

Cullin Williford



Cullin Williford worked with Extension Vegetable Specialist Chris Gunter on a diversification strategy to incorporate high value crops that are not usually grown in NC. Do to labor issues and other uncertainties, Cullin focused on leafy greens and root crops that can be mechanically harvested.

To harvest leafy greens, he worked with a local engineer/mechanic to build a harvester. Everything was built from scratch besides the frame which came from an old peanut digger. The total cost was \$11,940.92. *(Photo: Cullen harvested 320 (50lb) bags of onions from a one acre test plot.*



Cullen used the same engineer/mechanic to build a tiller/bedder/shaper for bedding the land and preparing the ideal seed bed. He used this piece of equipment to spray pre-plant chemicals that need to be incorporated into the seed bed. Cullen will use this equipment for leafy greens, onions and other crops that grow on beds.

For irrigation, he went with a sand filter set-up from Berry Hill Irrigation that dramatically reduced the costs. Cullen will use this sand filter for irrigation across all crops. For cooling, he rented an 18 wheel trailer with a reefer unit. This was a very successful decision, and he plans to either purchase a Box Van with a cooler on it or lease one.



Update: Cullen's investment into harvesting equipment has paid off nicely, and he plans to continue experimenting with high value crops that are not usually grown in NC. Although his fall harvest was completely washed away by hurricane Matthew and the flooding that followed, his early harvest included 22,000 lbs. of spinach, 35,000 lbs. of turnips, and 15,000 lbs. of onions. The estimated value is \$68,300. *(Photo of fields after hurricane Matthew.)*

Old House Honey (David Batts)



David Batts from Macclesfield, resides on the family farm. His grandfather transitioned from a tobacco farm to a Loblolly Pine Plantation. His father acquired several other farms and added Long leaf pine. They now own 385 acres providing a tremendous amount of food and foraging for quail, turkeys, deer and honeybees.

They allot 7 acres to plant pollinators such as sage, clover and wildflowers. David is an integral part of the operation, but in 2007 he attended a beekeeping school

through NC Cooperative Extension, and became a certified beekeeper. *Photo: Old House Honey was started as a bee removal project from an old farmhouse built around the turn of the century.*



There are no pollinator services in his local area, and produce farms are currently leasing with distant beekeepers, but traveling long distances puts stress on the beehives.

David received a small grant to expand his bee pollination service. He hopes to make this a fulltime vocation that he will share with his sons. *(Photo: David and his sons)*

Update: David added 50 hives, and marketed honey from strawberry fields to a local farmers market. He rented all of his bees for propagation and earned close to \$13,000 from honey sales and bee pollination rental. However, 2017 will be a year for rebuilding. David's bees were hit hard by pests and flooding from hurricane Matthew.



Blake Thompson



Blake Thompson, of Smithfield grew up on a farm that has been in the family for at least four generations. As a youth he raised meat goats and produced many class winners and champions at local and state fairs. Last year, the farm raised 55 acres of tobacco, 100 acres of corn, and 300 acres of soy beans. The farm has seven acres of pasture set aside for the hogs to graze. *(Photo: Visitors from NC Cooperative Extension and the Commission tour the farm.)*



Blake used the grant funds to implement a pastured pork operation. This niche market has grown significantly in the past few years and will provide a year-round income stream. Blake plans to market the pork with a larger group of pork producers that sell to regional restaurants and grocery stores.



Based on surveys from NC Choice, an outreach program of Cooperative Extension, the market for sustainably raised pork has grown significantly. In 2012, respondents anticipated raising 5700 hogs. In 2014, that number grew to over 10,000. Blake visited farms with similar operations and they are struggling to keep up with the demand, so he feels confident this will provide regular income to the farm operation.



Update: The fencing was installed, creating seven pens with water and feeding equipment. Blake planted corn and grain sorghum to be used for feed; and purchased a second group of pigs for 2016.

With the trailer, he has hauled in feeder pigs, and hauled out finished pigs. He used the scales to weigh pigs to determine when they are ready to market, and to weigh pigs sold to individuals. Blake estimates the value of product at \$40,000.

Creekside Fresh Pickings (Michelle Tingine)



Michelle Tingine, of Snow Hill wants to offer her customers a little something extra when they visit the farm produce stand. With her grant funds she purchased and furnished a covered wagon, used for hayrides and other tourism opportunities; and added some kid friendly recreational activities and sweet treats grown on the farm.

The Ice cream maker was purchased and was up and running for the summer season. Their Agent Roy Thagard, heard some customers say that it was the best ice cream they've ever had!



Selecting the best variety of strawberries has been a learning issue. Every year is different, but this year the variety they thought would be the sweetest and best turned out to be less than ideal. They talked with their Agent and next year they will plant several varieties too learn what varieties do the best for the farm and its customers.



In addition to the wagon, the NC AgVentures grant funding request included a restroom and freezer. The new unisex restroom is made with materials from an old tobacco barn on the inside, and mimic tobacco siding on the outside. The bathroom has a concrete floor, and a hot water heater has been installed.



Update: They plan to incorporate wagon rides throughout the year on the farm and offer more variety flavors of homemade ice cream along with more educational and hands-on activities on the farm.

The project increased the number of visitors to the farm and increased sales by 25%. Michelle said, *“Our farm is no longer just a farm with a produce stand. We are now a family owned and operated farm that offers fresh in-season produce that you can purchase homemade ice cream made with real fruits on the farm & enjoy a wagon ride/hayride around the farm with family and friends.”*

Kim Davis



Kim Davis of Fremont received a small grant to develop a *Greenhouse Transplant Tray Steaming business*. Tray steaming has become a necessity for tobacco growers, since the original process to control pathogens, using methyl bromide is no longer available. Control of disease pathogens can be achieved by tray steaming at 175 degrees for 30 minutes. Davis, who has been growing tobacco transplants since 1990 offered the service to tobacco growers in the region. *(Photo: Tray Steaming System)*

The tray steaming system was purchased and set-up on previous tobacco boxing shelter cement floor. Excessive rainfall created unfavorable conditions around the location. As a result, two loads of rock had to be purchased and spread.



Advertising was limited this first year, due to the time of year at which the system was installed. Tray steaming services were provided to four customers, resulting in a total of 29,130 trays steamed. *(More farmers had methyl bromide than they expected from previous years to sanitize trays, but the supply is extremely limited.)* Now that the steaming system is established, they will plan to start earlier in the year, and spread the workload opposed to just steaming in the winter months.



Update: The project has been successful but some farmers have purchased their own equipment and the steam machine required repairs, so the profits have not met their expectations. Kim is continuing to promote the business and contacting greenhouse farmers in the area *(Photos of Tobacco Transplants)*

Hickory Creek Farm (Kevin Gray)



Hickory Creek Farm in Greensboro is a NC Certified Century Family Farm. Last year, Kevin Gray planted old tobacco fields with Christmas trees for a future choose-and-cut operation. He hopes that one day his farm will be a one-stop location for NC grown farm products for the holiday season. He plans to use the grant funds to build a greenhouse for growing poinsettias. *(Photos: Christmas tree barn and greenhouse with poinsettias.)*



After grant approval, he began seeking help from those in the poinsettia industry. Dr. Brain Whipker, a floriculture professor at NCSU has been invaluable with helping them navigate the learning curve in growing poinsettias. He referred them to Williams Plant Farm in Sims, NC. They sell poinsettia cuttings and pre-finished poinsettia plants.

Since this was their first year and they also were dealing with a tight timeline to finish construction Dr. Whipker suggested they order pre-finished plants to be delivered late in September. This saves a tremendous amount of labor and the plants will already be potted in their final containers and soil. It also allows Kevin the ability to grow a quality plant the first year with much less risk of failure.



The greenhouse construction moved slower than expected as the site required significantly more grading than planned. Once they began moving dirt, they saw the need to build up the site for better drainage and a more aesthetically pleasing appearance in relation to the barn and surrounding structures. They are fortunate to be able to move good sand rock for the foundation from another location on the farm.

Update: The greenhouse was completed and total Christmas sales were up over 106% from last year, but there were challenges. The green house for growing

poinsettias will require some adjustments to heating and ventilation, and the number of plants will be reduced to allow more space for growth. Still, many of his Christmas tree customers purchased poinsettias and a local florist said his plants were beautiful and she committed to order plants for her shop from him next year. *(Photo: Kevin and his sons with Santa Claus at the farm.)*

Smith Farm Greenhouse (George Smith)



George and Donna Smith of Gibsonville are sixth generation farmers. 2016 marks the 83rd year the family is participating in the Greensboro Farmers Curb Market. They are using their grant funds to purchase plastic mulch laying equipment to become more efficient and increase vegetable production while conserving water. *(Photo: Left to right, George Smith, Extension Agent John Ivy and Cooperative Extension Director Dr. Bonanno.)*



George covered close to an acre in plasticulture. They have planted around 800 tomato plants, 600 peppers, 700 squash, 100 eggplant, 450 watermelon, 500 cantaloupes, 250 honeydews, around 1400 kale plants, 1500 cabbage plants, 800 collard plants, 1000 beet plants, 1700 broccoli, 500 cauliflower.

Their production doubled from last year because there is much less time required for cultivating (weeding). The irrigation is also much more efficient which has led to a decrease in fuel costs.



With their new equipment they have learned that the rototiller makes a perfect bed for the mulch layer. The mulch layer took some time to be properly adjusted, and they found that the smallest adjustment can make the biggest difference. However, once adjusted, the machine does a beautiful job.

Seed beds are uniform and a fine start for seeds and young transplants. Drip irrigation is much more efficient than overhead. The cost per watering for the same amount of land with overhead is about \$30.00 per watering with the new system it has been reduced to \$2.00!



Update: George and Donna said, *"The new equipment makes everything a lot easier."* Their crop yields were increased by 50% and their income by 30%.

They shared information about their project at the Farmer Foodshare Dinner, Guilford Food Council, Greensboro Farmers Curb Market, Mobile Oasis Market, Guilford County Health Department. *(Photo: Farmer Foodshare Dinner at the Smith Farm.)*

Carolina Country Fresh LLC (Josh Roberson)



Josh Roberson, of Bethel began to diversify away from tobacco several years ago when he opened Carolina Country Fresh, a retail farm market. He turned one tobacco field into a 12 acre corn maze, and with the grant funds, he and his family plan to expand their produce production. *(Photo: Right to left Josh Roberson, his father Kenneth and brother Kip)*

Josh has been able to do everything he set out to do and a little bit more. He found a bean picker through a local auction for \$12,500 (half the original estimate). However, the first bump in the road came with planting May peas. Peas are shallow rooted and therefore the plant comes out of the ground too easily. This problem resolved itself because he was able to use the labor that was picking strawberries to perform the pea harvest. The peas were popular so they were able to sell all they grew.



Josh planted field peas, butterbeans, and snap beans according to schedule. He was able to harvest the first small plot of snap beans with the new machine and it was a big success. Since he was able to obtain the machine at such a low cost, he decided to invest in a new Sheller and built a 30x30 shelter to house it under. The shelter is also large enough to park the picker under when it's not in use. *(Photos of Picker and Sheller)*

Update: *"The project was very successful, remarks Josh. I think the biggest proof of our success, in my mind was the fact that we had very little product to wholesale... We produced about what we expected but we were able to retail the majority of it... One acre of string beans grossed \$1800 and was harvested in two afternoons with three people working."* Manual harvest of beans runs around \$10 per bushel while the machine harvest ran around \$1-3 per bushel depending on yield. They have reduced expenses by \$7 to \$9 per bushel and increased profits.



Kevin Hobbs



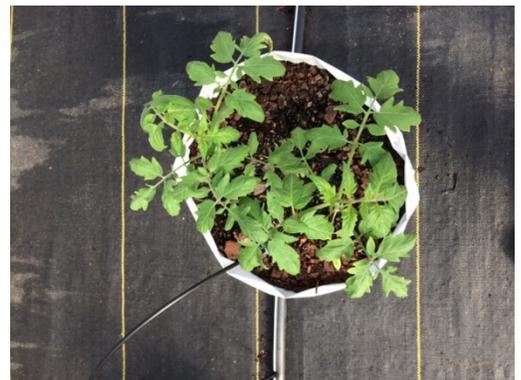
The Hobbs family has been living on the farm for at least four generations. They own around 600 acres of cropland, plus pasture and woodland. Tobacco has always been raised on the farm, but with today's new regulations, labor issues and family health problems, they decided to move away from tobacco. Their goal is to develop farm enterprises that are diverse and can weather the economic storms that are part of farming.



Kevin Hobbs planned to repurpose three greenhouses from growing tobacco transplants to growing specialty produce. As the farm operation moves away from tobacco, this transition will provide year-round cash-flow and work opportunities. However, the Hobbs project was delayed when a severe hail and wind storm hit their area and damaged the greenhouses. The Agent, Della King notified the AgVentures Program Coordinator about the delay and requested a budget amendment. The greenhouse repairs for one house were completed in June.



Update: Kevin seeded two varieties of tomatoes, along with some pepper plants. He seeded liners at two different intervals to lengthen product availability. He stepped up some of the tomatoes into the grow bags and installed drip irrigation with fertilization setup. Kevin had some issues with getting the right fertilizers and rates worked out with the media he is using. He submitted tissue samples and media samples for analysis by the NCDA Agronomic Lab in an effort to make the needed adjustments with fertility based on plant needs. This year, he harvested 5000 lbs. of tomatoes but anticipates 10,000 lbs. next year.



Susan Weaver Ford



Susan Weaver Ford, of Kenly is a third generation tobacco farmer. When the quota system was eliminated, Susan and her father decided to diversify their farm operation. Susan, who had just given birth to her first child, was interested in vegetables and decided to grow peas; she felt there was a good market in her area.

Since then, Susan has become a pea's expert. She has raised as many as five acres of peas. But, finding labor to pick peas is nearly impossible and the cost on returns is too high.

With her grant funds Susan purchased Oxbo Pixall BH 100; prepared the land and planted beans on three different planting dates. *(Photo of the Oxbo Pixall BH 100 harvesting peas.)*



Update: Over the summer, Susan has become proficient with the harvesting equipment. The picker was able to pick a row of butter beans in about 6-7 minutes, compared to a full day in the field hand-picking with several pickers. Susan estimates that her income increased by 30% this year.



Project plans for the upcoming year include planting fewer rows, but planted more frequently, and with regard to plant harvest times. She also plans to allow for wider truck middles. A wide path will enable the picker to run in both directions which helps to get the vegetables out of the field quicker. Also, she would like to invest in some type of storage unit to be able to make the products hold longer once picked. *(Photo: Susan Ford, William Upchurch and Jeff Camden)*

Dean and Rhonda Ingram



Dean and Rhonda Ingram of High Point are proud to own a NC Century Farm. It was a Tobacco farm until the mid-1970's when the operation transitioned to strawberries.

Over the past ten years they have incorporated more vegetable crops, but fruit crops are a big draw that brings shoppers to their farm agritourism operation and the booth at the Farmers Market.

A few years back Dr. Gina Fernandez from the NC State Horticulture Department visited their farm to determine if blackberries would be a good summer fruit option. (*Dr. Fernandez is the statewide Extension Agent with responsibilities in blackberries and raspberries (aka brambles or cranberries).*)

It turned out that the soil pH is great for blackberries and she helped them select a good location. To test customer interest they began to offer blackberries at their farm stand and off-farm markets. The response was overwhelming.

The Ingram's used their grant funds to incorporate new blackberry beds. They began working with existing beds but found the wood to be in poor condition. Replacing all of the boards in the beds was an unexpected expense. However, re-working the beds provided a more efficient placement of the beds and more blackberries in the designated area.

Once they rebuilt the beds, they added more soil, and covered the beds with heavy duty black plastic and were able to get the blackberries planted in a timely fashion for the spring growing season. They will use the remaining funds to purchase a cooler to keep the berries fresh.

Update: *"At this point in our growing season we do feel like the project has been a success. When you look across the planted area and see what growth our vines have put forth and how amazing the trellised bramble yard looks then you can't help but feel successful. But honestly, until we harvest our first berries this coming growing season then it is not fair to call it a success."* (Photo Left to right Dr. Bonanno, Guilford County Extension Director Karen Neil and Rhonda Ingram check out the blackberry beds.)



Pauline Hylton

Pauline Hylton of Mount Airy received a grant to support a new farm venture. She and her husband Tom inherited the farm in 2013. As soon as they moved in, they were busy with vegetable production, and caregiving to Pauline's mother, and with housing. With their grant funds they planned to purchase chickens and goats, and will market meat at both the farmers market and to wholesale markets. They have cleared and seeded a pasture area. They just need fencing.

The project has moved somewhat slowly. Pauline's mother, whom she cared for, passed away and the family was forced to deal with the associated issues. In addition, Pauline's husband was forced to take an off-farm job and is working 50-70 hours per week. Pauline is not physically able to do the heavy fencing work that is a big part of this project. Bryan Cave, Surry County Extension Director has been working with Pauline and Tom concerning fence construction techniques, post and wire selection, and general discussions as to animal selection.

Update: After a year filled with challenges, they are still enthusiastic about their project plans and beginning to move forward. The fence is complete and they purchased two goats.



Shepard Barbour



Shepard Barbour's first job was selling melons at a roadside stand at his grandparent's house. From that point on he learned to do everything that goes on at the family farm. He graduated from NC State with degrees in Agricultural Business Management and Field Crops Technology.

JMS farm grows tobacco, sweet potatoes, soybeans and wheat. Shepard Barbour plans to diversify the family farm operation by incorporating a turf grass/sod business. The economy in his community has improved, and home building has picked up. The demand for sod is greater than local growers can meet. He knows local contractors and feels certain the farm can produce a quality product. The process will also compliment the farm row crops for which profitability is on the decline.

Six acres of Bermuda sod were planted when he applied for the grant. The award money was used to purchase a Piggyback forklift. (See photo) He planted an additional 15 acres of Bermuda sod, and began to harvest the 5 acres of Bermuda sod planted last July, and it looks great!

Update: The piggyback forklift has been very successful. It was used to load pallets of sod on the farm as well as deliver sod to customers. Since the purchase of the forklift they harvested approximately 5 acres of sod, and added \$12,500 to his income. In 2017 he anticipates growing 20-25 more acres of sod. (Photo: land preparation, and sod.)



WDW Strawberry Farm (Donald Wayne Worley)



Donald Wayne Worley and his wife Denise, operate a family farm. Tobacco has always been grown on the farm. 500 acres are used for food production. The Worley's love working on the farm and want to insure that it is passed to future generations. They are using the grant funds to add a strawberry crop. *(Photo of the new strawberry stand)*

In the past, they had a neighbor who operated a very successful U-pick/We pick business. However, the neighbor retired, and there are no other fields for 20 miles. The strawberry crop would provide additional work for their H2A workers and their part-time help. It would also provide learning opportunities for local high school students who have an interest in agriculture production but are unable to work in tobacco due to the labor laws.

In March they purchased a building, trailer and Coolbot for the strawberry stand. They had a promising first year but people were wary of buying from them...believing the berries were not local. In April, Wayne lost his mother to cancer, but by the end of the season they were beginning to get repeat customers.

Update: *"We had many expenses going into a new crop that we knew nothing about but considering it was our first year we were pleased with the outcome. We did not see a profit per say but were surprised with the overwhelming outcome of support from neighbors and friends and were pleased with the crops performance. The grant helped tremendously off-set some of our expenses."* Wayne estimates his first crop value at \$30,000.



J & J Farms (Thomas Pierce)



Thomas Pierce from Jamesville grows strawberries, tomatoes, collards, cabbage, melons, corn and potatoes. He operates a road side produce stand (J & J Farms) from mid-April to the end of November. With the grant funds he will purchase a walk-in vegetable cooler and ice machine.

Thomas has completed the planning process for a walk in cooler for his road side produce stand operation. He has secured prices for the materials needed and drawn up construction plans. He has not poured the concrete pad yet because of delays from the wet weather we have had this spring. He plans to pour the concrete pad soon and begin construction on the walk in cooler.

Update: His project was delayed because of serious health issues with his wife, who plays an integral role in the farm operation. The cement pad for the walk in cooler has been poured and Thomas purchased a used cooler. He is waiting on the person to lay the blocks for the walls.



Johnston County Community Grant (Agent Dan Well, Project Manager)



The Cattlemen's Association of Johnston County received a small community grant to purchase portable cattle handling equipment that can be rented and transported to farms with small herds. The equipment allows the farmer to restrain and safely provide proper care such as ear tagging, vaccinating and deworming. The Johnston County Cattlemen's Association along with Cooperative Extension and County Government will manage the day-to-day oversight of the program.



This group received an award of \$10,000, half of what they requested. In February, Dan Wells attended the NC Cattlemen's Association Annual Conference in Hickory, and spent considerable time visiting with vendors of cattle handling equipment. In this process, he learned that Priefert makes a small system called CS-1 which includes their S04 squeeze chute, a palpation cage, and enough Priefert Premier Panels to construct a temporary corral capable of holding 35 head of mature cattle. This system has a MSRP of \$10,793.



In March, he requested and received quotes from three Priefert dealers. They also provided quotes for a TrueTest portable scale system.

The Youth Livestock Committee voted unanimously to purchase the scales from Thompson Cattle Company. The trailer was custom built by Marc Reynolds from Pittsboro. He's an independent

mechanic, and a cattle producer himself. It was paid for by the Johnston county Cattlemen's Association. *(Photos: Oct. 4th demonstration to introduce the cattle handling equipment.)*

Update: Agent Dan Wells organized a demonstration/dinner Oct. 4th to introduce the equipment. About 40 farmers attended the event. The cattle handling equipment rentals are booked through early spring 2017. On a side note, Dan believes this project has helped him to expand his outreach as a livestock agent in the community. The program provided a new door of opportunity for Dan to visit farms that are diversifying their horticultural operations with small herds. Transporting the equipment and helping set-up gives Dan an opportunity to see the farm operation and provide guidance.

Stokes Future Farmers' Market



Stokes Future Farmers' Market received a small community grant to purchase a trailer for the Stokes Future Farmer's Market. The group applied for a \$20,000 grant but only received \$2500 toward the purchase of a storage trailer

The group does not have a permanent location or facility. A trailer makes the set-up and breakdown much easier and efficient. It also provides some flexibility and allows them travel to different locations, for community events throughout the year.

Update: Initially, they concentrated on searching for a used trailer but found limited availability for the size they need and they also developed concerns about the reliability of a used product. Consequently, they shifted their search to purchase of a new product from a dealer. It turned out that new trailers were available for little more than the initial search results for used products.

They purchased a 6'x12' storage trailer in August and used it weekly for the Farmers' Market. With the portable storage they were able to provide vendors with the opportunity to sell at the Stokes Stomp, a 2-day festival in Danbury and at a community Farm Fest. Both of the events provided significant revenue for the vendors and promotion of the farmers market. The last step will be to wrap the trailer with the Market logo.



Growing Minds Educational Barn (Lewis Family)



Last fall the Lewis family remodeled their family's old country store and opened it as Little Creek Market for the holiday season. They marketed their farm's pecans, sweet potatoes, eggs, lamb, pork and chicken. They also sold North Carolina grown Christmas trees, wreaths, poinsettias, peanuts, honey, jams, produce and Alpaca spun products.

The Lewis family believes, "*it is their role as agricultural producers to educate the consumer about the industry that literally provides everything for us.*"



To incorporate an education component into the store, they moved an old rustic barn next to the market. The barn provides hands-on learning stations featuring seasonal products. The goal is to visually represent produce in different stages of growth while providing the steps involved from planting to harvesting.

Each station includes nutritional information and recipes. They are working with Cooperative Extension to prepare these nutritional facts and recipe cards.



Since the renovation took longer than expected, they offered the summer season educational opportunities at off-site locations; for example Farmville Presbyterian Summer Days.

Update: The renovation of the Educational Barn is complete. Families are able to purchase local products while learning about how they were produced. They have participated in various community events to promote the *Growing Minds Educational*

Barn. Working with Lenoir/Greene County Cooperative Extension Agent, Eve Honeycutt, they planned a Farmers Feeding Farmers event prior to harvest in September.

Coordinating with local pre-schools, and other youth groups, the Lewis family will host educational events during the week and weekends. They promoted the Educational Barn at local community church events, Chamber newsletters, the local newspaper, Greenville Umbrella Market, Taste of Farmville and daily at their Little Creek Market. The education barn has increased market sales and profits by 10%, a number they believe will increase in 2017.

Porter Farms (Jamie Porter)



Porter Farm in Snow Hill gets many requests from schools and other groups interested in visiting the farm and learning more about farm life. With the grant award they enhanced their roadside stand with fun recreational activities and increased their production of strawberries and pumpkins.

Stephen Porter comes from a tobacco family farm in Sampson County. His father and grandfather were both quota holders. Stephen and Jamie Porter rent farm land in Greene County. There are 75 acres of produce and 400 acres in grain production.

In 2005 they set up their first road side stand with a canopy tent, a plastic table and 2 chairs. In 2009 they started growing strawberries and began to expand their markets to include, the Lenoir County farmers Market and a produce stand in the parking lot of the Neuse Sport Shop.

The Porters have accomplished a good many of their project goals. The new website, (PorterFarmsKinston.com) is up and running. Their customers appreciate being able to see what produce is being harvested. They have added picnic tables, umbrellas, and swings to their strawberry you-pick field to add a more family friendly environment. They purchased strawberry baskets for the pickers with labels that include their new website and phone number, and the wagon. Unfortunately, flooding from Hurricane Matthew devastated 80% of their pumpkin crop and wiped out their fall tourism business as schools and local roads were closed for an extended period of time.



Harmony Ridge Farms (Kevin Oliver)



Harmony Ridge Farms in Tobaccoville, has a diverse farm operation that includes produce, poultry, Peking ducks and hogs. In 2015, over 2,500 Peking ducks were pre-sold to restaurants in the Piedmont and Charlotte. This is proving to be a lucrative business, but ducks are messy! *(Photo of ducklings on pasture.)*

Kevin has been using a repurposed horse barn for brooding. The ducks are kept indoors with supplemental heat in batches of 300. The ducks are then turned out on pasture for another four weeks. There is about 700 square feet of space in the barn, but he needs 2,000 square feet to accomplish their goal for 2016.



Kevin is using the grant funds to purchase two 8x40 storage containers which will be converted to brooding houses by adding doors, ventilation windows and cleaning doors. This set-up will give him the ability to brood 1,000 ducklings in a batch and clean the brooder weekly with the front end loader of the tractor. They would be able to raise ducks in the spring and fall when the temperature conditions are most favorable. The storage containers are a recycled product, and can be purchased from a local business. This strategy is less costly than constructing a building, and provides a system that is secure and will save time and labor. *(Photo: Exterior view of brooding boxes.)*



The project got off to a slow start as it took ten weeks for the repurposed storage container to be delivered. (They were told it would take three weeks.) Their plan is to outfit the container/brooder with the propane brooder hood, water source and exterior access drives so that they will be ready to brood the first batch of ducks with the August duckling deliver. They brooder boxes were highlighted in the September farm tour. *(Photo: Interior view of brooding box.)*

Update: The project is complete. They doubled their brooding capacity which has enabled them to process larger batches and reduced their transportation cost per duck. They are considering breeding their own laying hen replacements to further enhance the process. The estimated value of the ducks is \$120,000; their sales have increased by 40% and income by 20%.

Lenoir County Cooperative Extension (Eve Honeycutt)

Lenoir County Cooperative Extension received a small community grant to purchase portable cattle handling equipment that can be rented and transported to farms with small herds. The equipment allows the farmer to restrain and safely provide proper care such as ear tagging, vaccinating and deworming. Lenoir County Extension staff, under the advisement of the Lenoir County Livestock Development Association and the Pitt/Greene Cattlemen's Association will manage the day-to-day oversight of the program.

This group received an award of \$10,000, half of what they requested. Significant time was consumed looking for a similar product that would still fulfill the goals of the grant project as well as allow them to work with a local dealer. They encountered additional delays because the local dealer had a house fire. An order was placed for equipment on June 10.

Its final arrival date happened to be the same weekend as the widespread flooding from Hurricane Matthew. Due to the flooding of the Lenoir County Extension office and livestock arena, the field day to show off the equipment to local cattlemen got postponed. Currently, in Greene County, several cattlemen are working together to set up the equipment and use it to work the cattle of an older farmer. Once the equipment is set up, a field day will be planned to formally introduce the cattlemen to the equipment and advertise its' use. Those that are working with it now are very impressed to have such equipment available for their use.

Due to extensive damage from flooding, the Lenoir County Extension office is still working out of temporary quarters, at 327 Queen Street, Kinston.