even those who bring their own lunches—to taste-test local and healthy items that are on the menu for the day. Since starting the taste-tests, there has been a dramatic rise in participation. "It's easy to change menus and test things out, but it doesn't always work out," said Sunny. "It's a constant balancing act of how do we keep customers and supply these new school meals."

When the grant money ran out at the end of the school year, Sunny and Lauren raised \$60,000 from the Oxford community to keep the project going. To Sunny and Lauren, their success in meeting that goal was evidence of the community's support for Farm-to-School. "It was a lot of individuals," Sunny told us. The William Winter Institute for Racial Reconciliation also contributed a significant amount, and much of the funding was raised through events. This money has lasted them through most of the year, Sunny said, and will run out in November.

The school is applying for the second stage of the Farm-to-School Grant, which should come in December, just in time to keep the program going.

Sunny ultimately hopes that the yearly costs for the program will be taken on as part of the school district's budget. The position of Program Director of Oxford's Farm-to-School program, which Sunny now holds, would ideally be made a paid staff position by the district. "We really want to prove our value to the school district," Sunny said. "This is a project of the school district." Lauren Williams, who has a Master's Degree in Health Promotion, is currently in training to take over the position of Program Director next school year.

The next step towards this goal, besides garnering support from parents, is to network with farmers. As we conduct the interview, Sunny and Lauren are in the process of requesting information from farmers. They have reached out to farmers via radio, newspaper, news, social media, the school district website, Extension agents, farmers and markets. Often one of the biggest challenges for a Farm-to-School program, said Sunny, is convincing farmers that it's worth their time. "We would like the farmers to see us as a viable client, as someone who will spend their money on your food and not just expect donations," Sunny said.

The Della Davidson school is still very much a young Farm-to-School operation, but it is a pioneer for Mississippi. The challenges the school aims to tackle next, such as marketing to parents, establishing relationships with farmers, and enticing kids to eat healthy are among the many trials of sparking the seeds of change in a culture. Though the program is still a work-in-progress, it seems already to be changing Oxford's next generation's attitude toward food.

## V. Assessing Resilience in Oxford's Local Food Movement

To examine interactions between the different levels of remembrance and revolt in Oxford's local food movement, we applied our model of ecological resilience. We suggest that there are eight components that are causal factors in ecological resilience, and that the components can be applied at multiple levels from farm, to market, to distribution, to government policy.

## **Complementary Diversity**

Complementary diversity is a wide array of resources and activities that work in harmony with each other to provide multiple venues of success to an enterprise or system. At the individual actor scale, complementary diversity is heavily present in Oxford. Brown Family Dairy harbors diversity in several ways. Billy Ray cultivates his field in the style of rotational grazing, with a wide variety of grasses. He also uses multiple breeds of cattle and simultaneously manages a beef business, a pork business, and a dairy. Although the dairy brings in the most money and the farm could potentially survive on that alone, Billy Ray admits that in an industry as fickle and susceptible to disaster as dairy, having a backup business is an important security. Similarly, selling Brown Family Dairy milk is just one of the many points of income for Liz Stagg and Frank Coppola at The Farmer's Market. In addition to selling local dairy and produce, The Farmer's Market sells international foods that are high in demand among Oxford's diverse college community, but often hard to find. Frank also makes his own unique blends of sausages from local meat. Though Liz says that The Farmer's Market is not yet a "one-stop shop," it fills a wide

variety of needs that are relatively underserved in Oxford. The Farmer's Market also tries to maintain a diverse clientele through the goods they provide and their affordability.

Oxford itself has also recently tried to make its farmer's markets more accessible to a diverse range of customers. This includes opening up Oxford City Market, which strives to be inclusive to people using EBT and WIC. Despite this, City Market is relatively young, and the full fruition of its efforts have yet to be seen. The Oxford City Market itself is diverse not only in the clientele it serves, but in the vendors it incorporates. It tries to make space for all farmers rather than maintaining strict loyalty to a small handful of consistent sellers. However, by being too inclusive, the market runs the risk of no longer being complementary in its diversity by generating too much competition. That is, there is a balance between diversifying and cultivating complementary relationships with vendors that both Oxford City Market and Mid-Town Market ought to seek.

## **Modular Connectivity**

Relationships are at the heart of the success of not only both farmer's markets, but between all vendors and producers in Oxford's local food network. Modular connectivity refers to a network of relationships that allows for local food to be produced and distributed efficiently (connectivity), but in which each enterprise retains enough autonomy to operate outside the support of the system if necessary (modularity). To return to the example of farmer's markets in Oxford, Oxford City Market and Mid-Town Market present two extremes of modular connectivity. Oxford City Market has tried to incorporate all possible farmers in the surrounding community, and has not only worked closely with city government, but is in fact run by the City of Oxford. Though the market thrives in terms of connectivity, it has primarily relied on grant funding obtained by the city to pay its manager. As a result, the modularity of the market is at risk. Mid-Town Market, on the other hand, is extremely modular. It maintains a tight core of a handful of select farmers who sell every week. Mid-Town also turned down the opportunity to work with the grant that launched Oxford City Market. However, for what it has in modularity, Mid-Town Market currently lacks in connectivity. The market is less connected to city decisions, the wide array of farmers surrounding Oxford, and the potentially diverse customer base that comprises the Oxford community.

Direct relationships between farmers and local vendors are also beginning to emerge. From our interviews alone, it was clear that Brown Family Dairy has a tight connection to The Farmer's Market. Billy Ray's dairy is not only sold there, but is regarded as a friend by Liz and has received the encouragement of the market since he began Brown Family Dairy. Billy Ray believes that relationships to customers is what has made his milk so successful. The farm is open to curious passersby and tours for local schoolchildren. Although Billy Ray told us that he doesn't wish to be a full-time tour guide, he thinks that the transparency of the farm is what makes it worth buying for most people. Brown Family Dairy also runs an active Facebook page, keeping loyal customers up-to-date on the latest happenings among the cows and the farm. Liz Stagg also attributes much of her business to the relationships she forms with clients and farmers alike. Farmers see The Farmer's Market as a reliable ally in selling their produce or other goods. Customers often develop a personal relationship with Liz, who they may see at least once a week for years. Liz has been known to take a personal interest in customers,

developing relationships of trust by allowing customers short on cash to come by later and pay for their groceries in full, or by watching kids left in the car from the shop window.

## **Ecological Integration**

Ecological integration describes the extent to which an entity or system works with its ecology rather than against it. Ideally, if ecological integration is an active practice, a farmer or system will need to do less and less work over time to achieve the same results. At the individual scale, this is somewhat present in Oxford. The strongest example of ecological integration is the Brown Family Dairy, which uses the rotational grazing method. In the rotational grazing method, the farmer slowly cultivates pastures by weeding out grasses that are harmful for cows and nurturing a variety of grasses that cows will eat. The Brown also use grazing to aid the growth of grasses by only allowing cows on one paddock per day and giving each paddock time to recover. The cow manure in turn fertilizes the grass. In this way, the cows and the grass contribute to each other's growth.

At a larger scale, the city of Oxford's ecology has deeply shaped its current status as a leader of Mississippi's local food revolution. Oxford, located in northern Mississippi, has far more hills than the rest of the state. One participant suggested to us that this might be why Oxford and its surrounding area has little legacy of large-scale agriculture. As a result, the city's emerging local food movement does not face as much resistance from a strong culture of "big ag" as other areas in Mississippi dominated by the delta farming styles.

In our assessment of the two markets within Oxford we see a paramount difference between the ecological integration of the City Market and the Mid-Town Market. Mid-Town Market operates within the confines of a shopping center, farmers and vendors propping up their tents on hot asphalt, cars buzzing around the perimeter during market hours. On the other hand, the City Market strives to offer its goods in a park like setting with green grass and room for children to run around and play during market hours. There is an element of working with nature and finding ways to incorporate it into our businesses rather than shutting nature out. Moreover, the City Market strives to work with farmers who are demonstrating a high level of ecological integration, though they have a wide door of acceptance, the focus is on farmers who demonstrate organic and natural practices. Mid-Town Market on the other hand is open to wholesale growers and farmers who use undetermined amounts of pesticides and chemical fertilizers.

## **Local Organization**

The City of Oxford is actively seeking to increase its resources for supporting local food networks. The most substantial and recent evidence of this is the grant the city obtained in 2011 to create a new farmer's market. The Oxford City Market is another venue, in addition to independent entities like Mid-Town Market and The Farmer's Market, where the Oxford community can access fresh food produced locally. By welcoming Sunny Young and the Good Food for Oxford Schools Program, the city is also making large-scale changes that would allow for more local autonomy from conventional public school food distributors and more support

for local farmers. By making food a part of the educational agenda, Oxford has the potential to instill local food as a lasting cultural value.

Even before the advent of the city's local food movement, Oxford was known for its food culture. Its restaurants make it a popular tourist destination and has caught the eye of famous chefs like John Currence, a prominent chef from New Orleans who opened the wildly popular Big Bad Breakfast, a part of the City Grocery Restaurant Group, in Oxford in 2008. Chef Currence, a friend of the late writer Larry Brown, now serves Brown Family Dairy milk at his diner, among other local ingredients. During his years on the Board of Directors of the Mississippi Restaurants Association, the organization created a culinary education program in Mississippi public schools. Chef Currence has also helped establish a local farmers' cooperative to make distribution from local farmers to Oxford chefs easier, and serves on the Southern Foodways Alliance's Board of Directors. Especially since Chef Currence's involvement, Oxford has become an emerging destination for Southern food tourism.

The SFA also contributed to this transformation. The SFA rarely directly highlights Oxford's own local scene, but both the organization and its founder, John T. Edge, have been influential resources in asserting the need for local food in Oxford. John T. played a prominent role in establishing both Mid-Town Market and the Oxford City Market. The annual Southern Foodways Alliance Symposium, hosted by the University of Mississippi, is a gathering point for chefs and food critics from around the South, drawing further culinary attention to Oxford. The SFA has helped Oxford view food as another point of pride in its reputation as a cultural center.

The remaining issue, however, is that this apparent cultural transformation may only be reaching the wealthy. Oxford remains a heavily divided city. It holds both an extremely educated, wealthy population, as well as a poverty rate that exceeds Mississippi's overall poverty rate. For the most part, the culinary movement that has seized Oxford takes place in high-end restaurants and cafés. Until the recent creation of Oxford City Market, Mid-Town Market was the sole farmer's market in Oxford, and it did not accept WIC or EBT as payment. In order for Oxford to be truly locally organized and autonomous, the entire community must be free from dependence on large-scale agriculture and shipped foods. The City of Oxford is beginning to address this gap through both the Oxford City Market's acceptance of EBT and WIC and the Good Food for Oxford Schools Program. It also attempts to leverage the increasingly renowned culinary scene for overall food access by establishing Oxford Restaurant Week, in which each restaurant diner has the opportunity to vote for one charity. The city grants the charity with the most votes \$5,000. Good Food for Oxford Schools is one of the recipient candidates. In this way, Oxford simultaneously champions its culinary culture, eggs on support for local businesses, and to a smaller degree donates to a local food cause. Using support for Oxford's culinary culture to even out its access gaps is an example of the innovation in the changing of Oxford's system as a whole.

#### **Conservative Innovation**

Conservative innovation refers to both the innovation that allows a system to adapt to evolving circumstances and conservation, or the ability to learn from past knowledge and traditions. At

the individual level, both Brown Family Dairy and The Farmer's Market demonstrate a degree of conservative innovation.

Billy Ray Brown has discovered that to exist as a small-scale cattle ranch, he has a higher-value product by switching from beef to primarily dairy and selling locally. He has seen older dairy farmers on the brink of going bankrupt convert to selling locally as well in order to raise the value of their product ad turn their businesses around. In this way, Brown Family Dairy is a leader in small-scale dairy innovation. Billy Ray also experiments with cow breeding to adapt the cows to Oxford's climate. His new calf Pinky, a mixture of Jersey and Brahma, will generate more cows like herself that produce high-butterfat milk and can withstand the Mississippi heat. However, Billy Ray also draws heavily on the knowledge of cattle he gained through years of working as a farmhand and his relationships with older dairy farmers who were eager to see the business survive.

Similarly, the Farmer's Market holds fast to its value of supporting local farmers and the Oxford community. It has a traditional business model in which items are sold for a profit. However, in order to remain loyal to its values, the store has adopted some innovative practices. They allow farmers to sell surpluses there, and will allow for trial sales of unusual items. If the items sell poorly, then they won't be accepted at the store again, but Liz Stagg finds that what will or won't sell is often quite unpredictable. In order to both serve the Oxford community and make enough of a profit to live on, the store also offers niche items like international foods and unusual local sausage blends. While it still isn't a one-stop shop, the Farmer's Market remains competitive by selling innovative goods and items that otherwise aren't sold in the area.

At the city level, Oxford is innovating through its use of new programs like Good Food for Oxford Schools and Oxford Restaurant Week to weave local food into the city's infrastructure. Oxford City Market, though still running on a fairly conventional farmer's market model, is responding to the city's call for more equal fresh food access by accepting EBT and WIC. Since it is often complicated for each individual farmer to have their own machine and ability to accept EBT/WIC, the market has established a system where customers can buy tokens at the main desk with cash, cards, or EBT/WIC, and then spend those tokens at the individual farmer stands. Oxford City Market also allows for a constantly changing and expanding pool of farmers, and in this sense, it is extremely flexible. By contrast, Mid-Town Market is highly conservative in its approach. It draws on a continuous, non-changing pool of farmers. While it may benefit the two individual markets to learn from each other to become more balanced in conservative innovation, the presence of two extremes within Oxford may help to make the city as a whole to be both conservative and flexible.

## Redundancy

The presence of two farmer's markets in Oxford also contributes to the city's redundancy. Despite the negative connotations redundancy has garnered in its typical use, ecological redundancy refers to multiplicity or repetition and ability to reproduce itself of a system or enterprise. In the case of Oxford's local food vendors, the creation of the new Oxford City Market gives customers choices between the two types of markets, covers more locations where fresh food is accessible, lets customers go shopping for farm-fresh foods up to four days

a week, and allows several more farmers to sell locally. Redundancy is especially important in the case that one market should fail, in which case Oxford would otherwise would be left without a farmer's market. Redundancy is also a factor to consider in the resilience of the two markets' individual models. While Oxford City Market allows for an abundance of farmers, who may even sell the same item, Mid-Town Market limits the number of farmers that can sell and tries to ensure that farmers do not sell overlapping goods. In this sense, the City Market practices redundancy more strongly than Mid-Town Market.

Redundancy is also a point of concern for Oxford's individual farmers. As Billy Ray Brown indicated, the number of dairies in Mississippi has seen a drastic decrease in the last fifty years. As of very recently, though, this trend is beginning to reverse. Another redundancy problem that farmers face in the Oxford area is the difficulty of finding farmhands. Billy Ray discovered through experience that the demand for reliable farmhands is much higher than the pool to draw from, since most people interested in agriculture ultimately want their own farm or ranch. Though he has many years before retirement, Billy Ray is also beginning to consider whether his children will be interested in continuing the family businesses. Reliable farmhands, like the one Billy Ray currently has, are other possible candidates for replacing retiring farmers. Given the expenses that go into accumulating land and equipment, redundancy is an especially delicate dilemma for aspiring and aging farmers alike, and often involves the delicate question of transfering assets that have already been built.

## **Building Assets**

While farmers may begin with different levels of assets (here defined as physical resources like land and equipment) in order to achieve ecological resilience an enterprise or system must constantly be working to increase its assets. For example, at Brown Family Dairy, Billy Ray Brown pieced together his own milking parlor out of scrap parts and a cement foundation. Another asset is the quality of the grass pastures Billy Ray is slowly cultivating, and the new breeds of cows he develops. If Billy Ray passes on his farm to the next generation, the assets he accumulates will be the core of the value of his farm. The Farmer's Market has made similar investments in its infrastructure, including the transformation of a nearby building into a butcher's shop, where Frank Coppola, Liz Stagg's husband, can prepare sausages for sale at the shop. Of the individual actors we interviewed, it seems that building assets is a common practice contributing to their resilience.

This is less true in the case of Oxford's farmer's markets. Oxford City Market in particular faces a struggle with inadequate assets. Right now, it is still reliant on grant funding and fundraising to pay its manager and to operate. It initially invested a great deal of the original grant in a large tent, which ultimately damaged the ground it was on and created drainage problems within the market. It also lacks a permanent location, which may pose a serious challenge to its future existence. If Oxford City Market is to survive, it will need to transform its practices in a way that allows it to increase assets and secure a permanent, stable location.

#### **Periodic Transformation**

Transformation is perhaps the most distinctive component of ecological resilience, since change, or reorganization, is one of the four phases that composes the adaptive cycle. It is also reminiscent of revolt. However, it is crucial to talk about transformation as "periodic." Periodic transformation is revolt tempered by remembrance, and it is the balance that Oxford will need to become ecologically resilient.

The two farmer's markets in Oxford capture this struggle. Mid-Town Market, though originally a pioneering effort of the local food movement in Oxford, has sunk into a constant, but unchanging, pattern. It acts as a venue for a small group of farmers that does not change, and serves only the clientele that can afford its prices and reach its location. Its model is in no danger, but nor is it seeking to change or expand the range of who it serves. The Oxford City Market was created to incite revolt within Mid-Town's tradition of remembrance. It attempts to serve a variety of farmers and customers alike, and is experimenting with payment methods in order to accept WIC and EBT. However, it lacks a stable workforce, constant funding, or even a permanent location. Should the two markets begin taking lessons from each other, they might both find the delicate balance through periodic transformation.

Infrastructurally, the City of Oxford is beginning to seek a slow transformation as well. As John T. Edge indicated, what is perhaps most needed in Oxford right now is well-supported policy change. Good Food for Oxford Schools is an example of this change. As Holling predicted, the largest overarching system in Oxford has been the slowest to change. However, it is transforming, and whether it continues to be stable in its change will depend on the constancy of its commitment to the Good Food program and its support, financially and otherwise, for cultural change.

## VI. Conclusion: "We're not preserving any damn thing."

It is perhaps surprising that Oxford, a city with deep respect for cultural heritage, could be so full of revolt. However, given the fertility of Oxford as a hotbed for local food, its transformation may be considered a slow one. The city has a powerful volunteer force of students and professors, a commitment to the cultural celebration of food, and a desire to be the leader of progress in Mississippi. In order for this change to come about, Oxford's wealthy and educated elite must work with its surrounding farming community and come to understand its value. Some of the unsung leaders in Oxford's local food movement have been not the organizers, who are almost exclusively associated with the university or city government, but the farmers and vendors themselves. Individuals have been the key instigators in revolting from tradition in Oxford, and the goods they provide are the sources that farmer's markets draw on to fill their stalls and the Farm to School Program will desperately need for sourcing.

The lingering question of Oxford's resilience is whether revolting actors and systems can find enough stability to keep their projects alive and well, without falling into the trap of stagnation. This is the question that echoes through both of the city's farmer's markets, its individual enterprises, and its infrastructural changes. Oxford is embarking on a cultural transformation, and the success of that transformation will require all sectors of the community—rich and poor—to view local food as accessible and culturally significant.

"We're not preserving any damn thing," said John T. Edge with a small chuckle. In Oxford, a city steeped in Southern culture, changing tradition is a daunting task. However, for all its legacy of remembrance, it is also a city of revolt, which it will perhaps prove through the ecological resilience of its local food movement.