



N.C. Cooperative Extension, Surry Center (submitted by Joanna Radford, County Extension Director)

Responsibilities

Federal, state, and county governments each provide financial support and program guidance for North Carolina Cooperative Extension, which has centers in each county and with the Eastern Band of Cherokee. These centers are grouped into districts, each guided by a director. Specialists and administrators at NC State University and N.C. A&T State University also support county efforts by serving as liaisons to the United States Department of Agriculture, which is the parent agency for N.C. Cooperative Extension programs nationwide.

Extension agents in each of North Carolina's 101 local centers design and carry out educational programs aimed at serving local needs in agriculture, food, and 4-H youth development. The team in Surry County consists of:

Field Crop Agriculture Agent

Livestock Agriculture Agent

Horticulture Agriculture Agent and County Extension Director

4-H and Youth Development Agent

Family and Consumer Science Agent

Expanded Foods and Nutrition Education Program (EFNEP) Youth Educator

Expanded Foods and Nutrition Education Program (EFNEP) Adult Educator

Administrative Assistant

Part-time Receptionist/Secretary

Each day, Extension helps to strengthen our Surry County families and communities. Our mission and our work are dedicated to improving the quality of people's lives. We rely on research-based information from North Carolina State University and other educational institutions to develop educational programs based on the issues and needs of our communities and citizens. These educational programs and technical assistance provide solutions and empower our clients to make better-informed decisions. Our leadership in experiential education equips our clients in Surry County to effectively transfer knowledge and skills into practical application. We develop and foster partnerships with agriculture, business, industry, education, families, and government to create a unique culture of collaboration that increases productivity and fuels economic development.

Accomplishments and Statistical Data

4-H and Youth Development

- 3 active 4-H Clubs organized since April 2023.
 - Increased clubs by 150% (from 2 to 5) including County Council, 4-Hooves Equine Club and Dog Club.
 - 4-H Volunteers increased 180% (from 5 to 14).
- 500 youth contacts were made through summer day camps, summer enrichment programs, 4-H clubs, and community events.
- 275 Surry County students participated in 4-H School Enrichment programs during the fall semester.
 - 2nd graders at Pilot Mountain Elementary learned the life cycles of butterflies and watched metamorphosis right in their classrooms.
 - 2nd graders at Copeland Elementary discovered how chicks develop by incubating eggs, candling them to watch their development, and being able to watch the hatching process in their classroom.
 - 3rd graders at Shoals Elementary learned about different soil types and how soils affect plant growth. They were able to do several seed-planting trials, learning how factors such as sunlight, temperature, and the amount of water they receive affect them. They observed the process daily in their classroom. Students learned about composting and how much waste there is from the school cafeteria every day. Classrooms are beginning to compost uneaten fruit and vegetable scraps from their lunches, which will eventually be fertile soil they can use in their school garden.
 - Middle schoolers have learned about personal finance, explored careers, and made some simple recipes they can enjoy themselves or share with their families.
- 500 youth participated in Agriculture Awareness Day. 4-H taught youth about various plant parts and their functions.
- A new audience was reached. Approximately 40 homeschool students participated in monthly enrichment classes.
 - Monthly topics included nutrition, apples, pumpkins, cooking, and sewing.
 - Two service projects were carried out.
 - Youth made cookies and cards for the Surry County Sheriff's Department.
 - Blankets were made by youth and donated to Spark of Hope, which offers a closet of supplies for families of foster children in Surry County.



- Three youth attended 4-H Camp at the Betsy-Jeff Penn 4-H Center.
- Two youth made presentations at the district-level competition during 4-H District Activity Day.
- One youth participated in the Youth Market Turkey Show project. The youth raised and showed his turkey at the N.C. State Fair and won third place. He also won first place for the pen sign. The sign contest winner received a free guaranteed registration for next year.
- 60 youth participated in 4-H Summer Programming.
- Approximately 125 youth are active 4-H members.
- 85,236 youth were indirectly reached through newsletters, radio broadcasts, community awareness events, and social media posts.



Family and Consumer Science

- The NC Department of Insurance (NCDOI) and Seniors' Health Insurance Information Program (SHIIP) provided training and quarterly updates for Extension and local volunteers. 180 individuals were served by Seniors' Health Insurance Information Program (SHIIP) volunteers in Surry County, with a cost savings of \$533,897 as reported by the NC Department of Insurance.
- Extension partners with Surry County Health and Nutrition Center to provide information to help manage diabetes through the Diabetes and You series.
 - 92% of participants reported making lifestyle changes to improve their health by eating less, or having more appropriate serving sizes, and reading labels.
 - 77% of participants are preparing more meals at home.
 - 54% of participants are being more active.
 - 46% of participants are monitoring their blood sugars as recommended by their physician.
 - 67% of participants believe they are communicating better about their diabetes to their health care provider.
- Storytime Cooks: Learning About Food Through Books – A weekly program aired on Surry on the Go. Share easy and nutritious recipes, basic food safety tips, and food preparation tips with viewers. Kids who are more involved in the kitchen are more likely to try new foods. Lessons include discussion about seasonal foods and where and how food is grown. Good eating habits are key to preventing health problems later in life.



- A nutrition and physical activity program for children ages four and five titled “Color Me Healthy” was presented to young children.
 - Four participating classroom teachers shared that 100% of the students were more willing to taste fruits and vegetables after participating in the program.
 - 100% of the students increased their physical activity.
 - Parents have observed an improvement in their child's willingness to taste fruits and vegetables at home and have increased their physical activity.
 - Parents shared that kids are asking for vegetables, have shown an interest in cooking, are more interested in trying new foods, and want to exercise.
 - One parent shared how their child is regularly talking about healthy food, and another child is telling her father to eat healthy. The impact of Color Me Healthy extends outside of the classroom and into the home, benefiting the family.
- There are three Extension and Community Association Clubs. All have resumed regular monthly meetings (since 2020). There has been no decrease in membership.
- Regular local magazine articles are written for Surry Living and Yadkin Valley Magazines. The articles focus on nutrition, cooking, and food safety information, along with family friendly recipes. Surry Living reaches 30,000 readers each month. Yadkin Valley Living reaches an estimated 60,000 readers through its 25,000 print magazines and online viewers every two months.
- The Cook Smart, Eat Smart series was held in Pilot Mountain for 20 participants. This was a new audience, as many of the participants had recently lost a spouse and were lacking cooking confidence and skills. In each of the four sessions, participants participated in hands-on cooking opportunities to create a meal of new recipes for all to enjoy. Attendees gained knowledge about planning menus, food buying tips, basic cooking skills, and food safety.
- ServSafe classes were taught in partnership with Surry County Environmental Health to food handlers to help prevent foodborne illnesses at their establishments. Thirty-six establishments were represented.

Expanded Food and Nutrition Education Program

EFNEP educators have been helping limited resource families learn strategies for feeding their families healthy meals on a limited budget and increasing their physical activity. There were 107 adults who graduated from the twelve-week program that benefited local families. This saves county residents thousands of dollars per year in medical, prescription costs, and loss of productivity.



- 98% (105 out of 107) of the participants showed improvement in diet quality.
 - 92% (98 out of 107) showed improvement in food resource management.
 - 69% (74 out of 107) showed improvement in physical activity behaviors.
 - 71% (76 out of 107) showed improvement in their food safety practices.
- EFNEP continued to work with a new audience. This group consisted of adults with disabilities. There were 43 adult participants who had health concerns due to their disabilities. They were eager to learn about nutrition and how to prepare simple meals for themselves. Sessions were delivered both face-to-face and virtually for the convenience of all the participants.
- EFNEP youth programming reached 4,092 youth in grades K-6th. Each program consisted of six-week curriculum delivered at six elementary schools and various summer sites.
 - 84% of children in grades K-2nd improved in one or more core areas.
 - 99% of children in grades 3rd-6th improved in one or more core areas.



Agriculture and Natural Resources

- There are 32,795.7 acres in the Voluntary Agricultural Districting Program and 500 plus acres pending approval.
- Two on-farm corn research trials were conducted.
 - Trial 1- In partnership with the Official Variety Testing Program through North Carolina State University. The 2023 Official Variety Test (OVT) of corn varieties were planted after tillage was completed in a section of creek bottom within the same host field. The OVT combined early, medium, and late maturing corn hybrids into the research trial to determine yield potential and growth potential in our local environmental conditions.
 - Trial 2- In collaboration with Dr. Ron Heiniger, North Carolina State University Corn Specialist. To determine the ideal rate of starter fertilizer at the time of planting. Farmers use this data to reduce the amount of starter fertilizer applied at planting to save money and increase profit margins.
- Extension submitted soybean samples representing Surry County in the 2023 Soybean Quality Sample Survey that was led by the United Soybean Board, U.S. Soybean Export Council, and University of Minnesota. This survey enables farmers who participate to evaluate the overall quality of the soybeans produced on their farm. The U.S. Soybean Export Council uses this data in their International Marketing Program for high-quality, American-produced soybeans.

- Extension worked with corn and soybean growers to achieve high corn and soybean yields. Growers used Extension recommendations for best management practices, which resulted in seven entries into the North Carolina Corn Gowers Association Corn Yield Contest, four local corn fields entered the National Corn Growers Association Corn Yield Contest. From these local entries, one entry placed number one for highest corn yield in the conventional, non-irrigated category in North Carolina.
- Extension partnered with Surry County Public Works and the North Carolina Department of Agriculture & Consumer Services to provide a Household Hazardous Waste and Pesticide Disposal Collection Day.
 - Residents safely disposed of 4,225 pounds of unwanted pesticides – tripled from previous year.
 - There was 27,883 pounds of household hazardous waste collected at the disposal day – 5,486 pounds more than in 2022.
 - Total disposal savings of a conservative value of \$330,000 for the disposal of the items collected.
 - Emergency response costs savings of approximately \$450 per pound (\$14,448,600).
 - Contamination site savings of \$1,000 to \$100,000 plus, depending on the volume and circumstances.
- Recertification trainings were given to 120 private and commercial pesticide applicators.
- Extension provided field data for the Extension Survey Documentation of Agricultural Farm Fields for weed specialist research in North Carolina, Georgia, and the United States Fish and Wildlife Services. This information will be used to help resolve crop boundary mapping issues related to pesticide applications and overall pesticide usage.
- 64 Tobacco farmers attended and received GAP certification during tobacco production winter meetings provided by Extension.
 - Without GAP certification, tobacco farmers could not sell their tobacco.
 - 3,225 acres of tobacco were represented at the production meeting.
 - \$12,964,500 tobacco income from tobacco farmers being GAP certified.
- 33 Soybean farmers attended the winter soybean production meeting, representing 6,650 acres. Auxin herbicide best management practices training was given during the meeting. This training is required for farmers who use auxin herbicide products in the production of soybeans.



- The livestock program has made 101,491 contacts in personal visits, producer meetings, community and youth events, Facebook/website posts, mailings, and radio spots.
- 635 in-person contacts have been made through livestock farm visits and livestock producer meetings.
- The sheep and goat producer group is growing in the county as we work toward building our mailing list and starting to have events for this group of producers.
- Monthly beef producer meetings have expanded to almost year-round, with 10 meetings this year.
- 250 people receive the new livestock bi-monthly newsletter that includes best livestock production practices to aid in the success and productivity of farming operations.
- 16 livestock producers took hay samples this year, with 15 of them doing this for the first time. Information from the samples will help improve hay quality in the future.
- The mineral program has continued through partnership with the Surry County Cattlemen Association. This has helped decrease mineral costs for livestock producers by purchasing in bulk.
- Extension partners with the Surry County Cattlemen Association to provide cattle equipment rentals, such as a squeeze chute, to local livestock producers. This rental allowed one producer to increase profits by \$1,287.94.
- Extension assisted with Asian Long Horned Tick problems, which when in high populations, can cause death to cows and calves due to blood loss.
- Yadkin & Surry County Cooperative Extension hosted the 9th Annual Foothills Specialty Crop Growers' Roundtable, with 59 farmers in attendance. Topics included blueberry production, apple production, medicinal herbs, mushrooms, composting, permaculture, soil health, growing via aeroponic systems, tips for online marketing, and information to get connected with the Visit NC Farms app.



- All participants were either satisfied or very satisfied with the information they received, the presentation quality of the instructors, and the overall quality of the program.
- 70% of participants had an average of 0-5 acres, 10% had 5-10 acres, 13% had 10-20 acres and 7% had 20-50 acres.
- 62% of participants believed they will be able to grow more successfully from the information gained.
- 57% said yes to growing new crops or varieties that they would not have otherwise grown.

- 47% said they would be interested in investing in a new crop enterprise on their farm.
 - 68% believed they will be able to save money by knowing how to better manage their soil.
- Extension collaborated with the Surry County Beekeepers Association on holding a six-week “Bee School.” There were 101 people participating, 85% now have beehives. At the same time, a Junior Beekeeping Certification course was offered to youth ages 5-16.
 - 3 youth have beehives. One of the youths have a total of 5 hives.
 - 1 first place and Champion overall bee display board at the Carolina Classic Fair Exhibit with “Life of a Bee”.
- Extension provided technical assistance to 18 local small farms with produce and small fruit production. This was a savings of \$25,000.
- Seed Libraries were implemented at each of the four county libraries and the senior centers in Mount Airy and Pilot Mountain.
 - Each seed library site reported heavy use of the seed libraries.
 - Many homeowners began to grow plants that they had not grown before.
 - Ninety-two percent of the people who took seed reported growing a garden.
 - Homeowners have gained knowledge about growing seeds and producing food for themselves.
- 45 gardening workshops were conducted in multiple areas throughout Surry County. Through evaluations, we found that participants of the workshops valued the workshops at \$58,104.
- Extension Master Gardener volunteers attended all three local farmer markets (Dobson, Elkin, and Mount Airy) with an educational booth every week of the markets.



Challenges Discovered or Experienced in 2023

- Getting started again after COVID has continued to be a challenge.
 - WIC participants in the EFNEP program find it difficult to come back out with their very young children for face-to-face sessions. Clientele became used to staying at home. Some priorities may have changed, and they did not want to attend in-person events.
 - There have been difficulties with scheduling programs in classrooms with teachers due to their new teacher training and workshop schedules.

- Staffing Issues
 - It is taking time for new agents to develop relationships with our farmers and become familiar with Surry County. They are progressing and are meeting more and more people and developing relationships.
 - A new 4-H Agent was hired in April. Her background is in education, but had little knowledge of 4-H. It is taking time to learn all there is to know about the programming. This first year involves numerous necessary training events and time away from the office.
 - Recruiting volunteers has been difficult. People are busy and have little extra time to spend volunteering.
 - Contact lists are outdated and need updating. Updating these lists is a continuous, on-going task.
- Time Management
 - There are more needs and opportunities in our community than can get done. It has been difficult to manage time for reports with the client demand for home visits, office visits, programming for the public, telephone calls, technical assistance, and our other day-to-day activities.
- Programming
 - Youth are involved in multiple organizations and activities, making meeting times difficult to schedule.
 - Getting people (from 4-H'ers to farmers) used to meeting regularly. With many demands on time, finding a good time to meet where everyone can make it is hard, and many people are out of the habit of attending meetings.
 - Getting volunteers for youth programming.
 - Youth guidelines given by NC State University are strict and involve numerous pages of paperwork. This is cumbersome for parents when registering their youth in 4-H, but it is necessary before youth can participate.
 - People not knowing about Extension and that we are here as a resource.
 - Additional stressors for farmers include farmland decreasing and input prices increasing.
 - How to handle farm transitions and farm stress.
 - How to increase the involvement of produce and fruit producers in the local farmers' markets.

Goals and Objectives for 2024

- EFNEP has target numbers for educational training. We want to meet and exceed these targeted numbers.
- Provide programming for more diverse audiences.
- Continue to grow the local 4-H program by:
 - Offering a 4-H club within a 15-minute drive of any community in Surry County

- Expanding Summer Fun through participation and the number of programs offered.
 - Involve more schools in school enrichment programs.
 - Continue serving the homeschool community by offering enrichment programs, field trips, and service projects monthly during the school year.
 - Involve 4-H County Council members in leadership opportunities such as 4-H Congress, Youth Voice, and Electric Congress.
 - Increase participation in project record books and presentations at the district competition.
- Provide educational workshops throughout the year that help people and families prosper.
- Be an advocate and provide technical assistance to local farmers.
- Provide SHIIP counseling and enrollment assistance.
- Promote Extension throughout the county through community organizations.
- Develop partnership opportunities.
- Increase social media presence to promote Extension programs.
- Participate in “Surry on the Go” opportunities to help educate Surry County residents.