20 22 REPORT TO

# REPORT TO THE PEOPLE



#### **2022 HIGHLIGHTS**

Trained **2**,**362** participants in **106** educational programs.

Secured \$11,612 in grant funds and donations to support programs.

Assisted, educated and informed7,788 Direct Contacts and226,238 Indirect Contacts.

21,496 Website Visits.3,275 of those in May 2022.



### WE MOVED!





#### ANNUAL CORN VARIETY TRIAL



Approximately 7,000 acres of corn are planted yearly in Davie County. Farmers are interested in getting information about hybrids that are grown in Davie County and that could potentially produce higher yields. The average county corn yield is estimated at 154 bushels per acre (bu/ac).

A corn variety trial was planted on a local farm in Davie County and was also replicated in four surrounding counties so that performance results could be compared. This trial consisted of 14 hybrids with different maturity dates. The farmer who volunteered for the Davie County variety trial wanted to conduct the test in bottomland, and many corn fields in the county are bottomland fields.

Yield results were outstanding for the trial. Rainfall was minimal in the county so having this trial planted in bottomlands, which tend to retain moisture a bit longer, provided great information to the growers in the county. The plot yield average was 266 bu/ac. Farmers were extremely interested in the results of this trial, and some contacted the agent to request the top yielding hybrids to grow on their farms next year.

While variety selection is not the sole contributor to high yields, having these results can help growers determine what varieties may yield higher in bottomlands. One Davie farm saw a 112 bu/ac increase over the average county corn yield. At the time of harvest, corn prices were approximately \$7.00/bu. If 7,000 acres of corn are planted in Davie County yearly, farmers could potentially see a \$5,488,000 gross profit countywide by utilizing this variety. Farmers are encouraged to use this data and make changes to increase yields and profits.

## DAVIE COUNTY FARMERS RECEIVE NC AGVENTURES GRANTS

Farmers in Davie County often need to expand or diversify their operations in order to have an economically feasible farm. However, even farmers who have been operating for more than a few years often have trouble finding funding to diversify into a new crop or add infrastructure to expand production. The NC AgVentures Grant is one possible source of funding for farmers.

In 2021 and 2022, six Davie County farmers approached the Horticulture Agent for help with the NC AgVentures Grant. The agent helped the farmers with the writing, reviewing, and submission of the grant applications, and wrote letters of review, if requested to do so.

Two Davie County farmers were awarded NC AgVentures Grants. One grant, for the 2020–2021 grant year, was for the maximum amount of \$8,000. The farmer used the grant to help build a high tunnel. Although full implementation of the project was delayed until 2022 due to logistical problems in getting materials, the farmer finished the high tunnel in early 2022. The new high tunnel not only allowed the farmer to increase vegetable production, especially in the off season, but also allowed the farmer to diversify into growing potted mums as a new product to offer along with other fall seasonal products, such as pumpkins. The second grant, awarded for the 2021–2022 grant year, was for \$4,500. The grant allowed the farmer to obtain a walk-in cooler for their operation, which allowed them to diversify into vegetable and cut flower production from producing only meat.



### CENTRAL DAVIE ACADEMY STEM ENRICHMENT

Central Davie Academy is the alternative School in Davie County. Students are recommended to attend Central Davie Academy based on behavioral or learning issues that make it harder for them to function in a normal classroom setting. Based on the size of the school (usually only 20-25 students), there are limited resources allocated to the school for hands-on activities. For many of these students, they lack support at home and most qualify for free or reduced meals while at school. However, 4-H can allow hands-on activities and lessons that teach valuable and age-appropriate science content to engage students that have a hard time succeeding in a normal classroom setting.

In partnership with Central Davie Academy, the 4-H Agent worked to secure a grant from Energy United's Bright Ideas Program (\$1,000) to teach hands-on science lessons with the Middle and High School Students at Central Davie Academy. Lessons focused on 4-H curriculum including The Magic of Electricity, Microbes: The World Within, Embryology, Soil to Seed, and Soil Solutions. The 12 Middle School Students and 9 High School students participated in this weekly program for 30-45 minutes, where they were able to learn different STEM and agricultural terms and concepts through fun and interactive lessons.

Students had a fun and educational time during these lessons. Middle School students (based on pre-test and post-test scores) demonstrated a 12% increase in understanding of microbiology and electrical concepts. High School students (based on pre-test and post-test scores) demonstrated a 9% increase in understanding of microbiology and electrical concepts. School attendance increased on days of the program by 22% and several high school students incorporated lessons and activities into their essays and projects. Students also got to have hands-on agricultural and food experiences including hatching chicks, making homemade yogurt, planting an herb garden, and using mint harvested from the garden to make a tea. Students also got genuinely excited by lessons which offered high success with minimal repercussions which is often hard to find while working with at-risk youth.

## CENTRAL DAVIE ACADEMY STEM ENRICHMENT









### NC FARM SCHOOL: PIEDMONT

There are about 74,000 agriculture producers in North Carolina according to the 2017 Census of Agriculture, and 27% of those producers are new and beginning farmers. Only nine percent of North Carolina's farms sell directly to the consumer. North Carolina needs new farmers to meet the demand for locally grown food and to increase community resilience. Often Extension Agents receive requests such as, "I have land that I just bought (or inherited). Tell me what I can do to make money with it." These questions have increased since the beginning of the pandemic. This is really an open-ended question because it depends on the market and the operator on whether an agriculture venture will be successful. Any good business starts out with a solid plan and lots of research. The key to having a successful farm enterprise is defining what success means to you. Success may mean keeping the farm out of development, increasing community resilience, or farming full time.

North Carolina Farm School (NCFS) is a unique entrepreneurial program for new and transitioning farmers with the mission of increasing the number of successful farmers in North Carolina. Davie County hosted the Southern Piedmont Farm School in the spring of 2022. The NC Farm School program offers eight business sessions taught by Extension Specialists and Agents, as well as field trips to see working farms. The business sessions give students the tools to match a crop or animal operation to their current goals, land resources, and marketing opportunities. Classes cover practical steps in goal setting, resource evaluation, sound financial management, and effective marketing strategies. The goal of NCFS is to allow a pathway of success for farmers to generate viable businesses. Participants learn economically sustainable farming methods in a range of production systems, including vegetables, fruits, poultry, animal husbandry, specialty crops, and agritourism.

continued...

### NC FARM SCHOOL: PIEDMONT

Fifty-nine people applied to be part of the Southern Piedmont Farm School. Thirtyone people were accepted and 85% of participants met the requirements for graduation of the course. At the conclusion of the school, a post-evaluation was emailed to participants. With a response rate of 77%, 83% of the respondents had created a written business plan, and 62% had created a written marketing plan. Ninety-six percent of respondents had found new marketing opportunities. Fifty percent of respondents had created a balance sheet and income statement, and 71% had created an enterprise budget. One of the benefits of NCFS is that each participant gets one on one time with an NC State University specialist trained in business startup, agricultural business, marketing, and production system evaluation. These consultations are invaluable to help save students' time and money as well as to help get their farm business up and running. In addition, students start working with their local Extension Agents who can help them follow through with their plans, connect them to local resources, and give them further training in production methods. When asked how much they would project a change in gross farm income as a result of NCFS, the projections ranged from \$1,500 to \$2,000 annually, and averaged \$8,722 per year.



## PESTICIDE COLLECTION DAY

Unused pesticides can be ticking time bombs if not disposed of properly. The longer pesticides are stored, the greater the chance of a spill, the container leaking or the pesticide being disposed of improperly just to get rid of it. This can potentially contaminate the environment causing an unhealthy and dangerous situation. Some of these unused chemicals are very old, banned decades ago and extremely toxic. Some of the containers are rusted, leaking and potential accidents waiting to happen.

N.C. Cooperative Extension in Davie County partnered with the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) and to host a Pesticide Collection Day. Nine individuals brought their unused and unwanted pesticides for proper disposal, reducing potential environmental contamination. The event also provided a great opportunity to meet folks and market other Extension programs.



As a result, 150 containers and almost 500 lbs. of pesticide materials were collected, from the general public to be disposed of properly, keeping these chemicals from potentially causing an environmental issue. NCDA estimates it costs \$5/pound to dispose of the chemicals so along with keeping the environment safe, a potential disposal cost of \$2500 was avoided. Homeowners have limited access to dispose of pesticides and were very appreciative of this opportunity to rid their house of toxic substances and protect the environment.

#### NCDOT BICYCLE HELMET INITATIVE



Children 5 to 14 years old visit emergency rooms for bicycle-related injuries more than any other sport or recreational activity. Each year, an estimated 800 children are hospitalized in NC for bicycle-related injuries, and an additional 13,300 receive emergency treatment. According to a study by the UNC Highway Safety Research Center, fewer than 24% of all bicyclists in North Carolina currently wear a bicycle helmet when riding on the road. Wearing a helmet can reduce the risk of severe brain injuries by 88%. Since 2007, the NC DOT Bicycle Helmet Initiative has equipped thousands of children with a helmet, a simple and essential means of reducing bicyclist injuries and fatalities.

N.C Cooperative Extension, Davie County Center, applied for the NC DOT Bicycle Helmet Initiative and received the maximum award of 100 youth sized bicycle helmets. The Initiative's goal is to provide helmets to low-income children in NC. Extension partnered with three local food pantries to market four separate Let's Go Biking events that spanned across the county. The events were held during the pantries normal distribution hours, which occurred on various days and times of the week. A few home visits were also made with food pantry staff to families that could not attend.

During these events, the Davie County Extension Director and 4-H Agent provided helmet fittings for youth, and youth participated in an egg drop activity and discussion to illustrate the importance of wearing a helmet. Youth were also provided with a water bottle and bicycle safety information to discuss at home. One young man wore his helmet riding home on his bicycle with his parents following in the car behind him. Weeks following the distributions, a mother from one event shared how the egg drop activity had really stuck with her four-year-old son and that he would not let his older brother go without his helmet. One hundred helmets were distributed to youth and families in need in Davie County to prevent unnecessary and potentially dangerous and costly, or even fatal, injuries.

#### NCDOT BICYCLE HELMET INITATIVE





## PRIVATE PESTICIDE APPLICATOR CREDIT COURSE

Davie County private pesticide applicators are required to earn re-certification credits every 3 years to retain their pesticide license. These classes also provide them with the most up to date information regarding safety and product knowledge.

North Carolina Cooperative Extension teamed up with the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) to provide opportunities in 2022 for Davie County farmers to receive category "V" credits. Applicators were provided with presentations on herbicide resistance, making the correct personal protective equipment choices and an update from the area NCDA&CS pesticide inspector.

There was a total of 17 private applicators in Davie County that were successfully certified in 2022. Most can expect to pay around \$10/acre for one spray application if they use an outside source to apply pesticides. The average farm size in Davie County is about 130 acres. Certifying these applicators saves our farmers approximately \$1,300 per spray application. This class was also offered by video after the original class date. Six applicators were able to view the video and receive their credits as a result.



#### MEETING FORAGE RENOVATION NEEDS DURING TIMES OF HIGH FERTILIZER PRICES

Over the years maintaining an adequate forage stand while achieving a high level of forage production with a cost-effective fertilizer budget has challenged livestock producers. This year's high fertilizer prices presented an even bigger challenge. Local ag supply businesses do not always provide information for each individual operation and one size fits all does not always work. Forage renovation advice has not been complete and forage stands have not performed as desired. Their fertilizer recommendations did not produce the forage quantity desired or were cost prohibitive. Higher fertilizer prices this year only added to the confusion of what fertilizer to use.

Utilizing various methods, Extension has always provided producers information on soil testing, interpreting the results, different fertilizer recommendations along with proper procedures to renovate forage stands to meet the needs of the forage to improve quality and quantity. Comparing different blends and rates helped farmers sort through the fertilizer pricing maze. With quality forage imperative, more producers utilized soil sampling and Extension's recommendations for improving forage quality with strategic fertilization plans and forage renovation methods. Eight producers asked Extension for specific help.

Utilizing soil sampling and proper forage renovation procedures, forage stands were robust, nutrient needs were met, adequate forage quality and quantity were produced and fertilizer rates were as cost effective as possible. The eight producers saved an average of \$2,200 each utilizing Extension recommendations for seeding rates, time and depth of seeding and fertilizer recommendations (blend, amount and timing). Three producers said this was the most grass they had produced in years and the others were relieved that their fertilizer costs weren't any higher.

## REGIONAL 4-H RABBIT SHOW AND VIRTUAL POULTRY SHOW

Davie, Davidson, Forsyth, and Yadkin counties are seeing a shift in their populations as the counties become more urban/suburban. Even rural land is now being subdivided into smaller acreage parcels (less than 30 acres) according to the NC Department of Commerce Rural Planning Commission. Due to this, traditional livestock for 4-H shows (cattle, sheep, goats, and swine) are becoming rarer in these counties. However, many families still have room for smaller livestock, like poultry and rabbits, that youth can raise and show. Animal projects form a cornerstone of 4-H and Extension Youth Development and teach so many incredible skills including responsibility, record keeping, financial management, and public speaking skills (Tomoson et al., 2019).

In order to still involve youth in livestock programs, Davie, Davidson, Forsyth, and Yadkin County Livestock and 4-H Agents partnered to bring a Regional 4-H Poultry and Rabbit Show to fruition. Over 40 youth registered to participate in either egglaying, meat bird, and/or rabbit projects. Under advice from regional poultry specialists, livestock agents created several workshops to prepare families for raising chicks, creating a healthy backyard flock, and how to prepare and show poultry. The Davie 4-H Agent worked with a local rabbit breeder to create a rabbit showmanship workshop to learn about rabbit husbandry and showmanship skills. Egg-laying families received Rhode Island Reds and Barred Rocks pullets in January. Meat bird families received Cornish-cross chicks in February that afforded them the opportunity to learn how to raise and process meat birds. However, weeks before our show, Highly Pathogenic Avian Influenza (HPAI) shut down the in-person poultry component, so it was switched to virtual.



## REGIONAL 4-H RABBIT SHOW AND VIRTUAL POULTRY SHOW

Nineteen youth turned in Poultry Project Record Books, which was a requirement of the project. Eleven youth participated in poultry showmanship virtually. Poultry videos were judged by the Wilkes County 4–H Agent. In addition to the show, poultry families learned more about poultry production, first-hand whether through processing meat birds or gathering eggs. We continued the Rabbit Show as planned and 11 youth (8 youth turned in rabbit project record books) were able show their rabbits at the Winston–Salem Fairgrounds. As a result of this project, three families started to produce their own rabbits for meat and pet production. For 85% of rabbit and poultry participants, this was their first livestock experience and many are interested in doing the show next year. For 28% of participants, this was also their first 4–H experience. A post show survey showed that all parents felt their child had learned responsibility, 77% thought their child had improved knowledge of financial management and record keeping, and 67% thought their child had improved public speaking skills.



#### IMPROVING SNAP RECIPIENTS ACCESS TO FRESH LOCAL FOODS

According to USDA, food security means access by all people at all times to enough food for an active healthy life. North Carolina consistently ranks in the top ten most food insecure states in the nation with an overall food insecurity rate of 14%. Davie County falls in line with the state average at 13% overall and 15% for youth. These numbers predate the COVID-19 pandemic, which only exasperated these conditions due to job losses, shutdowns and supply chain issues. Finding what were once normal, everyday items is not always a reality anymore. Some stores even directed customers to products that were not eligible for SNAP benefits during the height of the pandemic to sustain supplies for SNAP customers.

Mocksville has a well-established farm stand operated by a local greenhouse tomato producer. He offers fresh tomatoes and other local produce almost year-round, closing during January and February, at affordable and often discount prices. The business is located near senior and low-income apartment complexes. As a result, they have many customers that walk to the store and have had many inquiries for using SNAP benefits there.

During the pandemic, the store owner reached out to Extension for help in accepting SNAP benefits. The County Extension Director worked with the farmer to complete the online application with USDA, and once approved, helped the farmer obtain a free EBT card reader from the state. Upon reopening for the 2022 season in March, the store is now accepting SNAP benefits. Extension has been there for technical assistance, as needed, and provided signage to help notify customers of the new service. In time, sales figures will determine how successful this has been for the farmer, as well as the community.



# THANK YOU FOR SUPPORTING EXTENSION!

davie.ces.ncsu.edu

facebook.com/DavieCountyCenter

336-753-6100

