

**North Carolina Cooperative Extension
Application for Title Promotion**

Agent & Area Agent Positions

Employee Name: Margaret Anne Bell Ross

Beginning Date in Current Position: November 2, 2015

County (if more than one county, indicate "home" county): Jones County (cover eastern 33 counties)

Current Title		Title Being Sought	
	Assistant Agent		Associate Agent
	Associate Agent		Agent
	Assistant Area Specialized Agent		Associate Area Specialized Agent
✓	Associate Area Specialized Agent	✓	Area Specialized Agent
	Assistant Area Agent		Associate Area Agent
	Associate Area Agent		Area Agent

Employment Record (attach additional sheet if necessary)		
Employer	Title	Dates
North Carolina Cooperative Extension	Eastern Area Specialized Poultry Agent	November 2, 2015 - present
North Carolina Cooperative Extension – Craven & Jones Counties	Livestock Agent	July 1, 2010 - November 1, 2015
Livestock Veterinary Services	Veterinary Assistant	May – June 2009
North Carolina State University Swine Educational Unit	Research Project Assistant	May – July 2008
Murphy-Brown, LLC	Farm Intern	May – August 2007
William's Clinic of Chiropractic	Office Manager	October 2009 – April 2010

Total Extension Experience as of March 1: 7 Years 8 Months

Degree(s)		
Degree	Institution	Date Awarded
Masters of Animal Science (MR)	North Carolina State University	December 2014
Bachelor of Science in Industry Animal Science (BS)	North Carolina State University	May 2010

Performance Ranking – Last Five Years {must be completed by County Extension Director}					
Year	2017	2016	2015	2014	2013
Ranking					

Major area(s) of program responsibility: commercial poultry, backyard poultry, youth poultry programs.

Introduction

My name is Margaret Ross and I am the Area Specialized Poultry Agent for the eastern region of North Carolina. My main responsibilities include providing educational programming and technical assistance for commercial poultry producers, as well as working with backyard flock owners. Through working with my **Poultry Advisory Council** (a specialized committee of the Advisory Leadership System) and maintaining a good working relationship with producers in the eastern counties I serve, I have been able to format educational programs, farm visits, meetings, and demonstrations to best fit the needs of Extension clients.

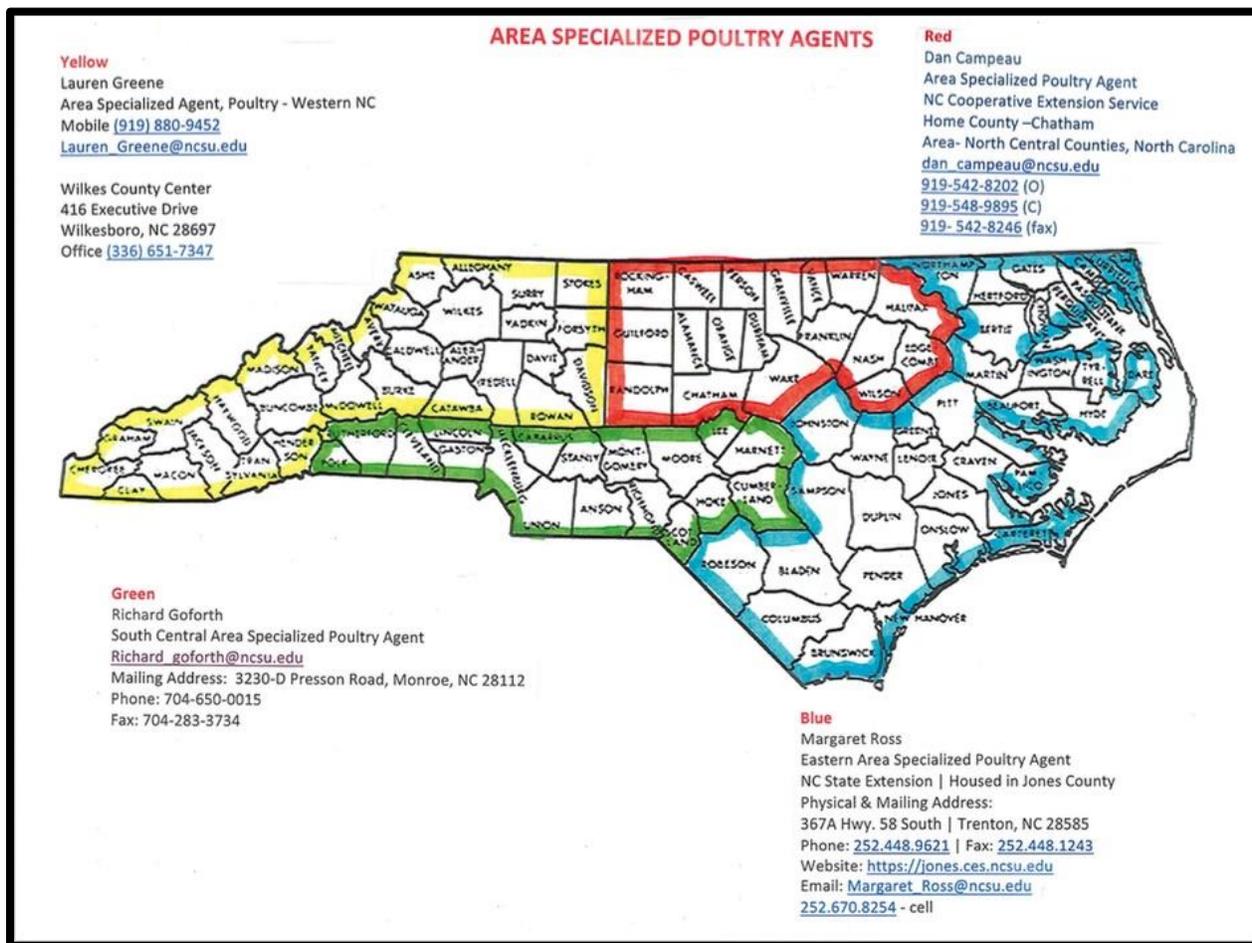
First, I would like to tell you a little bit more about myself. I grew up in Jones County 4-H, from a Cloverbud all the way until I graduated high school and finished up my Cumulative Record Book as a Senior. I focused on the Horse Program and even traveled with Dr. Bob Mowrey to Kentucky one year for the National Horse Demonstration. My 4-H Agent was Erin Morgan and my Livestock Agent was Amy Andrews. Amy taught me about forages and grasses for horses, helped me with posters for my presentations, and convinced me to be the captain of the Horse Bowl team. Although horses were my species of choice, Amy helped me raise a show hog, Wilbur, for the Coastal Plains Jr. Livestock Show and Sale. Hogs were my favorite animals to work with by the time I graduated college. By growing up in and around Cooperative Extension, I had an appreciation for Extension agents at an early age.

I grew up on the outskirts of Pollocksville, North Carolina, in Jones County on a large family farm that was rented out for crops – tobacco, corn, wheat, soybeans, sweet potatoes, peanuts, and cotton. Although we did not farm the land, I always appreciated farmers and what they did for a living. Even at five years old, I knew I wanted to go to North Carolina State University and become a large animal veterinarian. Although I changed my career path, I did attend North Carolina State University and received a Bachelor of Science degree in Industry Animal Science. I enjoyed getting to visit the educational field labs and work with the animals by being a Teacher's Assistant one semester for the Introduction to Animal Science course, and even cleaning hog house floors. One summer I interned with Murphy-Brown, LLC as a farm assistant, then interned with Livestock Veterinary Services in Kinston, North Carolina, the following summer. All of these experiences brought me to where I am today – full circle to first becoming a Livestock Agent, and now in my role as an Area Specialized Agent (ASA) for poultry.

In 2010, I graduated and accepted an offer with North Carolina State University, moved home and started my career as a Livestock Agent. I had the opportunity to further my career in 2015 when I applied for my current position as Area Specialized Poultry Agent. I would be the third agent (of three total agents) in that position across the state, after the restructuring of Cooperative Extension, as there had been more poultry agents previously. I knew my interest and knowledge in poultry had grown exponentially over the years I was a Livestock Agent, and this was a great opportunity to serve a more specific audience, yet continue to serve the agricultural industry that I love. I currently reside in Jones County, in Pollocksville, on a small farm. I met my husband, Adam Ross, in Cooperative Extension when he was the Livestock Agent in Randolph County. We enjoy country life and have been growing our farm since 2014. We currently process several steers each year and sell freezer beef, as well as sell pecans (seasonally) and apples fresh from the North Carolina mountains each fall. We hope to continue to expand our farm to other commodities as well. Our first child, a son, Abel Gray, was born in August 2017. I like to say we recently added to our farm "production crew" when Abel was born. We are thrilled beyond measure to have him here and can't wait to continue to follow our farm dreams so he will be able to run it one day. I was fortunate enough to take 12 weeks off to be with him after he was born. (There is a 12-week gap in programming in fall 2017.)

Furthermore, I am an active member of Pollocksville Presbyterian Church. I have helped with the Church nursery in the past and currently serve on the Congregational Care committee. I also serve as an

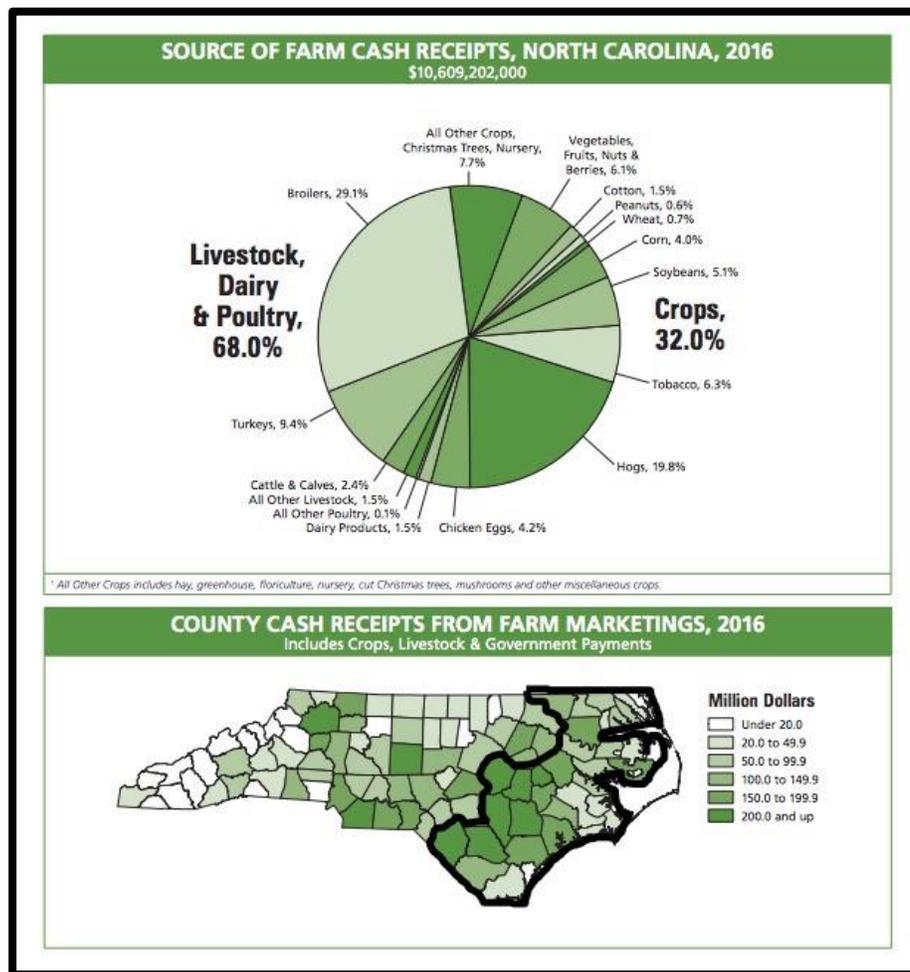
Advisory Board member for the State Employees' Credit Union at their Trenton, North Carolina branch. I was also a member of their loan review committee for several years. We meet on a quarterly basis to discuss how the Credit Union can add new and helpful services to Jones County citizens.



County Background

When I began my career with Extension in 2010, I covered two eastern counties – Craven County (my home base county) and Jones County, where I grew up. When I accepted the position of eastern Area Specialized Poultry Agent in November of 2015, I covered the eastern 40 counties. In 2017, Cooperative Extension hired a fourth poultry ASA, reducing my number of counties to 33. I would now like to take this opportunity to provide more information about the demographics of my program area.

Eastern North Carolina is known for its large chicken and turkey presence. Of the **top 10 counties in total farm cash receipts** as reported in 2016 by the North Carolina Department of Agriculture’s Agricultural Statistics, eight counties including Sampson, Duplin, Wayne, Robeson, Bladen, Bertie, Johnston, and Greene were in the eastern region I serve. For farm income (cash receipts from farming by commodity), **NC ranks broilers first, turkeys third, and chicken eggs sixth**. North Carolina’s rank in United States agriculture for 2016 was first in **all poultry and egg cash receipts**, second in **turkeys**, and fourth in **broilers**, as well as fourth in **eggs – value of production**. Livestock, dairy and poultry make up 68.0% of all sources of farm cash receipts in 2016, with broilers making up 29.1%. Turkeys follow behind making up 9.4% of that category.



The eastern counties I serve are in the highlighted black region on this map.
(Source for map, graph, and above paragraphs: North Carolina Agricultural Statistics 2017)

The agricultural industry in North Carolina is solid, especially the poultry industry. Our current Commissioner of Agriculture, Steve Troxler, has the goal to grow North Carolina agriculture to \$100 billion. The eastern NC counties greatly contribute to the state's economic value, again especially in the poultry industry. In addition, the vast majority of the 33 counties I serve are listed in the **20.0 to 49.9 million dollars** category to the **200.00 and up million dollars** category for **county cash receipts from farm marketings, 2016**. (Statistics from *2017 North Carolina Agricultural Statistics*)

Specifically, Jones County Cooperative Extension houses six agents who cover an array of responsibilities: commercial horticulture, aquaculture, 4-H youth development, commercial and backyard poultry (me), family and consumer sciences, and our director also covers field crops and livestock. We are unique in that we have four agents who are either Area Agents or ASAs. Jones County is a very rural county and agriculture is strong here, and always has been. Although Jones County only has around 10,000 residents, Cooperative Extension has always had a strong presence and that still rings true today.

In the following pages, you will find an in-depth summary of my most successful poultry programs based on the needs of the counties. I will focus on my programming impacts since the approval of my first title promotion in 2015. Similarly, you will find information on how those programs were planned and implemented. Next, I will discuss how I have aided in the Marketing of Cooperative Extension and

participated in University Engagement. Finally, I will conclude with some specific examples of my Leadership Career and Professional Development.

Poultry Program Need and Value

As you can see above, a **strong poultry Extension program in eastern NC is greatly needed and highly valued**. One main way I have worked to accomplish some of the educational needs in my counties is to **hold commercial poultry grower meetings**. The poultry ASAs create one program and annually present it across the state. This gives producers multiple chances to find the day and location that best fits their schedules. We provide unbiased, research-based information on how to be more efficient on your farm, how to be more sustainable, and provide updates on energy efficiency, litter and compost management. More information on these grower meetings is supplied later in this package.

Some of the **goals** of my **commercial poultry program** are to provide producers with information that helps better their farms economically, agriculturally, and sustainably, as well as providing ways to save money. By providing the latest technologies, we can potentially **save producers thousands of dollars**. We also want to continue to partner with local agricultural entities such as Farm Bureau, First Financial Bank, AgCarolina, and the North Carolina Department of Agriculture (NCDA) to provide agricultural programming in the eastern counties. By partnering with agricultural businesses and organizations like local chapters of the National FFA Organization and NC Choices, we are educating the public on where their food comes from and helping them to make informed decisions on buying healthy options for their family from local markets. This directly correlates with the **Local Foods initiative, a Flagship program of Cooperative Extension**. We are educating producers and agricultural interests to better market and promote local foods, local producers and agribusiness.

The main way to address the needs of the poultry industry is to work with my **Poultry Advisory Council**. I started working on the makeup of this specialized committee as soon as I started in this position; it is currently composed of industry representatives, industry loan officers, commercial producers, local Soil and Water Conservation Districts (SWCD), Natural Resources Conservation Service (NRCS) technicians, and upper administrators at the commercial poultry integrators located in the region I serve. I hold the meetings at the Duplin County Extension Office as it is centrally located for the majority of the members and also offers a nice facility for hosting the meeting.

We cover various industry topics that are current at the time such as the **Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), insulation, ventilation, disease management, LED lighting**, and other various topics. I always have a sponsor for the lunch portion of the meeting, and they are able to briefly speak about their products to the group. It is important to be **fiscally responsible** with this group, as well as with sponsorship for my commercial poultry grower meetings so I can use funding wisely to benefit the producers as much as possible and maintain a good relationship with the industry.

The other way I gather information on hot topics in the industry is by being a member of the **Poultry Coordinating Committee** with the Prestage Department of Poultry Science (PDPS). This group is comprised of faculty and staff of the department as well as the four poultry ASAs. This gives us a chance to make sure we are all on the same page as far as programming and what we are trying to accomplish. It also gives us the opportunity to highlight our programs so the other members know what we're working on.

In commercial poultry production, there is a lot of **diversity among producers**. Cooperative Extension strives to work all groups of people regardless of age, ethnicity, gender, or background. I have the opportunity to further the mission of Cooperative Extension by working with these producers, many who do not speak English as their first language. I have become creative in how to communicate with them. In one case, I worked with the client's daughter who spoke English well, in order to complete their nutrient

management plan. This was a success for Cooperative Extension and made for a great financial savings for the client.

I. Cooperative Extension Program(s)

Extension Reporting Objective: Profitable and Sustainable Agriculture Systems

Nutrient Management Planning

PLANNING

The eastern region of NC has seen **exponential growth in the poultry industry** with the expansion of Sanderson Farms in 2015 - 2018. The **majority of their new builds have been broiler houses**. A typical 8-house broiler farm site for Sanderson Farms has 27,600 birds per house, meaning there are 220,800 birds per farm. This was quite the **boost to the agricultural economy in eastern NC**.

On a new site, the integrator and financial institution lending money **require a nutrient management plan**, also known as litter plan or a waste plan. In this plan, I provide the producer with a calculated amount of litter produced on their farm, as well as provide them with options on how to properly manage their litter. This depends upon factors such as how much land they have, if they would like to apply the litter on their own land, or if they would like to have someone haul it off. Typically, producers use one or both choices – apply the litter on their own land or use a third-party applicator to haul the litter to another site. Once the litter leaves their farm, it is no longer the producer's responsibility for how it is handled. Many producers like the opportunity to get rid of the litter and not have to be responsible for it. On the other hand, a lot of producers like to apply their poultry litter to their agricultural lands / crops because it is “free” fertilizer, since it is a product that is already being produced on their farm. **This gives them a way to recycle their litter, utilizing the nutrients on their fields to produce crops in a sustainable manner.**

When determining needs for the year(s) and knowing about this large expansion from Sanderson Farms (and other companies as well), I knew a **demanding need of the Cooperative Extension poultry ASAs would be writing nutrient management plans for producers**. One way to determine this need was that outside agencies charge producers upwards of **\$2,500 per plan**.

DESIGN

NC State Extension encourages agents to become technical specialists and with that designation, you are able to write nutrient management plans. **Goals for writing nutrient management plans and working with producers** include helping them **better manage their waste and waste resources**, helping them **with conservation practices** and helping them be **environmentally friendly**, as well as **being a good neighbor**. We also work with them from an educational standpoint to make sure they understand the plan, how much litter to apply to each field that is written into their plan, and how to collect soil and waste samples and interpret reports to make agronomic adjustments to their litter applications. We **partner** with SWCD staff as well as the United States Department of Agriculture **Farm Service Agency (FSA)**. These agencies also help me advertise my classes to producers. This is a good way to market my programs, and a good way to find topics my producers would like to learn more about.

I can also write producers a **composting permit** for their poultry litter. I collect information from the producer (contact information, GIS coordinates of the farm, farm ID number, contract company, size and type of operation, topographical map, capacity and size of facility, etc.) and use it to calculate the amount of litter that a specific size bird will produce. This determines the size of the composter needed. The producer has several different composting options, depending on what works best for their farming operation. The

North Carolina Department of Agriculture (NCDA) requires all farms wanting to install a composter to have an approved permit from their poultry division prior to construction.

OUTPUTS / ACTIVITIES

Although producers know they must complete their litter management plan, sometimes it is hard to connect with them through certain methods. Not all producers use text messaging or email for example. When trying to collect specific data for each plan from producers, I had to get creative in how to do that efficiently. Also, I was getting so many phone calls for plans, I needed a way to capture the information in a timely manner, but also in a way that was easy for the producer to understand. I created a form called the **Litter Management Plan Information Sheet** that I could send to the producer (or Livestock Agent or loan officer) right away after a request for a plan. This way the producer could immediately start supplying the necessary information. An example of the information sheet as well as the compost permit checklist is included in the supplemental pages of my title promotion package.

To go a little more in depth on litter plans, there are **typically two ways a litter management plan is written**. The first way is if the producer plans to use their poultry litter on their own farm. In this case, I need the producer to go to their local FSA and request the maps of the crop or pasture land they plan to apply litter on. The other way litter plans are typically written is if the producer plans to use a **third-party applicator** to haul their litter off site. Cooperative Extension helps supply producers with the pros and cons of each option so they can choose the option that best fits their needs. If they choose to utilize their litter, it also helps them be **more sustainable on their farm** because they are recycling their waste products.

This beginning step is where an ongoing relationship with FSA, NRCS, and SWCD is so important. There is a **lot of teamwork involved** in writing litter management plans. I have been working with these agencies for several years helping producers acquire the maps they need for their litter plans as well as maps for where they'd like to construct their composters. Cooperative Extension works with NRCS and SWCD for cost share programs as well as **drawing setbacks** on composter permit applications. Cooperative Extension invites local NRCS and SWCD to speak at our commercial poultry grower meetings so producers have the opportunity to hear about upcoming **cost share programs**. One of the programs that many producers check into is the cost share opportunity for building a composter. **Producers must be in business at least three years to access this opportunity**. Cooperative Extension helps them with the record keeping forms they must fill out in order to apply for this funding.

OUTCOMES AND IMPACTS

Nutrient management plans would be a costly expense for producers if Cooperative Extension did not provide technical specialists to write these plans at no charge. My biggest year for writing plans was 2016 (a few when I started this position in 2015, and then finishing up a big part of them in 2017). I wrote 73 nutrient management plans and ~27 additional plans I assisted with for a total of about 100 plans. Each of these plans could have potentially cost each producer between **\$300 - \$2,500**. Extension efforts saved **eastern North Carolina poultry producers between \$30,000 - \$250,000** in providing this free service!

There is also a peace of mind that comes with Extension providing these plans because **Extension agents are a trusted resource among the farming community**. They know they also have access to us for litter questions and concerns, along with other poultry topics. In addition, there are very few technical specialists outside of Cooperative Extension that offer to write plans, so there was potential necessity for producers to go out of state to get this completed. It is important to note that this means as much as **\$250,000 remained in the North Carolina economy**. That's \$2,500 each producer could put toward another farm expense, such as generators or feed.

Composting permits fall along the same lines of being fairly costly as an out of pocket expense to the producer. Composting permits can cost as much as \$450. I have **written seven composting permits**

to send to NCDA. All seven have been approved and construction has either been completed or started on all of these composters. This results in a **potential for a \$3,150 savings for these producers**. As you can see from these impacts, completing the course to become a technical specialist years ago, then offering to write nutrient management plans and composting permits has **saved eastern North Carolina producers as much as \$253,150**.

There is more than sheer financial savings that Extension offers these producers by providing these plans and permits. We help them be more sustainable, save money, provide properly biosecurity for their farm, and lower their disease risk by **mitigating risk directly on their farm** with a composter. Again, the educational component is the main focus of Cooperative Extension and agents are here to be liaisons from the University to the producer and help provide them opportunities for growth on their farm, and enabling farm income and production.

Nutrient management plans and composting permits require a lot of moving pieces to work together. Cooperative Extension partners with the following to complete them: financial institutions such as First Financial Bank and AgCarolina, Soil and Water Conservation Districts, USDA Farm Service Agency, North Carolina Department of Agriculture, and many others. One great advantage of already having working relationships with these agencies was during **Hurricane Matthew**. This was not necessarily part of my planned programming, but the need for help from Cooperative Extension arose quickly fall of 2016. Extension stepped in and provided the following resources for producers, which was especially helpful because of the many environmental and financial concerns, and complications from the storm:

- NC Disaster Information Center
- Twitter – NC Cooperative Extension
- NCDA – Ag Weather Emergency Hotline
- Mortality Management Plan for Catastrophic Disasters
- Mortality Management Options
- Industry Need Request Forms
- Trespassing
- LP Gas
- Record keeping

Here is an excerpt from the email I sent providing these resources to the integrators and producers:

Mortality Management Plan for Catastrophic Disasters

In the wake of Hurricane Matthew and the potential subsequent flooding, attached is the NCDA&CS Mortality Management Plan for Catastrophic Disasters released from the State Veterinarian's Office. Please review carefully and if you have questions please [contact me](#) and I will do my best to answer and/or get you to the right person. Pat Harris is also available at atpat.harris@ncagr.gov and 919-715-6097.

[Mortality Management Plan for Catastrophic Disasters PDF](#)

Information from Natalie Woolard, Division of Soil and Water Conservation

Mortality Management Options

Rendering: Valley Protein will accept birds for render IF not too much mixed litter with birds and birds are no more than 48 hours down.

Landfill: Preferred if birds and litter can be removed without destroying the floor pad in the houses. Division of Waste Management has confirmed the following facilities will accept livestock/poultry mortality:

- Cumberland County Landfill
- Johnston County Solid Waste Services
- New Hanover County Dept. of Environmental Mgt.
- Onslow County Subtitle D Landfill
- Robeson County Landfill
- East Carolina Landfill - Bertie County
- Waste Industries in Sampson County

Please, if you are taking animals to the landfill, be sure to do the following:

- Call 24 hours ahead to let them know you are coming and how much you hope to bring-they have to be careful of the amount they take in relation to other waste to keep the landfill functioning properly.
- If you need to take animals this weekend, please let us know (which landfill and how much you want to take) so that we can ask them to be open-they are not normally open on weekends.

2016 Success Story

Title: Nutrient Management Plans

Situation: The poultry industry is currently growing exponentially. When a new farm is constructed, the integrator and the lending agency require a written nutrient management plan for the farm. The plan calculates the amount of waste that the farm will generate and specifies how to properly manage the waste in order to be environmentally friendly as well as help the farm be sustainable.

Response: NC State Extension encourages agents to become Technical Specialists in order to write these plans. I work with local Soil and Water offices to get the soil mapping done for the plan, along with other agents at NC State Extension. Producers in my eastern 40 counties were reached in farming and rural communities. There were over 100 participants.

Evaluation: Data from each producer is collected when they request a written nutrient management plan. Each producer must obtain and understand their nutrient management plan to be able to implement it properly. I worked with both producers and lending officers to complete the plans and all groups involved were very appreciative of the plans being written locally as well as at no charge to the producer.

Results: Getting a third party to write a nutrient management plan can cost the producer anywhere from \$300 - \$2,500 per plan. When the plans are written by an agent at NC State Extension, the plan can be written at no cost to the producer. I wrote over 100 plans this year, saving eastern North Carolina poultry producers between \$30,000 - \$250,000.

2016 Team Success Story

Title: Certified Crop Advisers Training

Situation: The Certified Crop Adviser (CCA) program is an American Society of Agronomy certification program. To maintain certification, CCA's must receive 40 best management practice educational credits every 2 years. Since 2000, the Agricultural Agents in the Southeast Extension District have planned and hosted an annual CCA Training to offer continuing education credits.

Response: A 2.5-day CCA Training was conducted and offered 20 Continuing Education Units. Seventy-five CCA's, consisting primarily of North Carolina agricultural dealers, pesticide/seed sales representatives, and other agencies from throughout North Carolina, South Carolina, and Virginia, attended the CCA Training.

Evaluation: An evaluation was conducted at the end of the training via a post-training survey. Fifty-nine participants completed the survey offering feedback for next years' training such as topic and speaker suggestions.

Results: In the post-evaluation, 100% of participants noted training information was relevant to their needs and exceeded their expectations, and stated they would recommend this training to others. By offering this opportunity every year, CCA's are able to keep their certification and save \$500, which is the average cost of 20 hours of continuing education online. In addition to the savings, using data from SimplyHired.com, the average salary for a certified crop advisor in North Carolina is \$5,000 higher than the average salary for an uncertified crop advisor. This salary was calculated using the average salary for all jobs with the term "certified crop advisor" or "crop advisor" anywhere in the job listing. Based on the increase in salary and the educational savings, seventy-five CCA's could potentially increase earnings by \$412,500 this year.

TESTIMONIALS

Scott Prestage, Prestage Farms

Cooperative Extension's nutrient management and environmental response to Hurricane Matthew

10/14/16

Eileen and Margaret,

I want to tell you how much we appreciate your help during the last few days. Although there's only so much assistance you could offer us while we scrambled to respond to flooded poultry farms, nevertheless you did what you could. That's important!

On behalf of our entire poultry division staff and growers, I want to say thanks for your help!

Scott

*Chris Robbins, Sampson County poultry producer, Nutrient Management Plan
08/11/16*

Thank you so much, it has been a pleasure doing business with you!

Extension Reporting Objective: Profitable and Sustainable Agriculture Systems

Backyard Poultry Management Program and Poultry Processing Demonstration

PLANNING

At the beginning of my new career as a poultry ASA, as soon as I began forming the Poultry Advisory Council and talking with a number of clients in my counties, I realized there was a need for educational opportunities pertaining to backyard poultry management. I was receiving **numerous questions about how to design chicken coops, disease and pest management questions, as well as how to protect poultry flocks from predators**. When I brought this topic to the Advisory Council, they were in agreement an introduction to poultry management program would be a great asset to the counties.

I planned this first class in 2011; it was so successful, I went ahead and tentatively planned the next class for the summer of 2012. I partnered with Dr. Donna Carver, a tremendous resource on campus. She is a poultry veterinarian with an Extension appointment. The participants in the poultry classes always like how easy it is to ask her questions. Over the years, I kept asking Dr. Carver to come back and discuss various topics, as well as involving other poultry specialists such as Dr. Ken Anderson and James Parsons. Partnering with these two individuals, as well as Dr. Carver, gave the poultry program a huge advantage – 3 poultry specialists in one room. The **program grew so much that I was approached from a participant about splitting the class in two – an introduction class and an advanced class**. Listening to this need, I created the suggested two classes. I continued the class in 2015 (**with a main focus on Avian Influenza**), just a few months before accepting the poultry ASA position. Since I have changed positions, I have focused my efforts on providing a poultry processing demonstration for backyard flock owners, with hopes of bringing back the very successful annual backyard poultry management program.

At the end of 2015, when I was in this new position, I started to reassess needs of the backyard poultry community, now that I was serving 40 counties. The Livestock Agents had been doing a “Chick Chain” where youth were able to raise chicks for a regional show. The Chick Chain turned into a much larger project and we eventually had to split into two shows because the show had gotten so large! One of the shows is now called the Coastal Plains Regional Chicken Project. It is the show that encompasses most of my counties, so my efforts are focused there. One **majorly popular topic for backyard poultry producers is on-farm processing**, definitely the one **training opportunity we wanted to offer** in conjunction with this show, since broilers are an option for youth to pick to raise and show. Cooperative Extension always has requests to put on these types of trainings because there are very few (if any,

sometimes – and currently, no) facilities that process chickens. So, if a small farm would like to offer chicken, they must process it themselves or find an alternative option.

The poultry processing demonstration for the **Coastal Plains Regional Chicken Project** started in 2017 the day after the show. I organized this training event in conjunction with the Livestock Agents processing the show broilers. We chose to do the processing demonstration at the Duplin County Cooperative Extension office because they have a great set up for this type of demonstration. I also wanted to **target other audiences** besides your “typical” backyard producer, so I invited **local chapters of the National FFA Organization** to join us for the demonstration. We had one class participate in 2017 and expect more in 2018. It is important to provide our young adult population with opportunities to learn and grow, so when they go on to college and graduate, they will have an appreciation for producers, the agricultural industry, and in this case specifically the poultry industry.

DESIGN

Backyard Poultry Management Class: Goals of the original program included educating current poultry producers on how to better manage their flock, as well as prepare families who do not currently own birds to feel comfortable starting their own flock. The main objective in the latter case is that individuals **feel empowered** with the knowledge they received at the class in combination with the support they receive from Extension to go ahead and purchase birds.

The backyard poultry management classes, as well as the new poultry processing demonstrations classes, are about **two hours long** and leave plenty of time for questions as well as discussing their future plans for poultry. **Evaluations are always provided to the class, especially in an effort to gather topic suggestions for future classes.** The total number of hours spent planning the educational meetings are **five hours per class.**

Here is a sample of part of the evaluation from the 2015 backyard poultry management class that focused on Avian Influenza, to highlight what **objectives and behavior changes** I had in mind when planning and designing the class:

As a result of the program, do you intend to:

1. Monitor your flock for signs and symptoms of Avian Influenza?
2. Evaluate and implement necessary changes to better manage your flock’s risk of contracting Avian Influenza?
3. Review your biosecurity practices and make an effort to improve the health of your flock by taking proper biosecurity measures?
4. Review your management practices and implement necessary changes to improve the health of your flock?

We have discussed topics such as predator control, fencing, nutrition, coop design, disease management, egg formation, egg selling and regulations, breed traits, breed history, state statutes, brooding, egg laying, and city and town ordinances. We always discuss **biosecurity** at our programs because it is such an important topic to cover. We work to ensure everyone leaves the class knowing how to **take various biosecurity measures to keep their birds healthy.**

Poultry Processing Demonstration: The poultry processing demonstration design began with a start to finish overview of **how to prepare for processing, how to actually process the bird, an overview of food safety and food handling, properly freezing the birds, labeling, claims, and marketing.** I knew it would be hard to cover everything in just two hours, so I set the classroom portion up for the morning and then let the participants do a walk-through of the processing and then they could stay as long after that as they wanted. This gave them an opportunity to ask the processors questions and actually practice

processing themselves. It was also important to design the class this way so the participants were not posing a biosecurity or contamination risk. When demonstrating processing poultry, it is very important for the participants to go from the “clean” side to the “dirty” side. Once they are outside of the building, they are not allowed to return inside. This helps keep equipment and floors clean and free from pathogens. It also helps keep the finished product safe. **This class fills a need for the public to learn how to safely and humanely process poultry and gives them the hands-on experience and tools necessary to go back to their farm feeling confident in this process.**

Another facet I had to recognize during the planning stage of this program was biosecurity and disease management. It had not been long since the United States had seen a terrible Avian Influenza outbreak and I knew it was a possibility North Carolina could see an outbreak which would require class cancelation. In order to make people 1 – aware of this in the respect to biosecurity and 2 – aware of this in the respect to possible cancelation of the class, I added this information to the Google Form I had the participants fill out to register for the class. Also important was prohibiting pictures and videos since these can be posted online to social media outlets and the content can sometimes be misleading to the public. If folks showed up without registering, they simply filled out one of the Google Forms shown below I had printed.

Poultry Processing Demonstration

Wednesday, May 3, 2017 // 9:00 AM
 Duplin County Agricultural Building // 165 Agriculture Drive, Kenansville, NC 28349

Join us for a poultry processing demonstration. Please register below.

*** Required**

Full Name *
 Your answer

Email *
 Your answer

Phone Number *
 Your answer

I have my own poultry flock at home. *

True
 False
 Not yet

I plan to use what I learn at this demonstration on my own farm. *

True
 False
 Maybe

By submitting this form, I agree to the following: *

I will follow strict biosecurity protocols before, during, and after the poultry processing demonstration (example: hand washing, changing clothes and shoes before going back to work with my flock, etc.)

By submitting this form, I agree to the following: *

I will not take videos and / or photographs during the poultry processing demonstration.

By submitting this form, I agree to the following: *

I understand this demonstration may be canceled at any time due to the possibility of a disease outbreak in NC. (You will be contacted if the demonstration is canceled).

OUTPUTS / ACTIVITIES

Backyard Poultry Management Class: Classes were held at the Cooperative Extension office as well as the Committee of 100 building in Craven County one year. PowerPoint presentations as well as less formal question and answer type formatting were used for the classes. In addition, participants were given handouts of the presentations and discussions to be able to refer to the material after class. I was able to inform the participants that I have a **poultry email listserv** as well as I write for numerous newsletters / newspapers. We also let participants know of upcoming poultry events, field days, and other programs that were available to them. The **target audiences** were **individuals who already owned poultry and wanted to further their knowledge and improve their flocks**, as well as those **individuals who were interested in owning poultry in the future**. Over 80% of participants already owned or had owned their own flocks.

In order to partner with local businesses, our local Chick-Fil-A has sponsored a chicken sandwich meal for several years. This helps **promote the poultry industry and incorporates working with our local partners**. I have also worked with our local hardware store in Trenton to offer poultry-related raffle prizes, such as feeders and poultry feed. By not only offering educational resources, but also pulling in other aspects of the poultry industry, the poultry “class” became a more comprehensive poultry “program.”

Poultry Processing Demonstration: The poultry processing demonstration is quite the integrated program! We use the conference room for the producer training portion, the kitchen for the drying, packaging, and labeling of the birds, and outside for the processing portion. It requires a LOT of folks! It is a great example of a **multi-programming collaboration**. This provides an opportunity for us to work with other agents, especially the Family and Consumer Sciences (FCS) agents. They are in charge of the kitchen, while the Livestock Agents like to be outside processing birds. Going back to the beginning of the project, a large majority of our laying hens (youth choose between laying hens and broilers) for the Coastal Plains Regional Chicken Project come from **embryology in the classrooms that our 4-H agents are in charge of**, so this really is an **integrated program that involves every major program area** in an office.

We also partner with the Prestage Department of Poultry Science (PDPS). One educational opportunity I incorporated this year was to get **recruiting packets** from the PDPS to give to the high school participants. Many of them were interested in learning more about the educational opportunities of the department, attending college there, as well as other programs like the Poultry Science Summer Institute. For the actual processing itself, we work with Dr. Matthew Livingston and Christina Shenton, both from the department. Christina typically delivers a PowerPoint presentation to the participants and then Dr. Livingston leads the outside processing portion of the class. Working with these individuals **links the program back to the University** as well as provides expertise for the participants.

The topics covered in Christina Shenton’s portion of the program are:

- | | | |
|-------------------------------------|---------------------------------------|-----------------------------------|
| ▪ Feed withdrawal | ▪ Packaging / Labeling | ▪ Equipment needed for processing |
| ▪ Catching | ▪ Biosecurity | ▪ Breed production background |
| ▪ Slaughtering / scalding / picking | ▪ Pest control | |
| ▪ Evisceration | ▪ Animal welfare | |
| ▪ Chilling | ▪ Strains for egg and meat production | |

Another major portion of the program is the regulatory part. We have Marvin Lackman, Food Compliance Office from the North Carolina Department of Agriculture and Consumer Services, Meat and Poultry Inspection Division, to provide the class with information on:

- | | | |
|---------------------------------|----------------------------------|----------------------|
| ▪ Poultry exemption: 1,000 bird | ▪ Poultry exemption: 20,000 bird | ▪ Misbranding |
| | ▪ Adulterated products | ▪ Record keeping |
| | | ▪ Sanitary standards |

- Labeling
- Safe handling labels

Advertisement for the class was through emails to all 40 County Extension Directors (CEDs), Livestock Agents, and my own list of backyard poultry producers. Since this class was sensitive in nature, I asked for it not to be promoted on social media outlets. Directors and agents forwarded the information to their county poultry producers. As mentioned above, I used a Google Form to incorporate the use of technology into the program as well as to have a record of those in attendance fully understanding the rules of the program.

OUTCOMES AND IMPACTS

Backyard Poultry Management Class: Evaluations showed participants estimated this program **saved them \$500 on average**. There was also an **overall increase in poultry management knowledge** and understanding according to the evaluations. Knowledge **before the workshop** ranged on average from **Very Low, Low, and a few Moderate** to **after the workshop, Low, Moderate, High and even a few Very High**. They were rating their knowledge on the following subjects: 1- Avian Influenza 2- Managing Your Flock's Risk 3- Biosecurity and 4- NC's Planning and Preparedness. Also, every participant who answered the question "Was the information easy to understand?" answered **yes**. Everyone said the training workshop **met their expectation** and **they would recommend this training workshop to others**. Some participants even drove two hours to attend the class!

Other **impacts of the class** include **societal behavior changes**. By educating producers and the public on how to **properly care for and manage their flock**, there starts to be a shift in society that the poultry industry is keeping the welfare of the animals at the heart of their decisions while producing a **wholesome and safe product for consumption**.

When asked what participants **liked most about the Annual Backyard Poultry Management Class** or **how could this training be further improved**, here are some of the notes:

Great update on AI. I feel very informed and know my risks now.	You did great! Good planning, great speakers!	Good information!	Very informative. Relaxed atmosphere.
Excellent speakers!	People willing to ask questions when they didn't understand and presenters willing to explain.	The information and ways to look for the virus.	Thanks Margaret for arranging this meeting. Please pass along thanks to our presenters Mandy and Donna.
Maps.	Enjoyed meeting and talking with specialists from NC State.	Ways the state has planned for disposal. Door prizes.	It was very informative.
Lots of knowledge of presenters. (2x)	Learning about Avian Influenza. (4x)	Agenda informative.	Speakers very approachable.

As noted above in the **DESIGN** section, I was looking for **behavior changes** as a result of the class. Everyone who currently had a flock said they were either **already doing this** or answered **yes**, that they did intend to initiate behavior changes to protect their flock from Avian Influenza. All participants said they thought this program would help them manage their flock in a more efficient way.

Poultry Processing Demonstration: An evaluation was given to all of the participants of the 2017 program. When asked what participants liked the most about this training, here are some of the responses:

- The processing demonstration.
- Lots of info.

- The effectiveness of the information. ▪ All of it.
- Learned a lot.
- It had lots of information and was easy to understand. The ability to ask questions.
- I enjoyed how thorough everyone was during both the presentations and processing. Very informative for my students.
- Knowledgeable presenters; wonderful informative handouts.
- I liked how there were different aspects shown throughout the training / PowerPoint part.
- Great wealth of info, knowledgeable instructors who were willing and able to answer questions. Excellent program! Can't wait for the next.

The evaluations showed 100% of the participants were either “**satisfied**” or “**very satisfied**” with the training. In addition, they all said the information was easy to understand. **Before** the workshop, the participants rated their knowledge as **very low, low, and a few moderate**. **After** the workshop, the participants rated their knowledge as **moderate, high, or very high**. This section was based on the following topics:

- On-farm processing ▪ Acquiring your Meat Handlers License
- Labeling your product ▪ Poultry exemptions
- Proper procedure for chilling and packaging poultry after processing

All of the participants said the training workshop **met their expectation** and they would **recommend this training workshop to others**. Under the **Taking Charge** section of the evaluation, we asked if the participants planned to do any of the following as a result of this program:

- On-farm process your poultry? ▪ Properly chill and package your poultry products after processing?
- Properly label your product?
- Acquire your Meat Handlers License?
- Follow the poultry exemption rules for 1,000 birds (or 20,000 birds)?

Of all of the participants who DID plan to on-farm process, all of the participants said they **did intend to do the above items**, were **already doing them**, or **would maybe do them**. The participants who said **yes** to the question “do you think this program will save you money on your farm?” said the **program saved them up to \$1,000 on their farm**. All of the participants who said they DID plan to on-farm process said **they did think the program would help them successfully process poultry on their farm**.

Impacts were made in other ways as well. **The meat that was harvested went to local food banks totaling between 400-500 pounds of donated meat!** Plans are well underway for this year's annual poultry processing demonstration in conjunction with the Coastal Plains Regional Chicken Project. We plan to expand this year's speakers to include NC Choices. They are a part of the Center for Environmental Farming Systems (CEFS) and provide educational marketing tools, labeling information, and demographics to help producers know where and how to market their product (Farmers' Market, direct sales, farm stand). Again, we partner with our FCS agents to ensure **proper food safety, handling, storing, chilling, freezing, temperatures, and labeling**.

I also help with a poultry processing at the University of Mount Olive (UMO). The first processing was in 2017. They have scheduled their processing for this year after their poultry show. Last year, I judged their poultry show with the Wayne County Livestock Agent, Stefani Garbacik Sykes. Partnering with a local University that teaches a wide variety of agricultural classes, including this one where the students raise the birds, show them, then process the broilers, provides a great opportunity for education as well as promoting the poultry industry. Many of these youth may end up with jobs in the poultry industry. In fact, I recently attended a **career day** at Jones Sr. High School and Christopher Hicks, who attended Jones Sr. and is

currently enrolled at UMO, also attended the career day to speak to the students as an ambassador from the University. He is currently a collegiate FFA officer. I had the privilege to speak to the students about my career with Cooperative Extension and several seemed interested in a career in the agricultural industry.

2016 Success Story

Title: Backyard Poultry Educational Programs

Situation: Interest in having backyard chickens as a hobby and / or a business has grown over the past several years. Producers are using backyard poultry as another source of income for their small farms by selling eggs and / or meat from their chickens. There is an educational need for backyard poultry topics such as parasite management, coop design, predator control, disease symptoms / treatment / prevention, and nutrition.

Response: NC State Extension responded to this concern by hosting various backyard chicken classes through local Extension offices. I was able to participate in these classes by attending as a speaker on the above topics. Other ways Extension responded was by partnering with local feed dealer representatives and local feed stores to speak at their Chick Chats which were hosted by Nutrena.

Evaluation: Data was collected by the agent or company that hosted the training. There were over 50 participants total between two Chick Chats and the Wayne County Backyard Poultry Class.

Results: Evaluations showed increased knowledge on the class topics as well as participants provided topics for future classes. The evaluations showed the classes saved them on average \$1 - \$500. At the Wayne County Backyard Poultry Class hosted by the Wayne County Livestock Agent, Stefani Garbacik, before and after knowledge points increased on average 6 points per person.

2016 Team Success Story

Title: Beginner Backyard Chicken Workshop

Situation: Backyard poultry flocks are becoming increasingly popular as consumers want to know where their food comes from. In a USDA-APHIS study in 2013, 0.8% of families surveyed owned chickens, that number has increased over the years as more people become familiar with chickens, eggs, and handling both. Internet searches for chickens, housing, and chicken coops were well over 9,000 per month in 2014, in the US alone. Cooperative Extension offers a unique view on commercial and backyard flocks to encourage the safe handling, housing, and care of these animals.

Response: A workshop was held in conjunction with Nutrena, to offer information to local county residents. This was aimed at beginners and was advertised online, on social media, in the newspaper and around the county with flyers. 13 people attended the workshop held in Goldsboro.

Evaluation: An evaluation was given to all participants at the end of the workshop and 12 of the 13 were returned.

Results: 67% of the participants who returned the survey said they would look into different bird types, and research what would work the best for their area. Over 33% said they would change their biosecurity measures, investigate better housing and learn more about diseases that could affect their birds. 83% of participants gained knowledge from this workshop and plan to apply it to their flocks. By improving their housing, biosecurity, disease identification, and bird types, owners can improve their care of their animals and in turn, improve the quality of their animals.

2015 Success Story

Title: Annual Backyard Poultry Management Class - Focus on Highly Pathogenic Avian Influenza

Situation: Backyard poultry producers are growing in popularity in Craven and Jones Counties and this increasing number of operations has led to an increased need for educational programs on basic poultry management. In addition this year, Avian Influenza is a threat to North Carolina and producers are looking

for information on proper biosecurity measures and information on symptoms, transmission, and reporting.

Response: The agent partnered with North Carolina State University's Cooperative Extension poultry veterinarian, Dr. Donna Carver, and North Carolina Department of Agriculture's Emergency Programs veterinarian, Dr. Mandy Tolson, to offer a Backyard Poultry Management Class focusing primarily on the threat of Highly Pathogenic Avian Influenza.

Evaluation: Evaluations were collected at the end of the class to see what topics producers wanted to see covered in the future (at our regularly scheduled annual Backyard Poultry Management Class), and to determine what participants learned that they could take back to their farm to improve their flock.

Results: Participant knowledge increased from very low and low to moderate, high and very high. 100% of returned evaluations showed **participants felt the class would save them up to \$500 on their farm.** Evaluations also showed the majority of backyard producers were satisfied with the information they received on how to prepare for Avian Influenza and will put those practices into place immediately.

TESTIMONIALS

*Keith Walters, Southeast District Extension Director
Regional Chicken Project Poultry Processing Farmer Training
05/04/17*

Margaret,

Congratulations again on being selected as a winner for the communication awards!

I enjoyed the training yesterday and you are doing a great job!

Way to go,
Keith

*Stefani Garbacik Sykes, Wayne County Livestock Agent
University of Mount Olive Animal Science Poultry Show & Processing
04/13/17*

Just wanted to thank you for all your help the past 2 days! I will be entering the numbers in for a non-degree credit class as well as a success story. I will put you on both of them. 😊

See you next week!!
Stefani

*Mark Seitz, Pender County Extension Director, Tractor Supply Tour D'Cluck Backyard Poultry Seminar
04/08/16*

Just talked to Jessica and wanted to thank you for coming to Pender last night. Sounds like you had a decent turn out and made a good connection.

Extension Reporting Objective: Profitable and Sustainable Agriculture Systems

Youth Poultry and Agricultural Awareness Programming

PLANNING

Today, youth are much less likely to know where their food comes from or have any experience on a farm. Not only is it important for Cooperative Extension to support local 4-H clubs and the interests of the kids involved, but it is also important for us to empower youth to learn more about agriculture, how to support agriculture, as well as how they can become involved in agriculture when they grow up.

The same need for youth agricultural education was found in the school systems. One of the Advisory Council members came to me with an idea to do an “Agriculture Day” for local Elementary-aged students. Youth agricultural education work supports two other key learning objectives – “**School to Career**” and “**Leadership Development**” under our Extension reporting objectives.

Another program I helped with in 2014 was the Southeast District 4-H Chick Chain (that turned into the Coastal Plains Regional Chicken Show). Here is an excerpt from the program flyer: “A 4-H Chick Chain is an organized group of children who are raising chickens for show and sale in order to learn more about the business side of the livestock industry. Through the 4-H program, children will be given 10 chicks. Six months later each child will return with 3 of those birds to the Southeast Chick Chain Show and Sale. After the show the birds will be sold at auction. Some of the money goes back to the child and some goes back to the 4-H program to buy chicks for the next year.” This program had over **80 participants** with the average hen bringing anywhere from \$10 - \$25 per bird!

DESIGN

There were **several goals and objectives** for working in the schools. We had to keep in mind many of these children had never seen farms or livestock. The goals for the school educational program were to **increase agricultural awareness and knowledge** with a big push to teach youth “where their food comes from”.

A **pre-and post-test** were given to students to gauge their knowledge before we presented the program and then again after the program was complete. We set out to change the attitudes of the youth from a negative attitude to a positive one of being proud of where their food comes from. **Economic factors are positively affected** through these programs because of the possibility of these youth going into the agricultural industry - an industry that generated almost **\$150 million between Craven and Jones Counties for Livestock, Dairy, and Poultry Products in 2012**. (This program started when I was a Livestock Agent).

The youth program is a great example of **programming across disciplines** as all the agents in Craven County were involved in “Ag Day”. We wanted to incorporate a **whole agriculture experience**, which did not just include livestock. We included other responsibility areas such as 4-H Youth Development, nutrition elements from our FCS agent, and a presentation from our NCDA aquaculture representative. This was a great opportunity for the staff to work together to plan an **integrative program** that showed real impacts in knowledge learned. We continue to do this type of programming.

OUTPUTS / ACTIVITIES

Ag Days have been set up where each group rotates through different agricultural stations. For example, at one of our Ag Days we had the following stations: Johnny Apple Seed! (horticulture), 4-H Pumpkin Fun (how to make pumpkin pie in a bag), Bumper Crop (field crops), You Are What You Eat! (nutrition), The Bees Knees (beekeeping), Billy Goat Gruff (livestock), and Cash Crop Corner (aquaculture / agribusiness). All the stations included **hands-on activities** where youth were able to interact with livestock or actually make pumpkin pie. Throughout the program, youth were able to ask questions to the presenters and learn more about that station’s key learning points. **A pre- and post-test were given to the students**

as well as an evaluation to the teachers. For the in-school agriculture education program, the target audience was youth who had **agriculture / science-based curriculum**.

For the Coastal Plains Regional Chicken Project, the participants pick up the birds in February and raise them until the show in May. They are required to attend an **orientation session** from their Livestock Agent or teacher prior to receiving their birds. They also must attend a showmanship class to learn how to properly show their bird. This class is great because it also allows the students to learn more about what questions the judge may ask during the show and allows them to **practice with their bird**.

Other youth poultry programs I have helped with include Science / STEM Day for Jones County elementary students, Duplin Grows for all the second graders in Duplin County, and I judged the 2016 Martin County 4-H Poultry Chain Show. I also served as a **Person in Charge (PIC)** for several **District Activity Days** and served as a room host twice for poultry programming. For five years as a Livestock Agent, I also helped at the livestock barn with the Coastal Carolina Agricultural Fair and their youth livestock programming. I was able to take those skills and transfer them to **youth poultry programming**.

In my current role as poultry ASA, I help with the following youth poultry programs: **poultry judging** (setting up the competition as well as working with local teams to practice for the contests), **4-H Congress poultry presentation judging / outdoor cookery judging** and set up, as well as **avian bowl** and other youth activities. When working with the local poultry judging teams for practice, I like to use the **poultry learning laboratory kit** from The Ohio State University. These kits have a plethora of resources to teach the kids about egg grading, carcass grading, and all aspects of poultry judging.

OUTCOMES AND IMPACTS

Evaluations to both students and teachers showed a successful Ag Day program. Several test averages are shared below in success stories, but the pre- and post-test scores respectively for three Ag Days are shown in the chart below: **(overall average increase in knowledge of 12.7 points per Ag Day)**.

Ag Day Pre- and Post-Tests	Pre-Test	Post-Test	Points Increased
Ag Day 1	75	84	9
Ag Day 2	60.6	73.3	12.7
Ag Day 3	56	72.5	16.5

The teachers were also given an evaluation and asked several questions to gauge the value they placed on Ag Day. Here is a sample of the **Teacher Feedback evaluations** and the results:

1. How beneficial do you think this program was to your students?
 - a. Not beneficial at all: 0%
 - b. Somewhat beneficial: 0%
 - c. Beneficial: 25%**
 - d. Very beneficial: 25%**
 - e. Extremely beneficial: 50%**
2. What do you think was the most beneficial part of the program?
 - **I think the most beneficial part of the program was the hands-on activities and visuals.**
 - **Hands on connections to content they have learned in 4th grade about NC and the agricultural impact it has.**
 - **The best thing was that we switched each classroom. The students were able to move and work with different presenters.**
 - **Everything. NC animals. NC crops / machinery.**

3. What would have made this program more effective?
 - **A scrapbook for the students.**
 - **More time to spend on a few of the activities.**
 - **Extend the time for each presenter. There was so much valuable information!**
 - **Nothing that I can think of.**
4. Did this 4-H School Enrichment Project meet your expectations?
 - **It brought AG to the school, which reinforced what we learned in a book.**
 - **Absolutely! Let's go ahead and put it on the calendar for next year! 1st week in October 😊**
 - **Yes, it did.**
 - **Absolutely.**

Did this project:	No	Yes
1. Increase your student's science skills?		100%
2. Increase your student's communication skills?		100%
3. Improve student behavior?	50%	50%
4. Increase student's interest in the area of agriculture?		100%

2016 Success Story

Title: Increasing Awareness of the Poultry Industry during Youth Development Events and Public Events

Situation: Youth today are totally disconnected from farm life and what products animals give us. Being part of a land-grant University system, NC State Extension has a mission to properly educate the public with unbiased, research-based information, as well as promote agriculture across the state and in my case, highlight the poultry industry.

Response: Through working with local NC State Extension offices and agents, I was able to attend and help educate the public about the importance of the poultry industry, what products the industry brings to the table, how the industry increases economic development by bringing revenue into local communities as well as creating jobs, and how poultry can be a healthy and nutritious choice. Events included Jones County Turkey Showmanship Class, Sampson County Ag Day, Duplin Grows, Wayne County Poultry Showmanship Class, Delalio Elementary School Career Day, the Regional Chicken Project show and harvest, Jones County Science Day, District Activity Day, and Poultry Health and Biosecurity presentation at a local high school.

Evaluation: Evaluations were given at the above events from the agent who coordinated the event. There were between 1,500 – 2,000 participants total in the above events.

Results: Evaluations showed participants enjoyed the poultry part of the program and learned more about the poultry industry and how it is an integral part of the North Carolina agricultural industry. It is especially important to debunk myths about the poultry industry such as how the animals are treated, spacing, etc. Having the opportunity to talk with someone who is open to learning more about this issue is worth a great deal. Overall, all of the above events were a success and most are already planned for 2017.

2016 Team Success Story

Title: 2016 Regional Chicken Project

Situation: There is an interest in youth to participate in chicken projects because they are a more affordable option in comparison to the larger species. Extension knows the value of livestock projects and the life skills they provide.

Response: As a collaborative effort between Extension and school ag education classes (FFA), 8 counties offered the chicken project. Participants could choose between raising laying hens or broilers. Broilers

could be given back to be processed and donated to a food bank. The goal was to provide lessons in raising chickens, showing chickens and recordkeeping. 112 participants signed up and 89 participated in the show. Youth raised hen chicks from 3 days to 4 months and broiler chicks from 3 days to 7 weeks. There was an organized showmanship contest, breed show, and record book contest. Youth attended 2 mandatory training sessions. Cape Fear Farm Credit provided financial support. \$420 in prize money was given to participants who placed in the top 3 in record book and breed show and top 5 in showmanship. **Evaluation:** 87 people completed an online evaluation prior to the show. 44 people did an evaluation at the show.

Results: 98% of participants were very satisfied or satisfied with the project experience. 90% of youth improved on responsibility and work ethic. 84% improved on communication skills. 96% learned new ideas on raising and showing chickens. Some quotes from participants are "I could learn about chickens and still have fun." Another youth said "my favorite part was actually getting to work with the chickens, hands on learning is the easiest way for me to learn." A parent said that "what I like best is the opportunity for my child to learn more about chickens and the responsibilities that go along with caring for animals."

2016 Team Success Story

Title: Duplin Grows

Situation: Youth have little education about where their food comes from, and there is a wealth of misleading information available. Agricultural agencies and companies are often unempowered to contribute to the knowledge base of youth in agriculture. Advisory committee has voiced a need for youth to have a better understanding of where their food comes from.

Response: Cooperative Extension in Duplin County and the Area Specialized Poultry Agent partnered with volunteers, agricultural companies, agencies, and Duplin County schools and government to offer a 2-day agriculture and food awareness event for second graders in the county. Seven learning stations were provided that covered soybeans, smoothies, small grains, beef, pork, poultry, bees, gardening, and soils. About 800 youth (34 classrooms), 60 school personnel, and 60 volunteers participated. The county advisory committee provided guidance and volunteers for the event.

Evaluation: Verbal and visual evaluation was conducted to gauge interest and knowledge gained. Written evaluations were collected from teachers at the end of the activity. Volunteers, staff, and teachers provided verbal feedback as well.

Results: The youth gained knowledge about different agricultural products, including common products that contain agricultural commodities. Youth gained knowledge about modern agricultural practices and were able to interact with producers and industry personnel. One county advisory committee member stated, "I don't think you could have done anything better to educate our young people in agriculture." Another committee member, also a teacher, stated, "It really accomplished the purpose and so many do not. It wasn't for show, but for substance."

2015 Success Story

Title: James W Smith Agriculture Education Day

Situation: The majority of youth in today's society are unaware of where their food comes from and have never seen farm animals. Craven County Cooperative Extension teamed up to put together an Agriculture Education Day for third grade students at a local elementary school. Educational stations included: 4-H Horticulture, Livestock, Small Grains, Soybeans, and Nutrition. All stations were interactive and hands-on and included activities, actual livestock for the youth to interact with, as well as materials they could take home.

Response: We partnered with local producers and volunteers, the North Carolina Soybean Producers Association, the North Carolina Small Grain Growers Association, the North Carolina Cattlemen's

Association, and Extension agents from Craven County to host the various stations as well as provide material and activities. Our audience consisted of 82 Craven County third graders at James W Smith Elementary School and their four teachers.

Evaluation: Each student completed a pre-test before the day's events and a post-test after Agriculture Education Day.

Results: The results showed a 65.7% average on the pre-tests and a 71.9% average on the post-tests - a 6.2% increase in agricultural knowledge. Teachers were also asked to complete an evaluation and provide suggestions for improvement of the day. Overall, the day was a huge success and youth learned more about the importance of agriculture. Youth will now be able to better understand their agricultural curriculum in the classroom as well as make better decisions when it comes to nutrition. Teachers also benefitted because they were provided with activities and educational worksheets to use in the classroom at a later time.

TESTIMONIALS

*Richard Goforth, South Central Area Specialized Poultry Agent
4-H Poultry Judging, Avian Bowl, and Poultry Presentations for 2017 4-H Congress
08/04/17*

I wanted to say a big THANK YOU to all those that helped with the 4-H judging, Avian Bowl and Poultry Presentations last week. It is great to work with such a professional and supportive group. I know what a busy and hot time of year these events occur and appreciate your help and expertise in making these events happen. Many of you helped with both days of events and came out early on a Saturday even. Thanks again for your efforts!

Richard Goforth, Area Specialized Poultry Agent

*Keith Walters, Southeast District Extension Director
4-H District Activity Day PIC (Person in Charge) – Chicken and Turkey Char-Grill
06/20/17*

Team Southeast,

Thank you so much for all that you did to make the 2017 Southeast 4-H District Activity Day a success. You provided presentation workshops to train 4-H youth, served as host counties, secured a location for the event, recruited and trained judges, provided directions to the event and classrooms, made people feel welcome, calmed nerves, served as PICs, coordinated food for breakfast and lunch, presented participation ribbons, double checked score sheets and the list goes on and on. Thank you especially for your investment of time and energy to improve the lives of our young people. Your team effort allowed the day to run smoothly. We really do appreciate everything that you did to make this DAD possible. We received very positive feedback and will work to improve youth participation at this event next year. Please forward my thanks to those not on the list and provide a special thanks to all that served as judges, room host and runners for the event.

Thanks again,
Keith

Jeff and Amanda Williams, Coastal Plains Jr. Livestock Show and Sale Parents

2017

Just wanted to say thank you for everything that you have done to make the 2017 Coastal Plains Show possible for the kids!! Our boys enjoyed this SO much and without you guys in the background they would not have had this opportunity!!

Jeff and Amanda Williams

*Amanda Hatcher, Duplin County Extension Director
Duplin Grows Agricultural Awareness Program
04/19/16*

Thank you all for your work for Duplin Grows, our ag and food awareness event for 2nd graders in Duplin County. We ended up with 34 classrooms from Duplin with about 800 students, more than 30 volunteers each day, plus more than 60 adults from the schools to participate. Here are some things I heard that I wanted to share: "I don't think you could have done anything better to educate our young people in agriculture." Mr. J.W. Kilpatrick, volunteer & president, Duplin Agribusiness Council.

"Thanks again so much for all you all did to make today the wonderful event that it was. We go to so many events and yours was so well organized and easy. It really accomplished the purpose and so many do not. It wasn't for show, but for substance. I appreciate that so much. I also appreciate y'all letting us be a part of it. We grew today in many ways. You have a great team and they have a great leader! I'm so glad to be partners with you all and if there is anything we can do please let us know!" Mr. Joseph Murray, volunteer & agriculture teacher, East Duplin HS. Joseph and three of his students came on Wednesday to help out. Many other positive comments were heard -- I believe you all did a great job and showed an excellent team spirit. Thank you all for your dedication to the youth and adults of Duplin County.

Amanda Hatcher

*Eileen Coite, Sampson County Extension Director, Sampson County Ag Day
04/19/16*

Wanted to make sure each of you saw the nice article in today's Sampson Independent. What a great day and each of you had a part in its success, so THANK YOU very, very much!

Here is the article: <http://clintonnc.com/news/8733/hundreds-enjoy-sampson-county-ag-day-festivities>

We will be following up soon to seek input on how we can grow and improve even more next time. Please let us know your thoughts.

Thanks again!
Eileen Coite

*Eve Honeycutt, Greene / Lenoir Counties Livestock Agent, Coastal Plains Jr. Livestock Show and Sale
03/29/16*

Thank you so much for all you do for this event. I truly enjoy working with you and appreciate all that you do to make the show happen. Thank you for giving so much of your time and effort! Eve

*Sarah Delap, Jones County 4-H Agent, 2015 Jones County 4-H Summer Adventures Chicken Camp
08/24/15*

Margaret,

Thank you so much for all of your help with the chicken camps this summer. I think the kids really enjoyed learning and holding the birds. Also thank you so much for all of your help with the youth livestock program. You have been a great liaison for both groups. Thanks again for all of your help.

Sarah

*Abbi Davis, Carteret County Goat Show Secretary
Use of Craven County Cooperative Extension Goat Weigh Scales
08/23/15*

Craven County Cooperative Extension,

Thank you so much for your support of this year's Carteret County Goat Show. It was so nice of you to loan us your scales to use! The show truly would not have been a success without you. Thank you again for everything!

Sincerely,
Abbi Davis, Show Secretary

*Eve Honeycutt, Greene / Lenoir Counties Livestock Agent, Coastal Plains Jr. Livestock Show and Sale
04/08/15*

A very special THANK YOU to each of you who helped in some way with this year's Coastal Plains show. I appreciate each of you stepping in to help in any role. Our show committee tremendously values all the Agents that work the show- they are very complimentary of everyone. Thank you for being a part of this historic youth livestock event!

Eve

*Marsha Earp, Craven County Horse Owner and Volunteer, James W Smith Ag Day
03/21/15*

Most appreciated. Always enjoy seeing you and thought yesterday was a great presentation for the kids. Great job done by all.

Marsha Earp

Stefani Garbacik Sykes, Wayne County Livestock Agent

Wayne County Livestock Show and Sale
2015

Margaret,

Thank you so much for your help with the 2015 Wayne County Jr. Livestock Show and Sale. We couldn't do it without you! Let me know if you need anything and I'd be happy to help.

Thanks again,
Stefani

As you can see from the above programs, I have been working in my counties in person and via other forms of communication. Here is a chart of my contacts from the Extension Reporting System for 2015 through 2016 (2017 not yet available).

Contacts from 2015 – 2016	
Known Face-To-Face	4,236
Non Face-To-Face	5,573

II. Marketing of Cooperative Extension and University Engagement

Some of the tools we use to market Cooperative Extension include newspaper, newsletters, and social media. I have been writing articles for several news outlets since I started working for Cooperative Extension in 2010, such as the **Fencelines** newsletter that has now changed into a partnership with several other counties who did a similar newsletter named **Livestock News**. Currently, Richard Goforth, the south-central poultry ASA, and I alternate turns to write for Livestock News. This newsletter is typically e-mailed to subscribers via their county Extension office through **Constant Contact**. Community members have the option to subscribe or unsubscribe to the newsletter. The writers are from the following 18 counties:

- | | | |
|--------------|--------------|------------|
| ▪ Bladen | ▪ Johnston | ▪ Richmond |
| ▪ Cumberland | ▪ Jones | ▪ Robeson |
| ▪ Duplin | ▪ Lee | ▪ Sampson |
| ▪ Greene | ▪ Lenoir | ▪ Scotland |
| ▪ Harnett | ▪ Montgomery | ▪ Union |
| ▪ Hoke | ▪ Moore | ▪ Wayne |

Sometimes, Livestock Agents like to include poultry articles in their newsletters, so I also contribute to the **Northeast District Livestock Newsletter**, as requested, that is put together by the Livestock Agent in Warren County, Kelsey Lichtenwalner. Another way I **market my programming** and **share educational information** with producers is through the **Sampson Independent** newspaper. I write for them about every six weeks and try to split my articles between backyard poultry topics and commercial poultry topics. **Sampson County ranks #1 in turkeys for “top ten counties in farm cash receipts for specified commodities” for 2016** (NC Agricultural Statistics 2017). Since they have a large number of producers in a concentrated area, I try to make sure my articles are timely. For example, I write seasonal articles such as “Being Energy Efficient in Your Poultry Houses” in the winter. Here is an excerpt of that article:

POSTED ON JANUARY 3, 2017 BY SAMPSON INDEPENDENT

Being energy efficient in your poultry houses

AGRICULTURE

By Margaret Ross - Contributing columnist



Over the years, energy efficiency has ramped up and people are more aware of their energy usage. Power companies have also started offering incentives to be more energy efficient. The poultry industry is also thinking along the same line. Here are some ways to help reduce your energy costs associated with your poultry houses:

Insulate your Houses- Your poultry houses and equipment should be well maintained and in good working order. If you need to, you may modify them to stop excessive heat loss. It is also important to insulate your poultry houses. Be vigilant of and quickly repair insulation that birds, rodents, or insects may destroy or damage.

Seal Curtains- Be sure to repair any curtain holes and rid of cracks between your houses and your curtains. Cracks may reduce the ability to properly control your ventilation. The entire

Here is an excerpt from one of my backyard poultry articles for the Sampson Independent:

POSTED ON MAY 16, 2017 BY SAMPSON INDEPENDENT

Backyard chicken DIY projects

AGRICULTURE

By Margaret Ross - Contributing columnist



PVC pipe waterers supply clean water for the backyard chickens.

If you have ever considered about how much they make projects you can do to customize what you want. You can add a waterer, and much more taking on a chicken DIY

Chicken Coops / Tractors it is a mobile coop. It allows you to move your yard in an easy and constantly have fresh grass for your population and helps feed. It can be a great asset to your yard. You can make any chicken coop with wheels (wheel barrow



Nesting boxes can be added to a portable chicken coop.

[Top Searches](#) | [Riding Mowers](#) | [Joel Parker](#)

and handles (wheel barrow-type handles work great). Many folks use old dog houses (or even play houses) as a starting point for chicken coops because they are enclosed and safe and all you have to do is add in a roosting bar and nesting boxes.

When building or retrofitting a structure to a chicken coop or tractor, consider spacing requirements for your chickens. They need a minimum of 2.5-3.5 square feet per bird of inside coop space plus an additional 4-5 square feet of outside fenced in run space. If you make your own chicken coop, don't forget to add a run for them to have time outside to exhibit their natural behaviors like scratching in the dirt for bugs and taking dirt baths to rid of mites and external parasites. When designing your run, don't forget to cover the top of the run with chicken wire or a solid roof if possible to keep aerial predators out. Also, be cautious of ground predators as you may need to add additional precautions such as chicken wire under the ground to stop them from digging under the fence to get into the chicken run. Other management aspects to consider are protection from

the weather, proper ventilation (cool in the summer and warm in the winter), adequate nesting boxes (at least one per 4-5 hens and at least 12" x 14") and adequate roosting space (minimum of 9"-10" of perch space).

Chicken Waterers: There are lots of ways to water your chickens and you can purchase inexpensive waterers from any local feed and seed store. If you're interested in filling up waterers less and having cleaner water, you can make a waterer. One option for doing this is by using a large PVC pipe and adding drinkers to it facing down, every foot or so. Be sure one of your caps on the end of the PVC pipe waterer curves up so you don't have to worry about water leaking out and that it is easy to open, close, and refill with water. You can supply your chickens with a large amount of water by using a waterer like this and it also keeps the water clean and free from dirt, leaves, and manure from the chickens- they like to use traditional waterers as perches and often dirty their fresh water very quickly. Be sure to mount this waterer close enough to the ground for the chickens to drink from it. The PVC pipe waterer works best if you start them out on it when they are chicks. Be sure the waterer is secured to

The Sampson County Administrative Assistant, Patricia Burch, supplies the agents with a schedule for writing for the Sampson Independent. She wrote these kind words to me at the end of 2016:

*Patricia Burch, Sampson County Extension Administrative Assistant, Sampson Independent News Articles
12/29/16*

Just a note of appreciation for your being so prompt with your news articles.
I hope you and your family have a very happy and healthy 2017 New Year.

Patricia Burch

Here is excerpt of an article I was featured in from the Goldsboro News-Argus:

Margaret Ross takes position as area poultry agent for Extension

By Steve Herring
Published in News on January 11, 2016 1:46 PM

[Print](#) [Email](#) [Bookmark / Share](#)

Growing up on her family's farm near Pollocksville, Margaret Bell Ross always wanted to be a veterinarian.

She also wanted to move away from the small Jones County town.

Now 28, she has returned home, not as a veterinarian, but as the area poultry agent with the North Carolina Cooperative Extension Service, where she is responsible for the 40 counties east of Interstate 95.

She will be based in Jones County.

"I never thought I would move back to Pollocksville, little old Pollocksville," she said. "But I love it. I grew up on a farm in Pollocksville. I always wanted to be a vet. My dream was to go to N.C. State. I got in and got into the animal science program."

She graduated in 2010 with a bachelor's degree in animal science. By that time, her interest had changed from veterinary school to looking at a career with the Cooperative Extension Service.

She started with Extension right out of N.C. State as the livestock agent for Craven and Jones counties and moved back home.

She remained in that position for about five and a half years before taking on her current role as area poultry agent on Nov. 15 -- the same day that her husband, Adam, began working as the livestock agent for Duplin County.

"While I was the livestock agent I was able to, online, go back to N.C. State and get my master's degree in animal science," she said. "I always loved livestock, and like I said, I always wanted to be a vet. But working with the farmers is definitely the best part of it, being able to work with the animals, to work with the livestock and work with the folks.

"I really want to do a good job and really have a good quality product to put into the food supply."

The biggest part of her job is working with commercial operations.



Full Size

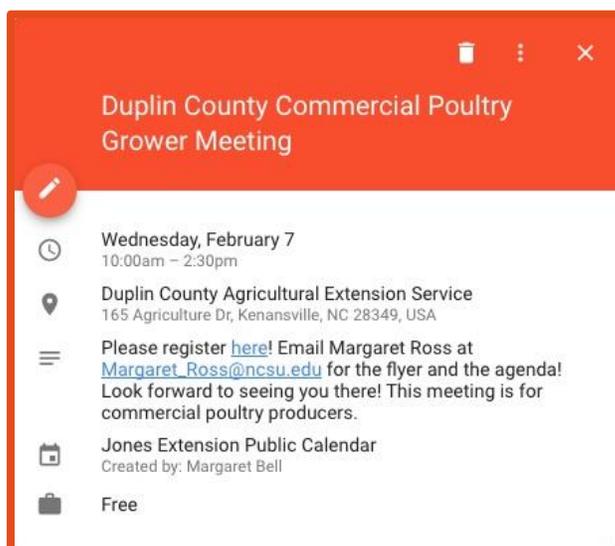
NC State University
N.C. State University
**COOPERATIVE
EXTENSION**
Empowering People - Providing Solutions
Wayne County Center

NEWS-ARGUS/STEVE HERRING

Margaret Bell Ross stands at the N.C. Cooperative Extension office. She has taken the helm as poultry agent for 40 counties at the Extension.

27

One of the most used tools for marketing programs is the **Internet**. With the help of the Internet, I can reach a wide range of clients. I use several different sites to make sure my **poultry program has a presence online**. Now that the systems have been revamped, I can create an event on the Jones County Cooperative Extension **Google Calendar** and then click on all the other counties I would like it copied to. It is very helpful to put events on the public Google Calendar for each of my counties because I can include all the event information there, as well as a link for participants to register right from the calendar:



Also, I created a Facebook page for our Southeast 4-H Chick Chain Show & Sale (now the Coastal Plains Regional Chicken Project). Here is a summary of the program: “Teaching children responsibility, animal husbandry, and money management through raising and selling chickens!” The Facebook page proved a great way for agents as well as parents of the participants to ask questions, post pictures of their project birds, and keep up with events dates.

Social media is not the only place I focus my marketing efforts. I also advertise my livestock programs in printed media. For example, for many years in the Jones County Cooperative Extension office, all agents took turns writing a “Did You Know?” article for the **Jones Post**. This publication **reaches over 2,500 residents**. I typically wrote about a specific disease or problem area in relation to a certain species (when I was a Livestock Agent), or I would publicize an upcoming educational meeting or farm tour that I wanted to let the county know about. I have also written for the **Sun Journal**, New Bern’s newspaper, which **reaches 30,000 citizens**. I have written for the **New Bern Now** publication, a more recently created periodical intended to let New Bernians know about what’s going on around town and what services and educational resources are available to the public. Article topics have included **hurricane preparation for your farm and livestock**, how to **identify poisonous plants in your horse pasture**, **animal waste operator continuing education credit courses**, to how to **properly and economically bale and sell your hay**. I have even made an “appearance” on our **local radio show**, where my County Extension Director at the time, Dr. Tom Glasgow, typically does a gardening show weekly.

Currently, I **serve as the co-chair for the poultry workgroup** of the animal program teams. One of our main goals is creating and updating the online educational resources we have available through our **workgroup portals**. I also serve as a member of the **animal waste workgroup** and we are working on updating those resources as well. Our websites and online materials have all recently been updated, giving **NC State Extension branding a much more uniform and professional look**. By updating each of these portals, we will be able to direct clients to our websites for updated and current publications.

We also help advertise programs for poultry producers from Cooperative Extension as well as other organizations. Here are some examples:

- Egg Grading School from the Prestage Department of Poultry Science
- Highly Pathogenic Avian Influenza (HPAI) and CERCLA email correspondence to integrators and producers
- Rural Advancement Foundation International's (RAFI) program – A Poultry Producer's Guide to FSA Loans (also had an article on RAFI's website – "Cleaning Up After Hurricane Matthew: Info for Poultry Growers")
- Poultry Show and Sale Ban information from NCDAs during the HPAI outbreaks across the country

III. Leadership Career and Professional Development

During the restructure of Cooperative Extension, there was a lot of concern about if folks would lose their jobs. In my home base of Craven County (at the time), we ended up with a 1.3 agent agriculture appointment. There were already three agriculture agents in the county, including me, so I knew I should start to search for other positions within Cooperative Extension. This Area Specialized Poultry Agent position became available so I applied and interviewed for it. I happily accepted the promotion when the position was offered to me, but that doesn't mean it was easy to leave my Livestock Agent friends and coworkers, as well as all my clients whom I had grown to love over those five years! Here are a couple of testimonials from some of my favorite clients when I changed positions:

Dr. Tom Glasgow, Craven County Cooperative Extension Director
11/02/15

Thanks for the note. Best of luck with your transition and we hope to hear of good progress as you settle in. It was quite an accomplishment on your part to take aim at that job and capture it!

Tom

Lynne Stroud, Jones County Horse Owner
10/30/15

Congratulations Margaret! Steve and I have sooooo enjoyed getting to know you and your entire family the past couple years. If you are ever on our side of the river, please stop by! Keep us posted on what's happening with you along the way! Take care and best of luck! They are lucky to have you!!!!!!!

Happy Halloween,
Lynne

Steve Stroud, Jones County Horse Owner
10/30/15

Congratulations Margaret! BUT YOU WILL BE MISSED!! I have loved your energy and friendliness to us. Who will be the Livestock Agent/contact for us now? Come see us.

Steve Stroud

I knew when I started my career as a Livestock Agent, it would be imperative for me to seek out the necessary training to be a **valuable resource** in my counties. Over the past (almost) eight years with Cooperative Extension, I have taken advantage of the trainings offered, as well as trainings offered outside the organization. Here is a list of trainings and workshops I have attended:

2015

Trainings and Workshops Attended

- North Carolina Association of County Agricultural Agents (NCACAA) Meetings / Professional Tours
- National Association of County Agricultural Agents (NACAA) Annual Meeting and Professional Improvement Conference (AM/PIC) – Sioux Falls, South Dakota
- North Carolina Cattlemen’s Association Annual Conference
- Livestock / Forage Agent Training Conference
- North Carolina Pork Council’s Pork Conference
- Southern Farm Show
- NC Choices Carolina Meat Conference
- Craven County Local Emergency Planning Committee (LEPC) Meetings
- Jones County Heritage Festival Planning Committee Meetings
- Interagency Training to Enhance Pasture-Based Agriculture Programs
- Information Management Class – Introduction to Constant Contact
- Information Management Class – Updating the County Extension Website
- Local Food Systems for Extension Agents Professional Development Course – Tour of a Local Meat Processing Facility
- NCCES Mobile Communications Device Allowance Plan
- State Extension Conference
- Profit Simplified Beef Cattle Seminar
- Butterball’s Grand Opening and Ribbon Cutting and Plant Tour – Hosted by Raeford / Hoke Chamber of Commerce
- Amazing Grazing Workshop: Pasture-Based Livestock Education Program
- National Air Quality Site Assessment Tool (NAQSAT) Training
- National Pork Board Speakers Bureau Operation Main Street Training
- NCSU Swine Research Forum
- North Carolina Ag Awareness Day at the Legislature
- Jones County Cooperative Extension Staff Conferences and County Advisory Council Meetings

Trainings I Hosted / Co-Hosted

- Craven/Jones Livestock Association Meetings including Farmland Viewing
- Pork Quality Assurance (PQA)
- 2015 Eastern NC Hay Day
- Craven County Animal Response Team Meetings (CART)
- Jones County Animal Response Team Meetings (CART)
- 2015 Jones County 4-H Summer Adventures Chicken Camp
- Spoke at the September 2015 Craven County Health Department EPI Team Meeting on Highly Pathogenic Avian Influenza
- Taught the “Practice of Artificial Insemination on Reproductive Tracts and Practicing Thawing Method” section of the 2015 Artificial Insemination Short-Course – Hosted by Scarlett Mobile Large Animal Services

Certifications, Certificates of Completion, Boards, and Awards

- NCACAA Educational Poster Contest – 2015 State Winner
- NACAA Educational Poster Contest – Participant
- National Weather Service Certificate of Training – Basic Severe Storm Spotter Training
- Jones County 4-H Youth Development Program Support Certificate

2016

Trainings and Workshops Attended

- NCACAA Meetings and Professional Tours
- NACAA AM/PIC – Little Rock, Arkansas
- North Carolina Cattlemen’s Association Annual Conference
- Livestock / Forage Agent Training Conference
- North Carolina Pork Council’s Pork Conference
- Southern Farm Show
- Jones County Heritage Festival Planning Committee
- Duplin County Cattlemen’s Association Farmland Viewing
- Responding to Public Records Requests Webinar
- North Carolina Forage and Grasslands Council Winter Conference Series
- 2016 Duplin County Agribusiness Council Annual Membership Meeting
- South Central Poultry Advisory Council Meeting (Richard Goforth)
- Jones County Cooperative Extension Staff Conferences and County Advisory Council Meetings

Trainings I Hosted / Co-Hosted

- Craven/Jones Livestock Association Meetings
- Judged the 2016 Martin County 4-H Poultry Chain Show
- Animal Waste Operator Class – offered Operator-In-Charge (OIC) Credits and Pesticide Credits

Certifications, Certificates of Completion, Boards, and Awards

- NCACAA Educational Poster Contest – Participant
- NACAA Educational Poster Contest – Participant
- Jones Sr. High School Career and Technical Education Advisory Board Member

2017

Trainings and Workshops Attended

- NCACAA Meetings and Professional Tours
- NACAA AM/PIC– Charleston, South Carolina
- North Carolina Cattlemen’s Association Annual Conference
- Livestock / Forage Agent Training Conference
- North Carolina Pork Council’s Pork Conference
- Southern Farm Show
- District Extension Conference
- Emergency Support Function 11 Meeting (ESF-11)
- First Citizens Bank Young Farmer Luncheon (represented Jones County Cooperative Extension)
- South Central Poultry Advisory Council Meeting (Richard Goforth)
- Jones County Cooperative Extension Staff Conferences and County Advisory Council Meetings

Trainings I Hosted / Co-Hosted

- Taught the showmanship portion for the Onslow County Chicken Clinic in preparation for the Coastal Plains Regional Chicken Project Show – Clinic hosted by Melissa Huffman, Onslow County Field Crops and Livestock Agent
- Judged the University of Mount Olive's Animal Science Poultry Show and assisted with their Processing Demonstration

Certifications, Certificates of Completion, Boards, and Awards

- Service and Support to the Jones County 4-H Youth Development Program Certificate
- Jones Sr. High School Career and Technical Education Advisory Board Member
- NCACAA Communications Award – Team Newsletter – Contributor of the Northeast District Livestock Newsletter – 1st Place
- NCACAA Communications Award – Computer Generated Graphics Presentation – Biosecurity on Your Farm - 2nd Place

2018

(as of March 1)

Trainings and Workshops Attended

- Civil Rights Training
- North Carolina Association of Cooperative Extension Specialists (NCACES) webinar – “How to Maximize Reach and Assess Impact”
- Preparing for the NC Food Animal Initiative
- Western Poultry Extension Advisory Council Meeting (Lauren Greene)
- Jones County Cooperative Extension Staff Conferences – assisted with the NC State Extension 2017-2018 Needs Assessment
- Jones County Advisory Council Meetings

Certifications, Certificates of Completion, Boards, and Awards

- Jones Sr. High School Career and Technical Education Advisory Board Member
- Joined NCACES (they now allow membership from Area Specialized Agents)

One of the first professional organizations I joined was the district-wide **North Carolina Association of County Agricultural Agents**. I wanted to become involved in this Association, so I **immediately signed up to be on the Food Committee and the Audio / Visual Committee for the Certified Crop Advisor Training** that the Association puts on annually. **I also joined the Benevolence Committee and chaired it for several years**. I continue to be very involved in this professional organization and I have only missed one meeting since my start with Cooperative Extension in 2010. My membership to the district Association also meant I was a member of the national and state Associations. I served as the **secretary for the Southeast District from 2015 - 2016, as well as continued to serve as the chair for the Benevolence Committee, and remained on the Food Committee and the Audio / Visual Committee**. The Certified Crop Advisor (CCA) training changed the way we serve food for the participants several years ago and I have served as a co-chair for the Food Committee since that change. I am still very active in the CCA training and **was a speaker for the conference in 2016**. I spoke on **poultry litter management** as well as highlighted the great resource Cooperative Extension was to the poultry producers after **Hurricane Matthew in October 2016**.

In addition to **utilizing professional development opportunities**, I furthered my subject matter knowledge by completing my **Masters of Animal Science degree in August 2014** and feel my

coursework helped me tremendously as a Livestock Agent and now as a poultry ASA. Working with the College of Agriculture and Life Sciences and the professors, advisors, and mentors there, helped me learn more about applicable animal husbandry skills and teaching methods to help me work with my clients more effectively. Since my Bachelor of Science and Masters degrees are in Animal Science, I would like to go back to NCSU to start my doctoral program in Poultry Science soon.

Cooperative Extension Interns

A great Extension marketing opportunity came my way in Summer 2012 from an advisor at Wayne Community College asking me to **host an intern** from their Animal Science program. The intern was **required to have over 300 hours that directly related to her degree**. I spent the summer having her ride along with me to farm visits, help me organize and plan livestock programs, attend the NCACAA summer meeting, and learn more about Cooperative Extension and our history. She also wrote an educational article about her experience with us that was published in our local newspaper. Her time was not only valuable to her as well as helped her complete her degree, but her time was valuable to us too.

I have hosted three interns since then. One in Summer 2013 - a local high school student interested in the agricultural industry, and again in Summer 2014 - a student also from a local high school who plans to become an equine veterinarian. My first intern moved back to rural New York to start a farm with her husband and both the other interns have been accepted to colleges where they will be able to work toward degrees in agriculture or veterinary medicine. These interns will be able to **advocate for Cooperative Extension** and share their experience from their time with us in their college careers.

The third intern came to Cooperative Extension from Jones Senior High School's **Workforce Investment Act program**. These students go through the program to **learn basic skills** to prepare them for the workforce – how to be on time, appropriate dress, working with the public, how to interact with peers, note taking skills for meetings, as well as many other subject matter skills that make them more attractive to future potential jobs. The student that worked with me during the summer in 2015 came from a very low socio-economic background. She was not used to being held accountable to show up on time, to be prepared for the day, and to have a positive attitude. I like to think working with the entire Jones County Cooperative Extension staff that summer truly helped her blossom into the young woman she is today. We encouraged her to always keep going, to get her education, and to dream big. She continued her education and we hope she will do great things! She will always hold Extension in a special place in her heart, and we will do the same. Not everything can be measured in sheer numbers and this story is a fine example.

Programmatic Teamwork

Working with seasoned Livestock Agents was key to helping me learn the ropes in Extension. I have always been happy to work on larger projects in a team setting and the Southeast District was no different. **Teamwork is important in Cooperative Extension** and it has been a great way for me to **offer more educational programs** over the years. Currently, I work with the other poultry ASAs – Richard Goforth, Lauren Greene, and Dan Campeau. As mentioned above, we work together to put on programs throughout the year and across the state, the main program being the **commercial poultry grower meetings**. These partnerships and teamwork help **advance and promote Cooperative Extension overall**. In 2017, we hosted grower meetings across the state and are doing the same program again in 2018. Attendance is growing at these meetings and we had **positive impacts** during our first year. At each meeting, producers were encouraged to fill out an evaluation letting us know the impact of the class on their farm. **Sixty-four percent of producers said the class saved them up to \$500, nineteen percent said it saved them \$501 - \$1,000, and seventeen percent said the class saved them \$1,001 and above.**

Here is the evaluation summary from the classes:

Evaluation: 2017 Commercial Grower Meetings

Summary: All 3 Meetings Combined Total

How satisfied are you with:	Not Satisfied	Somewhat Satisfied	Satisfied	Very Satisfied	Overall Satisfied
The relevance of information to your needs?		9%	61%	25%	
Quality of presenter(s)?	2%	7%	55%	29%	
Subject matter knowledge of presenter(s)		4%	52%	38%	
The overall quality of the meeting?	2%	9%	38%	30%	

How do you rate your knowledge about:	Before this meeting					After this meeting				
	Very Low	Low	Mod.	High	Very High	Very Low	Low	Mod.	High	Very High
Nutrient use models	14%	14%	41%	16%		2%	4%	43%	36%	4%
Biosecurity on your farm		23%	36%	25%			4%	16%	46%	25%
Cost share programs	9%	21%	38%	16%	4%	2%	2%	36%	41%	9%
Emergency mgt. plans by NCDA	4%	20%	48%	13%			2%	34%	46%	7%

How much money did you think you will save or profit by information learned from this meeting? Please circle.

- A. 1-500 dollars **64%**
 B. 501-1000 dollars **19%**
 C. 1001 and above **17%**

Also as mentioned previously, I serve as a **co-chair for the poultry workgroup**. One of our tasks was to find programs and activities that our budget could fund. This could be used for scholarships to send agents to conferences or to purchase equipment that could benefit poultry producers. In 2017, our work group chose to purchase candlers for each of the four poultry ASAs. In 2018, we have purchased each ASA a poultry learning laboratory kit from The Ohio State University. These kits are used to teach poultry judging teams, as well as can be used for agricultural awareness events like **Duplin Grows**.

I also serve as a member of the **animal waste workgroup** to represent poultry litter. We meet throughout the year to discuss **programmatic needs of addressing animal waste issues**. We are currently working on updating our **animal waste portal** on the Cooperative Extension website to better address needs of poultry producers. In 2017, this workgroup used funding to purchase spreader calibration kits for each of the poultry ASAs and they are available to producers to aid in calibrating their spreaders.

In 2017, NCDA hired a **waste-to-energy consulting firm** to help guide bioenergy meetings for poultry producers through their new program called "**New Ag Market Initiatives**." The firm, Cavanaugh and Associates, partnered with Cooperative Extension to hold a **Poultry Growers Bioenergy Day** in Union and Duplin Counties. These meetings brought everyone to the table to discuss bioenergy from a producer standpoint all the way to a plant standpoint. This partnership included the following: NCDA, Cavanaugh and Associates, NC Sustainable Energy Association (NCSEA), North Carolina Cooperative Extension (poultry and forestry), Prestage AgEnergy, Poultry Power USA, Catawba Biogas, Biogas Corporation, and the Power Resource Group.

In addition, there are several programs we either host, speak at, or attend representing the University. They include NC Turkey Industry Days (attend representing the University) and the Broiler Supervisors' Short Course (host with the Prestage Department of Poultry Science). We are also working on a **ventilation school** with live demonstrations to be available to producers across the state twice a year.

In summary, by serving the commercial and backyard poultry producers in eastern North Carolina, I have an opportunity to help producers save money, add value and profit to their farm, be more sustainable on their farm, as well as put good neighbor, biosecurity, and conservation practices into place. I hope this Title Promotion application has effectively displayed my most successful and impactful programmatic work from 2015 to 2018. I look forward to continuing to serve the eastern North Carolina poultry producers through educational Extension programming.

Thank you for your consideration of my Title Promotion application.

