

Virtual Poster Presentation

2020 ESP Annual Conference

A list of submissions for each of the four categories is followed by poster graphics.

4-H, Youth Development

4-H Tech Changemakers Program: Bridging the Digital Literacy Gap Across Generations

Submitted by: Alexandria Griner, CEA, Gordon County

Additional Team Members: Stephanie Skojac, Kandace Edwards, Caleb Millican, Lori Bledsoe

The 4-H Tech Changemakers program began in Murray County in 2018 to combat the digital divide and has since expanded to 3 additional counties. Youth serve as technology mentors for adults, teaching them how to use a variety of technological services on their devices.

Starting with the Basics to Build a Healthy Future: Pre-K 4-H Programming

Submitted by: Sonya Jones, CEC, Pulaski County

Pulaski County 4-H has a foundational program that focuses on literacy and healthy to Pre-K and teach them about 4-H at a very early age. It is a positive youth development program that helps build a foundation for a lifetime of healthy decision-making skills.

4-H N.A.I.L.'D It (New Adventures in Learning Distantly)

Submitted by: Sonya Jones, CEC, Pulaski County

Additional Team Members: Jazmin Thomas, Crystal Perry, Megan Powell, Ashley Carroll, Margaret Halbrook

4-H N.A.I.L.'D It was created because of COVID-19 cancelling traditional face-to-face 4-H programming. The Southwest District 4-H Team of UGA Extension faculty & staff wanted to find a fun, educational way to stay connected during school closures and continue sharing research-based knowledge and information to the youth, families, & communities.

Dougherty County 4-H Agricultural Field Day

Submitted by: James Morgan, CEC, Dougherty County

Additional Team Member: Jazmin Thomas

The Dougherty County Agriculture and Natural Resources County Extension Coordinator and the 4-H Youth Development County Extension Agent met with the Career, Technical and Agricultural Education director to discuss the possibility of conduction and Agriculture Field Day targeting all seventh graders in the Dougherty County School System.

Building Communication Skills with County Project Achievement

Submitted by: Jacqueline Nunn, CEA, Putnam County

County Project Achievement is designed as a three lesson curriculum for 4th-6th grade youth to increase their aptitude for written and oral communication by guiding students through the writing process and participating in presenting their capstone demonstration to classmates.

ROCKETS: Reaching Our Community Through Kindness, Education, Togetherness, and STEM

Submitted by: Crystal Perry, CEA, Sumter County

Additional Team Members: Mitzi Parker (FACS Agent), Bill Starr (ANR Agent), and Melinda Miller (4-H PDC)

The ROCKETS project enables youth with disabilities opportunities to build positive relationships and enrich their learning experience. All three Extension program areas implemented this inclusive and innovative project at two schools in Sumter County, Georgia. Participants became independent thinkers, participated in exploration and service projects, and joined other 4-H activities.

4-H Summer Camp Goes Virtual

Submitted by: Cheryl Poppell, CEC, Toombs County

Additional Team Members: Rebekah Greene, Tattnall County; Lili Hester, Ware County; and, Riley Wimberly, Toombs County

When face-to-face Georgia 4-H camps were cancelled this summer, a team of Southeast District 4-H staff created a Virtual 4-H Camp which included favorite activities such as making s'mores, camp cheers, variety show, and more. The event reached 166 registered youth from 2 countries, 13 states, and 35 Georgia counties.

For Goodness Snakes

Submitted by: Abbie Salmon, CEA, Floyd County

Snakes are a common reptile that can be found all over Georgia. While many people may have some fear of snakes it is important to understand that snakes are a valuable part of our ecosystem. Floyd County 4-H addressed this need through the use of a prepackaged activity kit.

Daily Ag Zoom Sessions

Submitted by: Andrew Warner, CEA, Wilkes County

Additional Team Members: Cindy Meadows, Reid Miller, Michael Abney, Thad Glenn, Cale Cloud, Jeffery Tomblin

COVID-19 caused significant changes to how UGA Extension could provide information to the state's citizens. Virtual programming essentially became the best means to reach out to clientele and to continue being relevant in the community. In response this team implemented a Daily Ag Zoom Session focus on both youth and adult education in agriculturally related issues effecting citizen across Georgia.

4-H Tech Changemakers Program: Bridging the Digital Literacy Gap Across Generations

By Stephanie Skojac, Alexandria Griner, Kandace Edwards, Caleb Millican, and Lori Bledsoe



Introduction

National 4-H Council and Microsoft are working together through the 4-H Tech Changemakers Program to help close the broadband access gap. Currently in the U.S. there are 24 million people who do not have access to high speed broadband internet and millions more lack the digital skills to use this important tool. The 4-H Tech Changemakers Program combines the power of teen leadership with the opportunities technology and broadband access offer to help communities realize the potential of technology as a force for good. This program will elevate teens as teachers to provide training in technology and digital literacy skills to assist adults in 80 communities across 13 states. Murray County 4-H trained youth to provide instruction and support to senior citizens on basic use of everyday technology. They offered support through community collaborations. Monthly classes are offered at the Murray County Senior Center focusing on digital literacy skills. Some of the classes focus on social media, online shopping, internet safety, video calling, grocery services, and basic skills involving email, contacts and voicemail. This program also improves leadership skills of 4-H'ers teaching digital literacy monthly to an audience of another generation.

Program Delivery



2018-2019 Program Schedule

In the summer of 2018, Murray County 4-H received a 4-H Tech Changemakers grant from the Microsoft Corporation in conjunction with National 4-H Council. The purpose of the grant was to allow a team of 4-H Youth Leaders to identify a need in their community and then address that need using technology. Led by Youth Leaders Daniel Skojac and Boaz Whealy, Murray County 4-H assembled a team of 4-H'ers and conducted a needs assessment in the community. Through surveying people young and old, it was found there was a big gap between the digital skills of senior citizens in Murray County and younger residents, and that there was interest in making classes available to senior citizens to improve their digital literacy skills. That need, combined with the skills of the 4-H'ers in Murray County, led the team to decide to address this issue by offering monthly classes to help seniors learn to use technologies they already had better, and also to introduce them to technologies or technological issues with which they may not already be familiar. Murray County 4-H Tech Changemaker leaders approached the director of the Murray County Senior Center with the idea, which became the beginning of a strong partnership.

One day each month, about 20-25 Murray County 4-H Tech Changemakers arrived at the senior center after school. Refreshments were provided and the team took 20-30 minutes to eat and socialize with each other and the individuals that have come for the monthly class. After they ate, a brief presentation was given about a focused topic. Topics focused on throughout the year included: Getting to Know Your Device, Facebook, Online Shopping, Internet Safety, Wal-Mart Grocery Services, video calling applications such as Skype and FaceTime, and using features such as Contacts and Voicemail on personal devices. After this time of focus, 4-H Tech Changemaker team members spread out and worked one-on-one with the seniors on any type of tech questions they may have. 4-H Tech Changemaker team members have helped with everything from sending and receiving text messages on flip phones and connecting loved ones through social media or email, to helping one woman figure out how to watch the Braves game online. Attendees brought their own personal devices for assistance if they had them, or through the generosity of Microsoft, Murray County 4-H Tech Changemakers was able to provide Microsoft Surface Pros for seniors to use during the classes. A core group of seniors became the “regulars,” and strong relationships formed between the youth and these individuals. Participation in this program helped the seniors with their digital skills and it helped the 4-H'ers become better teachers. 4-H Tech Changemakers were not only building a bridge across the digital divide, but a generational one as well.

Results

Throughout the course of the program, Murray County 4-H had 30 youth leaders teaching sessions and served a total of 26 senior adults.

In a survey administered during the final session of the program, every adult respondent indicated that they agreed or strongly agreed with the following statements about the 4-H Tech Changemakers Program:

- I learned new technology skills
- This activity made me want to learn more about technology
- In this activity, I learned ways technology can help me
- The teens teaching were knowledgeable about the content for this activity.

Twenty-three youth Tech Changemakers also completed a post-survey regarding their experience. Results indicated the following:

- 96% agreed with the statements that the 4-H Tech Changemakers Project is a place where you get to teach others what you have learned and a place where you have a chance to be a leader
- 100% agreed or strongly agreed that the 4-H Tech Changemakers Project inspired them to help their community
- 100% agreed or strongly agreed that in the 4-H Tech Changemakers Project, they learned new technology skills
- 96% agreed or strongly agreed that the 4-H Tech Changemakers Project made them want to learn more about technology
- 100% agreed with the statement that in the 4-H Tech Changemakers Project, I see how technology can help change my community for the better

“Tech Changemakers isn’t just a program to learn more about technology, it’s a place that cultivates lasting bonds between senior citizens and youth alike.”
- Boaz, 4-H Tech Changemaker



"As you know I have been out of school for a while now and technology was not a word in existence at that time... These young leaders that we had teach us technology classes were not only kind and caring toward us but very patient with us...These students were excellent teachers and throughout the year they became our friends as well.”
- Betty Sue Grooms,
4-H Tech Changemaker Adult Participant

Next Steps

Murray County is offering a second year of this program with a series of 8 workshops throughout the year at their local senior center. In addition, through Murray County 4-H's strong leadership on this program, an additional grant was offered and the 4-H Tech Changemaker Program has now expanded to three additional counties in Northwest District. In March, five adults and seven youth traveled to Columbus, Ohio to be trained to deliver the 4-H Tech Changemaker Program. In April, those who received the national training hosted a tri-county teen leader workshop in which they trained 23 other 4-H'ers to be 4-H Tech Changemakers in their county. Workshops have begun in various locations throughout the three counties, including libraries, schools, and community centers.



Above: Tri-county workshop that trained 23 additional youth to lead 4-H Microsoft Tech Changemakers sessions
Left: Teen leaders at 4-H Microsoft Tech Changemakers training in Columbus Ohio

Abstract

Pulaski County 4-H has a foundational program that focuses on literacy and healthy living that is directed toward a much younger audience than the typical 4-H age youth (9-19 years old). These programs are focused on youth Pre-K age (4 & 5 year olds). It is a marketing tool to reach the younger audiences and teach them about 4-H at a very early age and a positive youth development program that helps build a foundation of healthy decision making choices. Through fun, kid friendly 4-H healthy living programming, routine healthy snacks, and exercise, healthy decision making skills are instilled alongside fun reinforcement activities. Students learn to make healthy habits for a lifetime, and they pass that educational information on to family members and friends exponentially educating our community and helping the effort toward combating the overweight & obese epidemic in Georgia.

Description

Pulaski 4-H has a foundational program, Focusing on F.U.N. (Food and Understanding Nutrition) that focuses on literacy and healthy living that is directed toward a much younger audience than the typical 4-H age youth (9-19 years old). The 4-H Cloverbud age programs are focused on youth Pre-K age (4 & 5 year olds). It is a marketing tool to reach the younger audiences and teach them about 4-H at a very early age and to help build a foundation of healthy decision making choices. By instilling routine healthy snacks and exercise with the love of reading, students will learn to make healthy habits and pass that educational information on to family members and friends exponentially helping to educate our community. The program content consists of 4 main parts: 1) literacy promotion, 2) understanding food and nutrition via MyPlate, 3) kid-friendly exercise, and 4) reinforcement activities. Reinforcement activities include: 4-H reading a book about a food or healthy topic, a MyPlate food group game is played to reinforce the topic learned, a coloring sheet is given to complete later and take home or a simple craft is done, a sample healthy snack may be given if appropriate for the book and/or lesson, and an exercise is done to help solidify the concept of eating healthy and exercise as a total healthy package. All items given out contain the UGA logo & 4-H emblem, and youth learn to recognize 4-H and the services and positive youth development we offer to the community at a very early age.

Starting with the Basics to Build a Healthy Future: Pre-K 4-H Programming



Sonya R. Jones - Pulaski County CEC/4-H Agent and Staley Bell - 4-H Educator



Targeted Outcomes

Georgia youth are currently facing an epidemic of huge proportions of being overweight and obese. To be obese a youth's body mass index, BMI, must in the 95th percentile or higher. There are more than 12.5 million children and teenagers that are obese in the United States. In the state of Georgia, obesity in children and youth was a significant public health problem. The youth in Georgia, ages 2-18, exceeded the Healthy People Goal of 5% for obesity by a significant amount of 10% or more in all age groups. The prevalence of obesity was 18.5% in youth in the U.S. in 2015-2016 according to the National Center for Health Statistics (NCHS Data Brief, No. 28,) Not only is the extra weight a medical problem for obese children, they have increased risk for other medical conditions such as: hypertension, sleep apnea, diabetes, low self-esteem, and asthma. Overweight adolescents have a 70% chance of becoming overweight or obese adults. Pulaski 4-H wanted to help teach healthy living programming earlier than the normal 9-19 age, so that a firm foundation could be started earlier for future healthy decision making skills. Focusing on Pre-K youth would help start the conversation of healthy living earlier and create a foundation for healthy living decision making skills that would follow the youth throughout their school career and beyond.

Hales, C., Carroll, M., Fryar, C., & Ogden, C. (2017, October). Prevalence of Obesity Among Adults and Youth: United States, 2015-2016 (Issue Brief No. 28). Retrieved from: <https://www.cdc.gov/nchs/data/databriefs/db288.pdf>

Evaluation



During a Quality Rated Child Care Evaluation for Pulaski Pre-K, the school had a lack of nutrition education and experiential learning opportunities. Pulaski 4-H was asked to help teach monthly club meetings to increase nutrition education knowledge in four Pre-K classes based on the agent's programming and expertise in healthy living. All 4-H programs met the GELDS (Georgia Early Learning and Development Standards) that support the growth of the whole child. Since its introduction, over 800 Pre-K youth (88 youth, 8 teachers, and expansion of family education via take home lessons/activities and afterschool programming yearly) have been a part of the healthy living program with 95% correctly identifying each food group and being able to place varying foods in their respective food group and identifying them as healthy choices or not during the lessons and matching games. This program is such a success that 4-H is invited back year after year and often collaborate with specialty day camps or summer activities for that age group and as resource lessons for parents too. The Focusing on F.U.N. program also opened the doors to programming with Head Start, a Federal program that promotes the school readiness of children from birth to age five from low-income families by enhancing their cognitive, social, and emotional development. This added an extra 30-60 youth (depending on the yearly enrollment) learning about food, nutrition, and exercise each month. Youth remember 4-H and the lessons for years after often commenting on them when we see them again in the community and/or at the schools. One teacher stated. "4-H helps us meet a need where we were lacking. They bring experiential learning to the kids that we do not have time to do in the classroom. The kids love the lessons and are excited each month to find out what the lesson will be about!"

Program Replication

This program is easy to replicate. Most school systems are mandated to provide nutrition education to the youth. If a Pre-K program isn't available, Kindergarten would be a great place to start too with early foundational Healthy Living decision making skills. 4-H program staff and youth can provide lessons supplied by USDA's MyPlate or from other sources to teach about the food groups and exercise, read books that relate to the topic of the month (food group or exercise), provide reinforcement activities, and a take home portion to continue education with family and friends to create a well rounded educational program. Only time, effort, printing, and inexpensive supplies are needed to replicate the program. Lessons used are available upon request. Most mandated nutrition programs also have an allotted amount of money that can be utilized to help offset cost of printing and buying any needed supplies.



Summary

4-H N.A.I.L.'D It was created because of COVID-19 cancelling traditional face-to-face 4-H programming in Georgia. The Southwest District 4-H Team of UGA Extension faculty & staff wanted to find a fun, educational way to stay connected during school closures and continue sharing research based knowledge and information to the youth, families, & communities of Georgia. Throughout the virtual ten weeks, 570 live youth & adult participated from more than 25 Georgia counties, at least 10 states engaged in the program, 4,000+ views for the recorded session videos, & 730+ views for the summary video.



Major Issues Addressed

4-H N.A.I.L.'D It was created because of COVID-10 cancelling traditional face-to-face 4-H programming in Georgia. The Southwest District 4-H Team wanted to find a fun and educational way to stay connected with 4-H'ers and continue sharing research based information. The team decided on a free virtual 10 week program, April 13th - June 17th) that would allow varying 4-H staff to participate via the online program by teaching classes each week in their niche area of interest. This provided a way for 4-H staff to collaborate and be able to reach beyond their county for programming needs. The ten weeks provided lesson on topics that covered, STEM, Healthy Living, Agriculture Awareness, Leadership, Arts/Crafts, and more. This program offered an outlet for positive youth development for the 4-H'ers in Georgia and beyond. This innovative programming provided a source to cover a major issue of keeping 4-H relevant in a digital world during school closures & quarantine because of the pandemic.



4-H N.A.I.L.'D It (New Adventures in Learning Distantly)



Jazmin Thomas, Dougherty County 4-H Agent, *Sonya Jones; Pulaski County 4-H Agent, *Crystal Perry; Sumter County 4-H Agent, Megan Powell; Lanier County 4-H Agent, *Ashley Carroll; Tift County 4-H Agent, & Margaret Halbrook; Terrell County 4-H Agent



Methods Used

4-H N.A.I.L.'D It was hosted by a team of Southwest District Georgia 4-H Faculty & Staff. Each Zoom session featured an educational lesson followed by an optional hands-on activity that youth could do from home with common household items. If students did not have access to the supplies for the optional activity, they were still able to see it & engage virtually on the session. A UGA Zoom id was provided for youth & adults to attend each session, at least 4 members of the group were present each week for safety & control of the session, and each session was recorded and uploaded to the Southwest District Facebook page.

Results Obtained

Throughout the virtual ten weeks, 570 live youth & adult participants from more than 25 Georgia counties & at least 10 states engaged in the program. Over 4,000 views for the session videos. Five states (Indiana, Missouri, Minnesota, Michigan, New Mexico, & Colorado) with 13 individuals requested information about the program and links to the videos. Each session had an evaluation survey given via the Zoom poll option to help the faculty and/or staff know if they participants learned anything from the lesson and to help with evaluation purposes and obtain quantitative & qualitative data. . The UGA Extension faculty & staff learned right alongside the youth and were pushed out of their comfort zone to engage in live sessions online, learning to convert engaging hands-on lessons into a virtual format, and had to overcome any technical difficulties that arose during the sessions. Although 4-H looked a little different during the pandemic, the 4-H N.A.I.L.'D It team never stopped doing what they do best - improving the lives of youth in Georgia & beyond!



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*Active ESP Members

Dougherty County 4-H Agricultural Field Day

*Morgan, J. ¹, Thomas, J. ²

¹ County Extension Coordinator, University of Georgia, Albany, ² County Extension Agent, University of Georgia, Albany

Abstract:

Agriculture is the largest industry in Georgia and accounts for \$73.3 billion of the state's economy. The 2018 Georgia Farm Gate Value Report shows that Dougherty County's agriculture is valued at \$71,307,033.00. The Dougherty County School System's Career, Technical and Agricultural Education (CTAE) pathways ensure that students receive the relevant and rigorous preparation required to continue their education beyond high school graduation whether at a community college, on-the-job training program, four-year college, graduation school, or in military service. The Career, Technical and Agricultural Education Department prepares students for life beyond the classroom by providing them with employability skills, along with the background needed to succeed in post-secondary institutions. Courses are designed based on current data and research in business and industry to give students the ultimate advantage upon exiting high school. Unfortunately, the agricultural pathway ended in May 2015 due in part to high turnover of agriculture education teachers and students losing interest. The CTAE director has previously had a desire to reintroduce the agriculture pathway but did not know how to gauge the level of interest of the students. The Dougherty County Agriculture & Natural Resources County Extension Agent and the 4-H Youth Development County Extension Agent met with the Career, Technical and Agricultural Education director to discuss the possibility of conducting an Agriculture Field Day targeting all seventh graders in the Dougherty County School System.



Figure 1: James Morgan, Dougherty County ANR Agent and Extension Coordinator, talk to students about farming equipment

Purpose:

When talking to kids in urban area about careers in agriculture, farmers are the first thing that comes to mind. The goal of the Dougherty County Agricultural Field Day was to educate students in five agricultural fields of study. These areas included Agricultural Business, Horticulture, Environmental Education and Natural Resources, Crop Production and Animal Science. Five representatives per field of study were identified. Each representative was sent an Ag Field Day flyer and vendor form to complete and confirm their attendance. The 4-H Agent developed a pre/post-test that was given out to the students at the beginning of each assembly and then again after they visited their last station. The CTAE director handled the logistics of providing tables and chairs for each station, soliciting volunteers, assigning each of the four middle schools times in which to participate in the field day, arranging lunch and transportation to Merry Acres Middle School where the Ag Field Day took place.



Figure 2 & 3: SOWEGA Master Gardeners and USDA NRCS joined the group of exhibitors for the field day

Results:

A total of 788 youth from three of the four middle schools were exposed to the Agriculture Field Day. By participating in interactive presentations and hands-on learning experiences, students learned how vital the agricultural industry is to Dougherty County and the state of Georgia. Representatives from the Dougherty County Farm Bureau, Flint River Ag and Turf, Flint River Fresh and Golden Peanut were on hand representing Agriculture Business. The SOWEGA Master Gardeners represented our Horticulture track. The Abraham Baldwin Agricultural College Poultry Club and Harry James' Horse Stables were part of our Animal Science track. USDA Natural Resources Conservation Service, UGA Extension Water Agents and the Georgia Forestry Commission were all representatives of the Environmental Education/Natural Resources track.



Figure 4: Students gather at the Flint River Fresh station

Some student were given the chance to climb inside the cab of a tractor for the first time and see that they are equipped with the latest technology to assist farmers. They were given the chance to be up close and interact with the horses and the poultry handlers. They learned about soil erosion, water quality and conservation, type of irrigation systems and pollinators from Natural Resources Conservation Service employees, UGA Extension Water Agents and SOWEGA Master Gardeners. The 4-H Educator and AmeriCorps State Member made peanut butter and smoothies with peanuts donated by the Georgia Peanut Commission. The students also learned about forestry resources and growing their own vegetables in small spaces.

Survey Outcomes:

Data from the post-test showed that 82% of participants were able to name a career related to agriculture other than a farmer. 91% of students also reported knowing how much money the agricultural industry contributes to Georgia's economy. 73% of participants stated they would be interested in an Agricultural Pathway at the middle or high school level. 86% of the students surveyed were able to recall the top 5 agricultural commodities.

Agricultural Field Day Survey Results

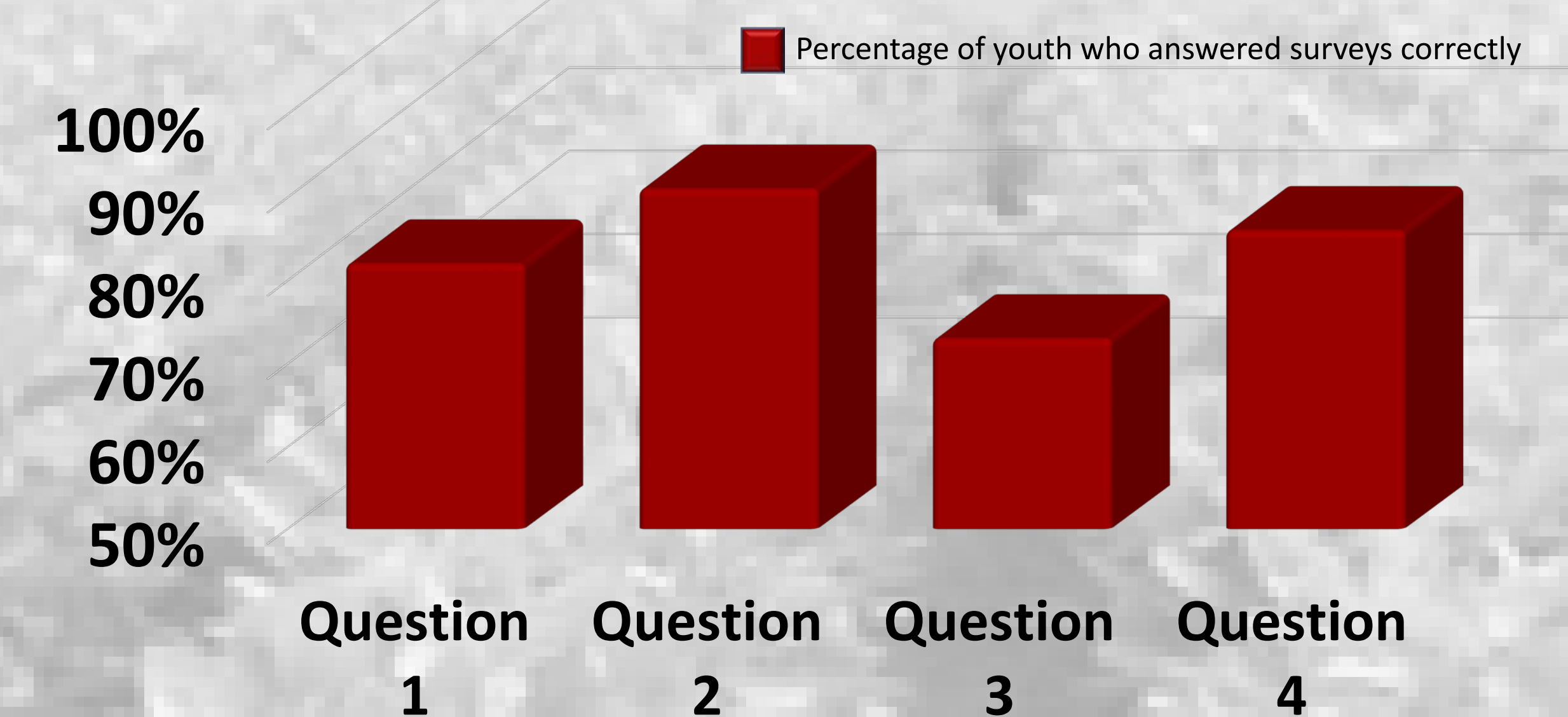


Figure 5: Data compiled from surveys taken by participants

Question 1: 82% of participants were able to name a career related to agriculture other than "farmer". **Question 2:** 91% of students also reported knowing how much money the agricultural industry contributes to Georgia's economy. **Question 3:** 73% of participants stated they would be interested in an Agricultural Pathway at the middle or high school level. **Question 4:** 86% of the students survey were able to recall the top 5 agricultural commodities.



Figure 6: Georgia forester shows students forestry related insects

Acknowledgements: Dougherty County School System's CTAE Department, Georgia Forestry Commission, UGA Stripling Irrigation Research Park and UGA Water Agents, Dougherty County Farm Bureau, USDA NRCS, Georgia Peanut Commission, Phoebe Network of Trust, SOWEGA Master Gardeners, Flint River Fresh, Golden Peanut and Mr. Harry James

Building Communication Skills with County Project Achievement



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Jacqueline Nunn, UGA Extension-Putnam County

County Project Achievement is designed as a three lesson curriculum for 4th-6th grade youth to increase their aptitude for written and oral communication by guiding students through the writing process and participating in presenting their capstone demonstration to classmates.

Purpose

A pivotal point in a young person's life is the transition from high school into college or the workforce. As youth make this transition, they must not only have a plan for their careers or academic paths, but also have the ability to enter and succeed in entry-level position/postsecondary courses without the need for additional training or remediation. When looking at the ACT National Report of the Condition of College and Career Readiness (2018), overall there is a gap between aspirations, and future plans/skill set. While a large number of 5th graders (around 80%) in Putnam County in 2018 were considered developing learners in English Language Arts, only 23.4% (down from 33.2% in 2015) were considered Proficient Learners in English Language Arts. Today employers and colleges are looking for young adults who have the ability to communicate effectively (both in written communication and verbally), to solve problems, to think critically and develop informed arguments, and to analyze information and data.

Program Methods

The target audience was the approximately 700 students in 4th-6th grade attending monthly hour long club meetings. From September-December 2019, 4-H focused on three lessons to guide youth through writing a speech:

Lesson One: Youth were taught the parts of a speech (introduction, body, and conclusion). Youth participated in guided activities to select a topic of interest, brainstorming method for creating an outline for their speech, and given time to begin writing their speech.

Lesson Two: Youth were taught examples of how to improve their writing on a 2nd draft by playing a class game "Making the Best Better". Youth were also taught how to research information. Youth participated in class time for writing and sharing in small groups.

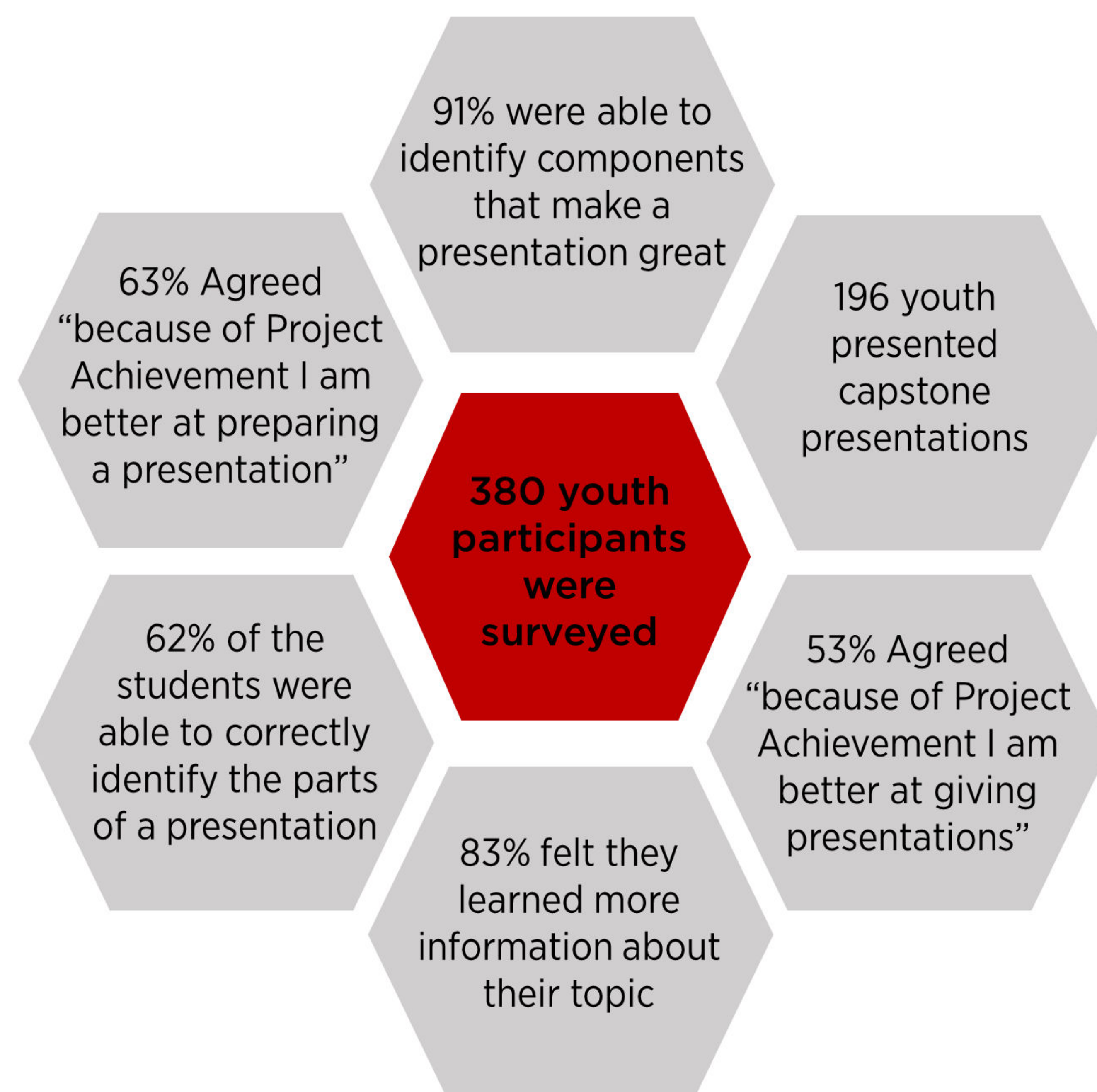
Lesson Three: Youth were encouraged to present capstone presentations in front of their classmates. For additional time youth were assigned impromptu speeches to practice timed writing.

Objectives

The youth will:

- Differentiate parts of a presentation
- Identify components that make a great presentation
- Develop confidence in preparing a presentation
- Develop confidence in presenting a presentation
- Write and demonstrate presentation in front of an audience

Results and Impact



Selected comments from youth when asked what the most important thing they learned was:

"When you research a topic you're not used to you have more knowledge in your mind"
"I should always be brave when I give my presentation"
"It's ok to be nervous by reading your speech"
"I learned that it is not that bad to talk in front of people"

Evaluation and Conclusions

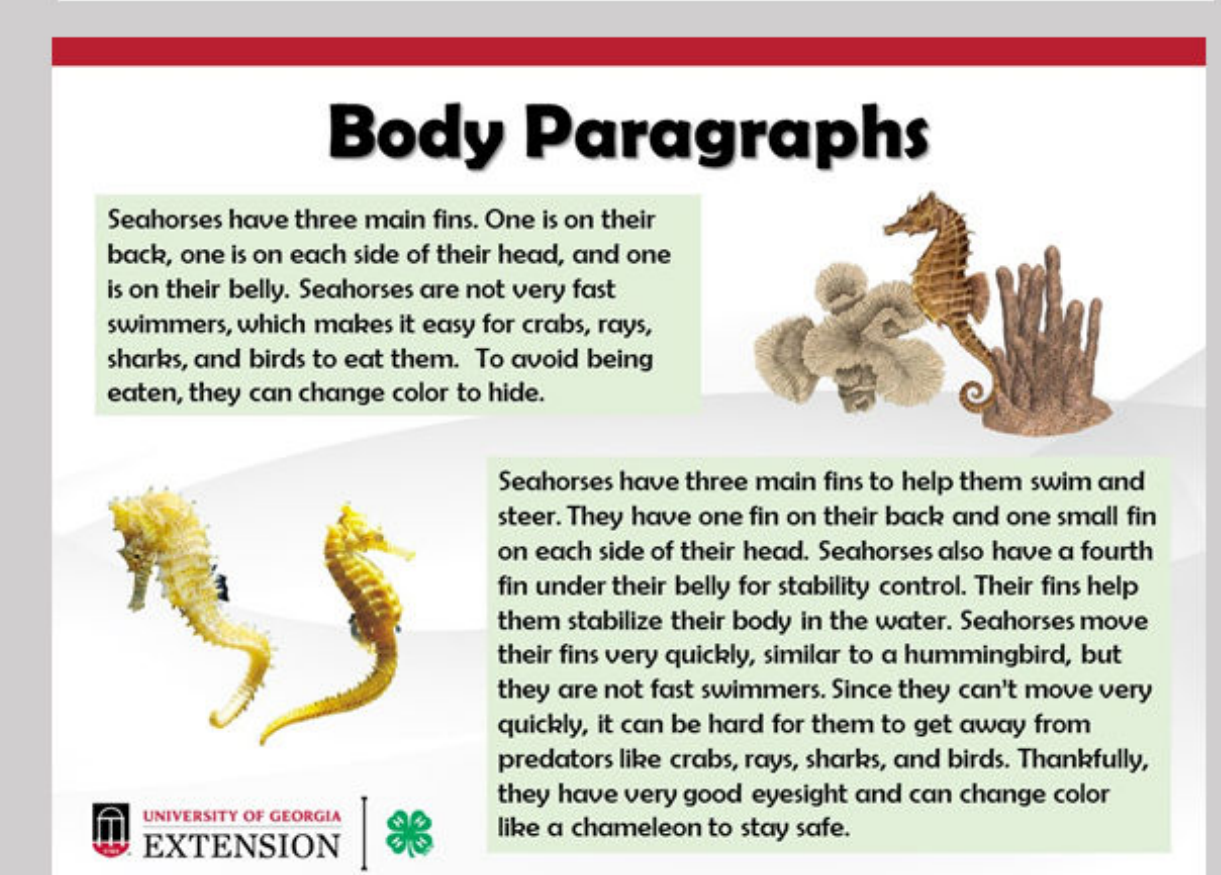
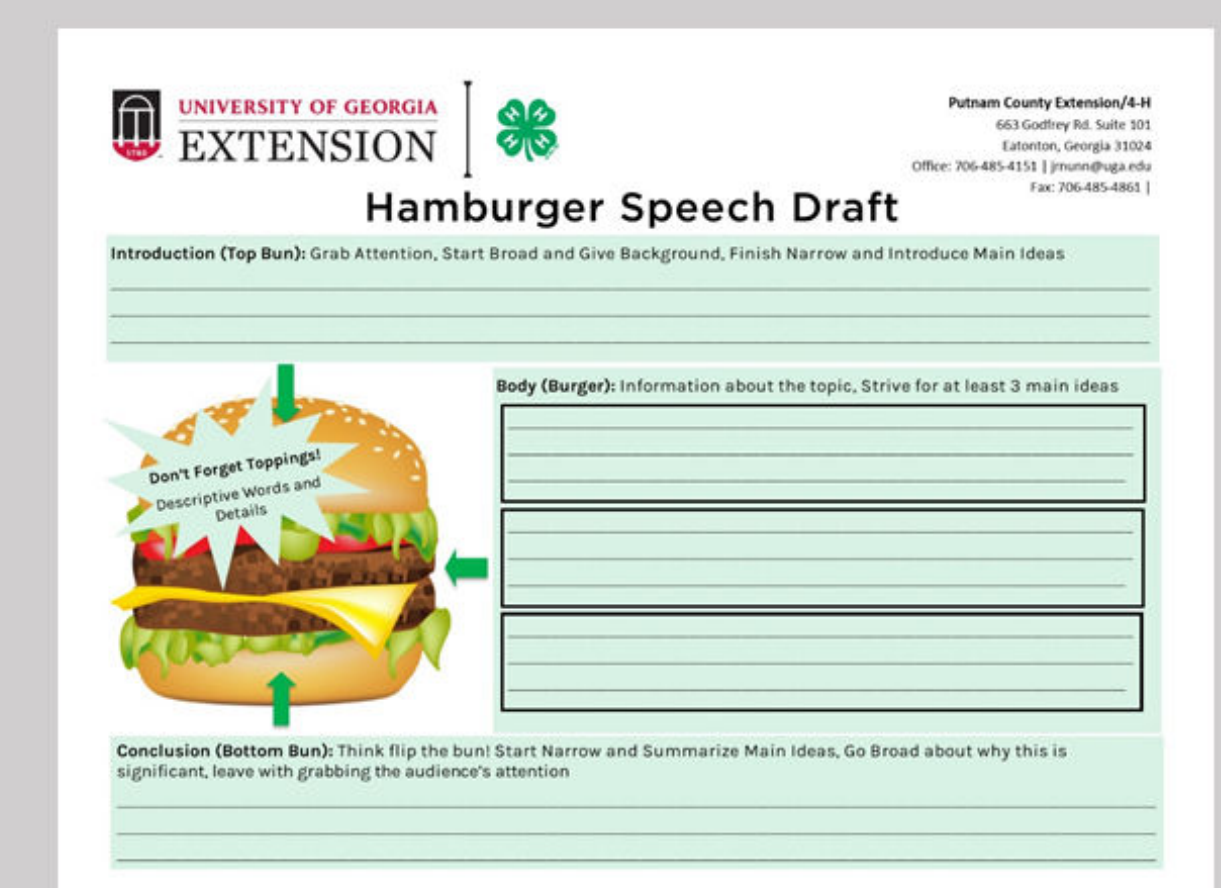
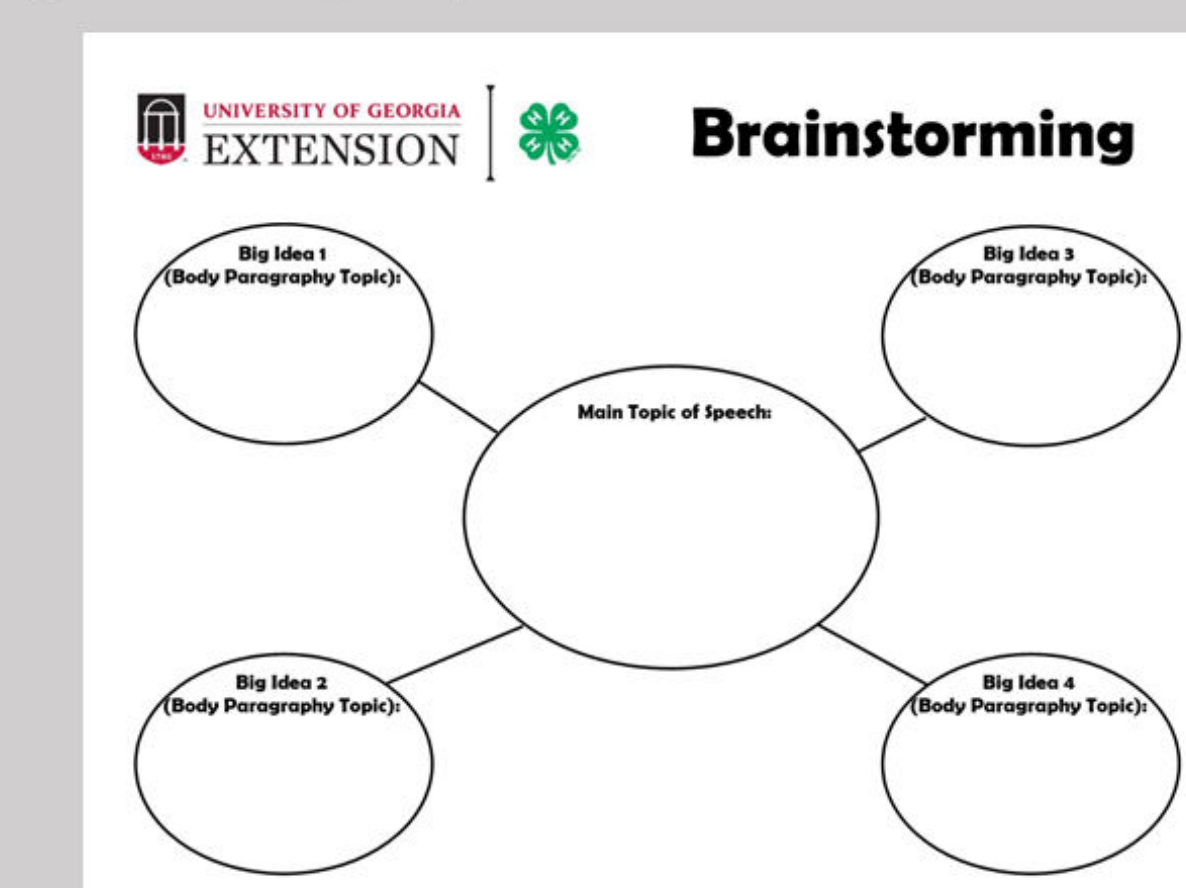
The lessons were developed to align with the Georgia 4-H Project Achievement competition, which has a common evaluation that has been developed by Jennifer Cantwell, State Program Coordinator. The same evaluation was used with randomly selected classes in January 2020.

Through County Project Achievement youth were encouraged to practice writing skills and public speaking. For many youth this was their first time speaking in front of an audience. County 4-H staff noticed an increase in confidence and interest in participating more in public speaking. As a result of County Project Achievement, Putnam County 4-H has had an increase in youth participating in District Project Achievement.

How You Can Replicate

The lessons are easy to replicate in multiple settings both in-classrooms and outside of the classroom. Lessons can easily be extended, given resources, to provide time for youth to research their topics.

Handouts and PowerPoints were developed to help guide youth through the process, and other programs can email the Putnam County 4-H Agent, Jackie Nunn for a copy: jrnunn@uga.edu.



SITUATION & OBJECTIVES

Sumter County is located in southwest Georgia with a population of slightly more than 30,000 people. The greatest needs surrounding youth in Sumter County are persistent poverty (25.5%), assisting school youth with disabilities (13%), graduation rate (78.7%); improving college and career readiness, and reducing youth in detention/incarceration. In rural areas, youth living with a disability may feel even more isolated than others, in the same location due to limited resources and/or access to various groups. Studies show the appearance of limited interaction between families of children with disabilities and families of children without a disability (Groce & Kett, 2014). With limited resources available for youth living with a disability in Sumter County, the University of Georgia Sumter County Extension office program areas of 4-H, Family and Consumer Sciences (FACS), Agriculture and Natural Resources (ANR), along with a Georgia 4-H AmeriCorps Member collaborated to implement an innovative 4-H gardening curriculum and various STEM activities in a unique project entitled *Reaching Our Community through Kindness, Education, Togetherness and STEM (ROCKETS)*. This multi-disciplinary and integrated project ensures that youth living with a disability have access to inclusive educational and fun experiences in integrated settings inside and outside the classroom.

The ROCKETS project's goal is to provide middle school youth with disabilities inclusion opportunities that build positive relationships, heighten skills in science disciplines, and enrich their educational learning experiences. Existing research shows the strong correlation between youth with special needs and sensory gardens (Hussein, H., 2010; Hussein, H., et al., 2015, & Hussein, 2017), but little research establishes a connection with special needs youth and school/community gardens as a tool for workforce skill building and empowerment to make positive choices. The ROCKETS project focuses on Agriculture literacy and STEM education as content areas to build capacity for problem solving skills in youth.



ROCKETS

REACHING OUR COMMUNITY THROUGH KINDNESS, EDUCATION, TOGETHERNESS, & STEM

Crystal Perry¹, 4-H CEA; Mitzi Parker¹, FACS CEA; Bill Starr¹, ANR CEA & CEC

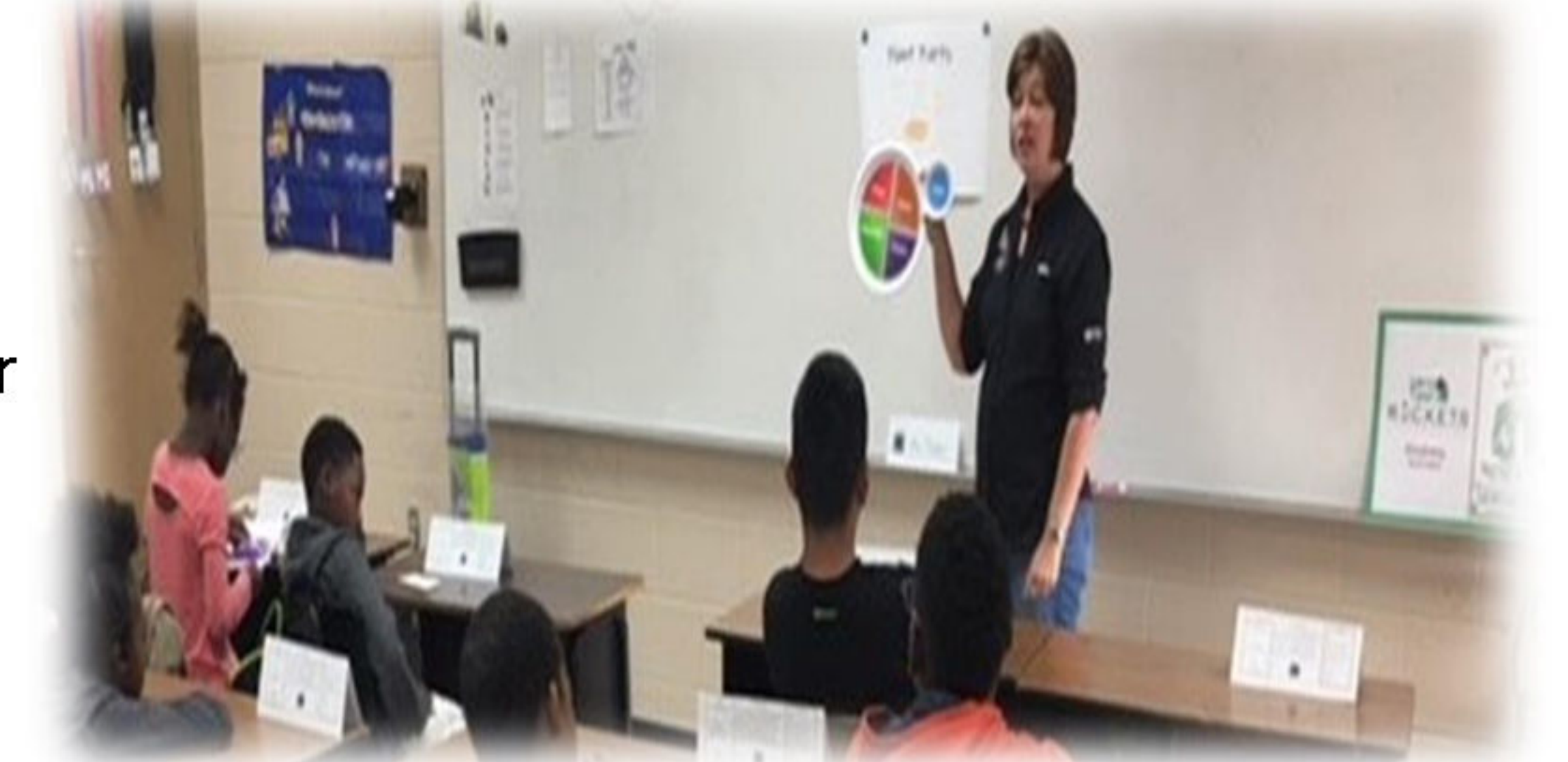
Haley Wilson¹, 4-H AmeriCorps; Brandon Gross², Ag Science Teacher; and Melinda Miller¹, 4-H PDC

University of Georgia¹ • Sumter County Schools²

STRATEGY & PARTICIPANTS

Youth, regardless of race, ethnicity, socioeconomic status, family history, gender identity or expression, etc. participated in the ROCKETS project. The target audience for the ROCKETS project is youth identified by school administrators and collaborative partners as individuals with a disability. Youth living with a disability were encouraged to join other 4-H youth in adaptive activities and programs in which their skills and abilities are accentuated. The Agriculture team advisors (4-H Agent 100%, ANR Agent 25%, High School Agriculture Teacher/FFA Advisor 10%, 4-H Volunteers 10%) built raised garden beds at participating schools with the assistance of FFA student members. The Health team (4-H Agent 100%, AmeriCorps member 50% and FACS Agent 50%) led classroom discussions on nutrition and healthy eating utilizing My Plate, the USDA Center for Nutrition Policy and Promotion's nutrition guide.

The ROCKETS Project provided suitable and adaptable educational materials and hands-on Ag and STEM learning experiences through sessions held in-class and outside the classroom. Participants were exposed to various settings and situations in which they had to also apply social skills learned through in-school and out-of-school programming while working with other youth. Following classroom sessions, youth worked in their school garden to water, weed, and harvest. Participants engaged in sensory activities which included tastings of their garden produce as well as in-season fruits and vegetables. Participants studied agriculture education and healthy lifestyles through their classroom garden, STEM concepts, and sensory activities.



Activities included: service projects, experiential learning field trips, and other 4-H activities. Through these activities, participants learned to better understand themselves and become independent thinkers. In an effort to measure the effectiveness and impact of the project, the ROCKETS project adult leaders administered written and electronic surveys to participants. Evaluation tools implemented included but were not limited to the *Learn, Grow, and Eat* curriculum and the National 4-H Common Measures instruments.

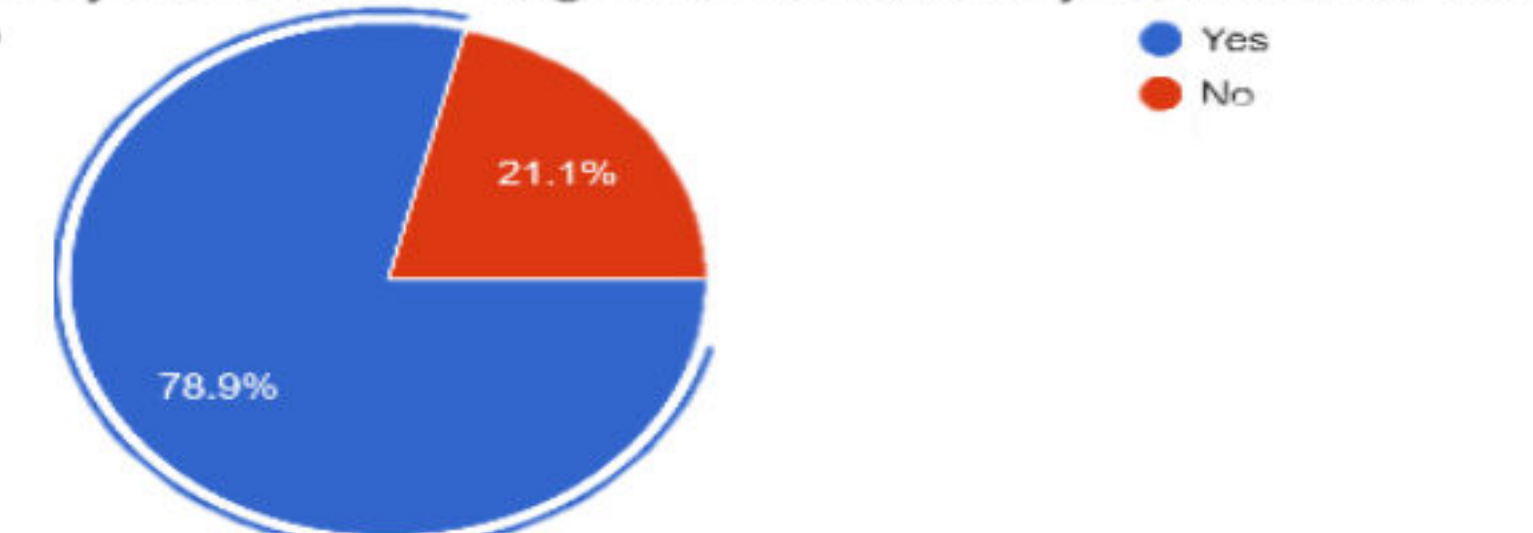
RESULTS

The ROCKETS project Extension team recruited a diverse team of volunteers and community partners to embrace a standard practice of increasing agriculture awareness for youth, creating and advocating for inclusive environments, and ensuring sustainability of the project. The adaptive gardening lessons, sensory activities, meal planning illustrations, and hands-on learning experiences inside and outside the classroom promoted retention and increased involvement in the local 4-H club. Youth who would not otherwise join a youth development program or an extracurricular activity was extended a unique opportunity to experience Sumter County 4-H Club.

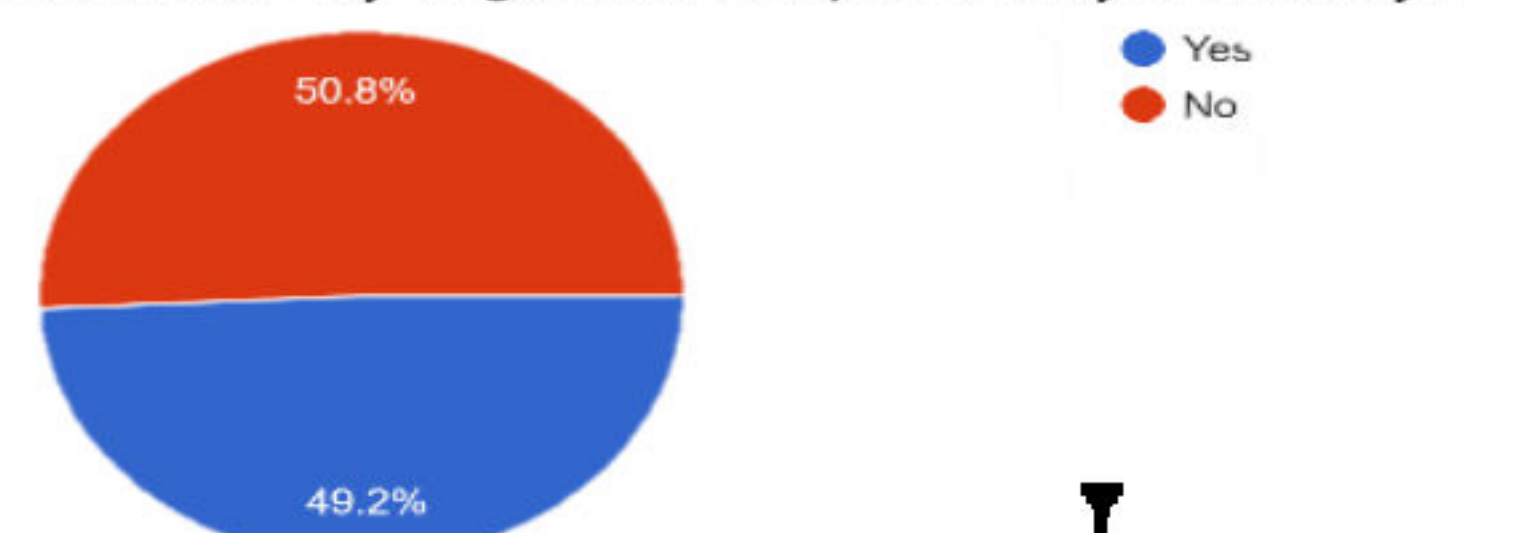
Data collected using multiple evaluation tools, to include the 4-H Common Measures, presented themes of participants' improvement in positive behaviors with school peer-to-peer interactions and the increase of their agricultural awareness. The data indicated that youth with disabilities learned soft skills and basic gardening practices for growing their own food. More than 65% of students gave their family ideas for healthy meals or snacks. 60% of the students were attentive to how physically active they are each day. Over 50% responded that they planted seeds or plants at home in a garden with their family. Teacher/Class Sponsor evaluations reflected a positive behavior change among participants as well as an increase in knowledge of the relationship between foods they eat, crops that are harvested, and their own health. In addition to the participants' behavior change and social skills, the Sumter County community was impacted by the total wealth of Extension knowledge and resources made available as a result of the project.

PRE-SURVEY

Within the last year, have you washed vegetables before you cook or eat them with your family?

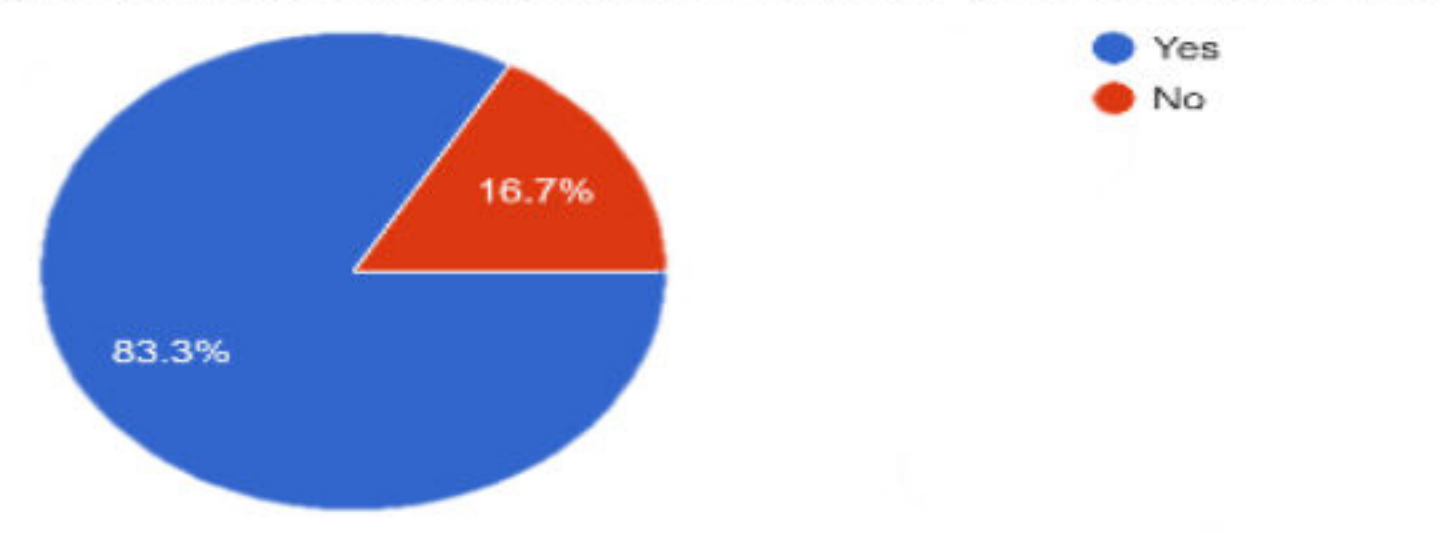


Within the last year, have you made any vegetable recipes with your family?

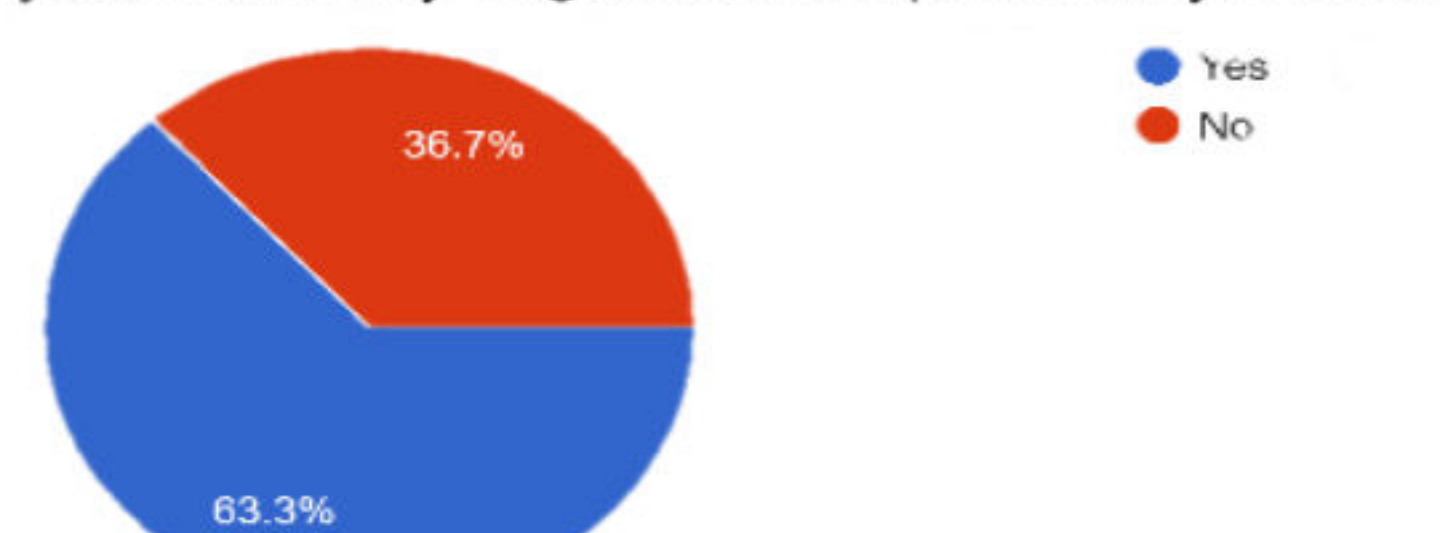


POST-SURVEY

Within the last year, have you washed vegetables before you cook or eat them with your family?



Within the last year, have you made any vegetable recipes with your family?



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CONCLUSIONS

The ROCKETS program model is a complete Extension program collaboration project. The diversity of the ROCKETS project is evident in the youth participants, but also in the adult leaders of the project and the project's program model. The three Extension program areas of 4-H Youth Development, Family & Consumer Sciences and Agriculture and Natural Resources all collaborated to ensure participants were exposed to the entirety of Extension resources and the diversity in the various roles of UGA Extension. By serving the needs of young people in Sumter County Schools through this unique programming approach, the ROCKETS adult leaders holistically impacted the lives of youth, families, and the Sumter County community. Participants of the ROCKETS project engaged effectively with Extension staff and volunteers in inclusive settings that promoted integrated, successful learning and unique experiences. Sumter County 4-H has expanded its reach to youth, increased participation in youth opportunities and increased available resources provided to the community.



ACKNOWLEDGMENTS

ROCKETS' pilot project is based upon work supported and funded by UGA Extension under a \$12,000 mini grant. We extend our thanks to Dr. Laura Perry Johnson, Sumter County Extension staff, Sumter County 4-H Volunteers, Future Farmers of America Sumter County Chapter, Sumter County Schools and the youth who participated in the project.



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- Groce, N., & Kett, M. (2014). Youth with disabilities. Youth with Disabilities (2014) Working Paper, 23.
- Hussein, H. (2010). Using the sensory garden as a tool to enhance the educational development and social interaction of children with special needs. Support for Learning, 25(1), 25-31.

4-H SUMMER CAMP GOES VIRTUAL

Presented By: Cheryl Poppell, Toombs County; Rebekah Greene, Tattnall County;
Lili Hester, Ware County; and Riley Wimberly, Toombs County

SITUATION

Each summer, thousands of youth from across the state gather together at one of the five 4-H Centers in Georgia to participate in a five-day, residential camping opportunities. These camping opportunities offer youth an opportunity to learn in a fun environment, build lasting friendships, experience independence, and more. Unfortunately, due to the COVID-19 Pandemic, Georgia 4-H face-to-face camping programs and most face-to-face 4-H programs were cancelled for the summer of 2020. Across the state and nation, children were unable to participate in the many face-to-face activities that were their normal source of social interaction with other youth. As the pandemic continued into April and May, concerns arose about youth suffering negative impacts from social isolation. Through informal evaluations with parents, 4-H staff in Southeast Georgia identified a need to provide youth with an opportunity to participate in social interaction with other youth.

Camp Memories



RESPONSE

In response to the need to provide social interaction opportunities, a team of 4-H staff in Southeast Georgia decided to share a portion of the typical week of camp through a Virtual 4-H Camp experience. The team conducted informal interviews with past camp participants to identify their favorite elements of camp and worked to incorporate these elements into a virtual experience. Special emphasis was placed on activities that let youth associate and feel a part of their “tribe” or team for the week. The camp also included a virtual photo sharing opportunity so that youth could share their activities with other youth involved in the program. Registration for the event was held through an online program called, EventBrite, and was open to anyone who wished to join—free of charge!

IMPACT

The Virtual 4-H Camp event included 166 registered participants representing 2 countries, 13 states, and 35 Georgia counties. Youth ranged in age from 3rd to 12th grade. The camp was administered through MailChimp online newsletter management service. Twenty unique email campaigns were sent which resulted in a total of 1,580 written contacts, 738 engagements, and 270 clicks on links in the emails. A total of 22 youth also completed the voluntary post-evaluation survey to provide feedback on their experience. Of the youth who completed the survey, 54.5% had previously attended 4-H Camp in person.

In quantitative survey responses, a total of 94% of respondents agreed that “Virtual 4-H Camp gave me something fun and educational to do while social distancing due to COVID-19”. The survey showed that 83% of respondents agreed that “participating in Virtual 4-H Camp helped me feel like I was a part of something bigger.” Similarly, 88% agreed to the statement: “I enjoyed being a part of my tribe\team during Virtual 4-H Camp.”

Qualitative responses showed that youth felt a sense of belonging to their tribe and that participating in the camp helped them feel better. One youth said, “The cheers were my favorite because it was fun cheering for my tribe.” Another said, “I loved the motivation videos because they gave me a pick me up and boost for the day!” The camp included a variety of activities that were well received by youth. One young person stated, “I enjoyed every single one of the activities because they were all so creative and fun.” Another shared that, “The ice cream in the bag activity was my favorite. We even ended up doing it a second time.”

Marketing Materials

VIRTUAL 4-H CAMP SUPPLY LIST

MONDAY

SHARPIE TIE DYE

- ☐ RUBBER BANDS
- ☐ WHITE T-SHIRT, PILLOW CASE, SOCKS OR COTTON ITEM
- ☐ SHARPIE MARKERS OR PERMANENT FABRIC MARKERS
- ☐ RUBBING ALCOHOL
- ☐ SPRAY BOTTLE

TUESDAY

ICE CREAM IN A BAG

- ☐ SUGAR
- ☐ VANILLA EXTRACT
- ☐ KOSHER SALT
- ☐ ICE CREAM TOPPINGS
- ☐ SANDWICH & GALLON ZIP BAG
- ☐ HALF-AND-HALF
- ☐ ICE

MARBLE COASTER

- ☐ SHOEBOX/SMALL CARDBOARD BOX
- ☐ PAPER
- ☐ GLUE/TAPE
- ☐ MARBLE
- ☐ RUBBER BANDS

WEDNESDAY

FRUIT SMOOTHIE

- ☐ 1 ½ C. FRUIT (PEACHES, BANANA, STRAWBERRIES, BLUEBERRIES, ETC.)
- ☐ ½ C. JUICE
- ☐ ½ C. YOGURT
- ☐ 1 C. GREENS (OPTIONAL)
- ☐ ¼ TSP. HONEY (OPTIONAL)

FRIENDSHIP BRACELET

- ☐ YARN
- ☐ CRAFT BEADS
- ☐ STRETCHY STRING

THURSDAY

SMORES

- ☐ GRAHAM CRACKERS
- ☐ MARSHMALLOWS
- ☐ CHOCOLATE BAR

ROCK EAGLE ART

- ☐ COMMON HOUSEHOLD ITEMS (NOTHING TO PURCHASE)

EMAIL QUESTIONS TO:
virtual4hcamp@gmail.com

VIRTUAL 4-H CAMP
HOSTED BY TATNALL, TOOMBS & WARE COUNTIES

JULY 13 - 17, 2020
OPEN TO GRADES 3 - 12
REGISTRATION OPENS JUNE 15TH
@ [HTTPS://WWW.EVENTBRITE.CO.UK/E/VIRTUAL-4-H-CAMP-TICKETS-108025328666](https://www.eventbrite.co.uk/e/virtual-4-h-camp-tickets-108025328666)

EDUCATIONAL CLASSES
DAILY CHALLENGES
ARTS & CRAFTS
SPIRIT DAYS
SPECIAL APPEARANCES BY 4-H COUNSELOR ALUMNI

UNIVERSITY OF GEORGIA EXTENSION
Tattnall-Toombs-Ware

Kahoot!

VIRTUAL 4-H CAMP
JULY 13-17, 2020

TUESDAY NIGHT TRIVIA TIPS and INSTRUCTIONS

1. The game will work best with two devices – one for Zoom and the other for the Kahoot! This is not required, but works better with two devices.
2. Device 1 - Log on to Zoom meeting at 6:50 PM to ensure you get connected
3. Device 2 - Join Kahoot at www.kahoot.it or with the Kahoot! App. Enter the Game PIN on the screen.
4. Get Ready! The game will begin at 7 PM!



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To learn more about this program and download resources, please visit the Virtual 4-H Camp Archive Page by scanning the QR code to the right.





Abstract

Snakes are a common reptile that can be found in most backyards, gardens and woodlands all over Georgia. While many people may have some fear of snakes it is important to understand that snakes are a valuable part of our ecosystem. Floyd County 4-H addressed this need through the use of a prepackaged activity kit produced during COVID-19 response. A total of 40 participants completed this activity.

For Goodness Snakes

Abbie Salmon, Floyd County 4-H Agent
12 East 4th Ave. Suite 107 Rome, GA 30161

Supplies

Each activity kit included:

- Wooden Craft Snakes
- Acrylic Paints
- Paint Brushes
- For Goodness Snakes Activity Guide



Information Shared

Below is a sample of the general information each participant received in the For Goodness Snakes Activity Guide. Photos of snakes of Georgia were also included.

Venomous snakes are a type of snake that produces venom. The venom assists them in hunting prey, protecting themselves and digesting their food. Within Georgia, most venomous snakes are known for their triangular-shaped head and elliptical-shaped eyes. Some of the venomous snakes in Georgia also have a rattle at the end of their tail. However, there are always some exceptions to these traits. The Copperhead and the Cottonmouth, two venomous snakes found in Georgia do not have rattles, yet the Coral snake which lives in Georgia has a round-shaped head instead of a triangular-shaped head, nor does have a rattle.

Non-venomous snakes do not produce venom. Within Georgia, they are known for an oval-shaped head, round eyes and never have rattles present. Remember that the Coral snake has an oval-shaped head and is venomous.

Hands On Learning



After reviewing the color patterns and characteristics of each snake participants were encouraged to select their favorite. Once they selected their favorite snake they were directed to use the acrylic paints to paint the wooden craft snake as a replica of the snake they selected. They were also instructed to identify if their snake was venomous or non-venomous as well as identify their favorite characteristics of their snake.

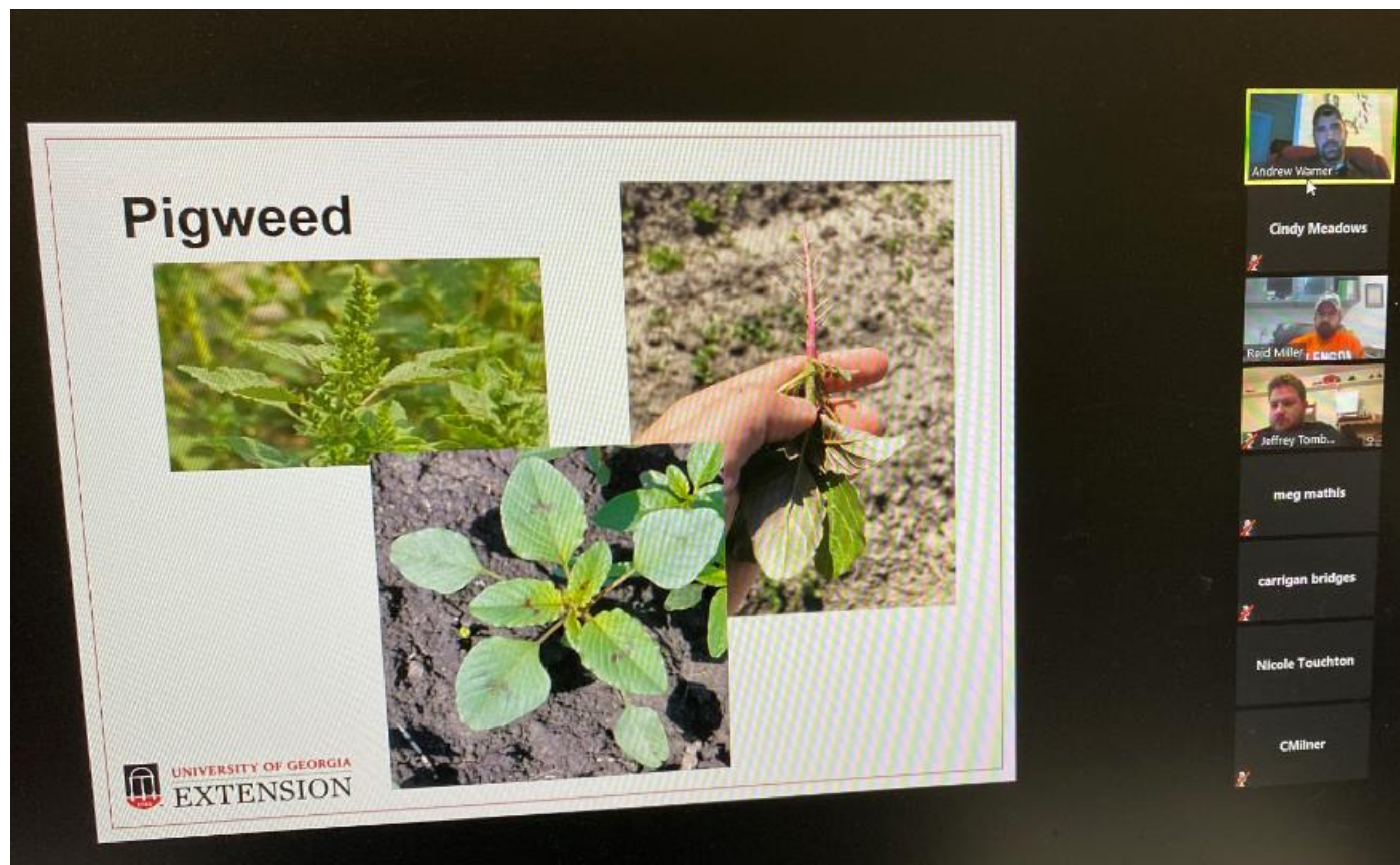
Evaluation Data



Of the reporting participants:

- 100% were able to identify that snakes are a valuable part of our ecosystem
- 100% were able to identify that non-venomous snakes do not have rattles present
- 95% were able to identify the typical head shape of a venomous snake in Georgia
- 35% reported this activity allowed them to express their creativity
- 26% reported this activity allowed them to learn more about snakes and the environment





Summary

COVID-19 caused significant changes to how the extension service could provide information to the state's citizens. The term social distancing and providing programs in that manner have become the means by which offices have had to adapt in this changing environment. Virtual programing essentially became the best means to reach out to clientele and to continue being relevant in the community. In responds to COVID-19 the Hart (Reid Miller), Jones (Michael Abney), Mitchell (Cale Cloud), Seminole (Cindy Meadows), Stephens (Thad Glenn), and Wilkes (Andrew Warner) County Extension Offices along with help from the Dublin High School FFA (Jeffery Tomblin) implemented a Daily Ag Zoom Session focus on both youth and adult education in agriculturally related issues effecting citizen across Georgia. The program consisted of 26 live Zoom meetings and recordings which were available on several social media platforms. In total approximately 620 individuals attended the live Zoom session and video posted on social media received over 1,100 direct views and over 15,000 indirect views. Post evaluation of 4-Her's knowledge gained through an Ag Trivia Game showed ~70% overall retention of information covered during Daily Ag Zoom Sessions. Qualtrics XM survey on program effectiveness showed: 100% of participants either thought the program was good to very good, and 100% of participates reported gaining valuable knowledge from programs.

Daily Ag Zoom Sessions

Meadows, C.L.¹, Warner A.C.¹, Miller, R.M¹, Abney, M¹, Glenn, T¹, Cloud, J.C.¹, and Tomblin, J²

¹ Extension Agent - UGA Extension, ² FFA Advisor - Dublin High School

Situation

On March 16th, 2020, Governor Kemp ordered all schools be closed due to COVID-19. This closing was supposed to end on March 31st, however, the dates for students to return to school continued being pushed back until eventually schools were closed for the rest of the year. On, March 16th several extension agents and a FFA Advisor came together to create a temporary virtual program that would provide 4-H'ers and their families with agriculturally related information. On March 23rd the first of the Daily Ag Zoom Sessions occurred only one week after the Governor's initial order to close schools due to COVID-19. The Daily Ag Zoom Session program was initially only planned to last until the end of March, but was continued until April 27th when attendance started to dwindle. The program provided timely and relevant information to viewers on topics in the areas of: Agronomy, Horticulture, Farm Safety, Forestry/Natural Resources, and Livestock Production.



Response

In response to schools being closed during the initial COVID-19 period county extension agents from Hart, Jones, Mitchell, Seminole, Stephens, and Wilkes County Extension Offices along with the Dublin High School FFA Advisor came together to create 26 different programs that provided meaningful agriculturally related information to 4-Her's and their families members. These programs were conducted via Zoom and focused on several different topics impacting Georgia's #1 industry: Agriculture.

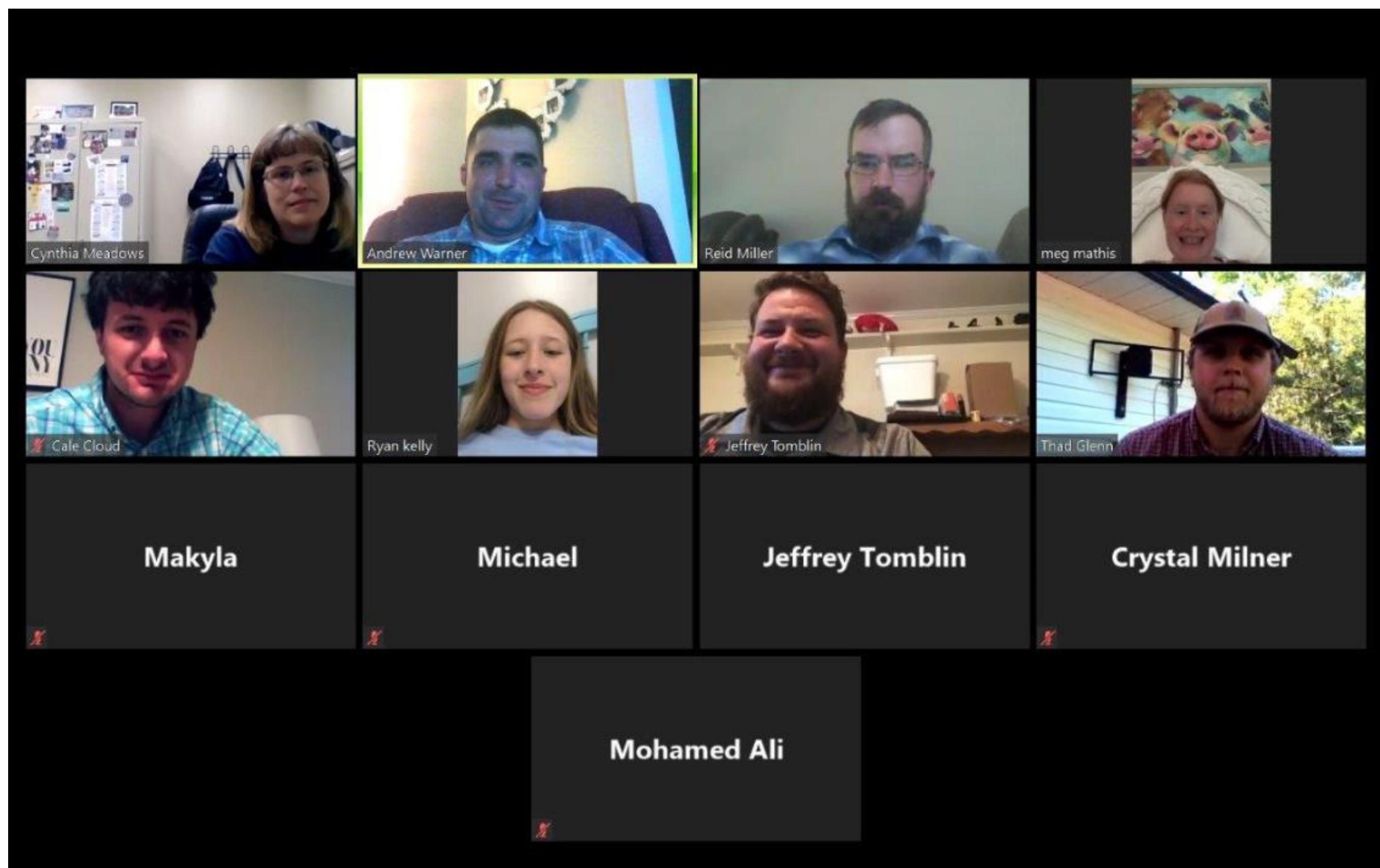
The Daily Ag Zoom Session Program was initially only planned to last two weeks, but was extended to the 26 different meetings as the COVID-19 restrictions were extended. Meeting topics during the program included: Agricultural Trivia, Farm Safety, 4-H/FFA Officer Talk, Current Beef Cattle Situation, John De La Howe School of Agriculture, Wetlands Restoration, Common Cattle Health Problems, Pork and Poultry Meats Lab, Using Lagoon Water for Irrigation, Basics to Raising Sheep and Goats, Tips for Selecting your Show Steer/Heifer, Freshwater Fish Species of Georgia, Forestry Contest Tips, Water Wars, Prescribed Forestry Burns, Raising Fishing Bait, Tips for Successful Home Gardening, Basic Greenhouse Operation, Basics to Irrigation, Judging Live Birds, Farm Equipment of Past and Present, Row Crop Update, 3 Good and 3 Bad Insects, Hog Show Tips, Land Use/Rotational Grazing, Pasture Weed Identification, and Grazing Options. These programs were presented by six different extension agents, one FFA Advisor, and the program hosted eight special guest speakers.

After the completion of the Daily AG Zoom Sessions evaluations were conducted in two parts to determine the overall effectiveness of the program. The first part was as an Ag Trivia Game to test viewers knowledge of material covered during talks. Only 4-Her's that had been present for at least one meeting could attend. The second part of evaluation was a short survey on how the program went and improvements that could be made in the future. The survey was conducted using the Qualtrics XM program and the link was sent to all individuals that attended at least one meeting.

Impact

The Daily Ag Zoom Session Program consisted of 26 live Zoom meetings and recordings which were available on several social media platforms. In total approximately 620 individuals attended the live Zoom session and video posted on social media received over 1,100 direct views and over 15,000 indirect views. Post evaluation of 4-Her's knowledge gained through an Ag Trivia Game showed ~70% overall retention of information covered during Daily Ag Zoom Sessions Program. Qualtrics XM survey on program effectiveness showed: 100% of participates either thought the program was good to very good, and 100% of participates reported gaining valuable knowledge from programs.

More importantly than knowledge gained during the Daily Ag Zoom Session Program provided viewers with a community at a distance. The most common comment written in the survey indicated the opportunity to interact with other people and having something do during the initial COVID-19 quarantine was very much appreciated by all that were involved. 4-H participant Ryan Kelly commented on survey saying, "As an Ag Zoom Participant the classes taught me a lot and were fun. It was also great to talk to other people during the COVID-19 quarantine, and the program gave me something to do." 4-H parent Jesse Kelly also stated on the survey, "As a parent I was impressed with the Ag Zoom Sessions. They provided a broad curriculum covering many topics of the agricultural industry. My child learned information relating to agriculture production and careers. We are grateful for the time and effort from the leaders and speakers. It provided great way to learn and socialize during the COVID-19 quarantine."



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Agricultrual & Natural Resources

Chute Side Beef Quality Assurance

Submitted by: Raymond Fitzpatrick, CEA, Franklin County

Additional Team Member: Jason Duggin

Beef Quality Assurance is a nationally coordinated, state implemented program that provides systematic information to U.S. beef producers and consumers of how common sense husbandry techniques can be coupled with accepted scientific knowledge to raise cattle under optimum management and environmental conditions.

Monroe County Heifer Evaluation And Reproductive Development: Assisting Producers Select And Market Superior Replacement Heifers For Additional Revenue Opportunities

Submitted by: Caitlin Jackson, CEC, Monroe County

Replacement heifers are vital to the continuation of sustainable and profitable beef cattle production. Because producers are continuously seeking to improve efficiencies in brood cows and herd genetics, it is in the best interest of the producer to retain only females that excel reproductive and confirmation standards. Through the Monroe County Heifer Evaluation and Reproductive Development (HERD) program, beef cattle producers in Monroe County are able to select and market superior replacement heifers for additional revenue opportunities.

Developing An Image-Based Assessment Technique For On-Host Horn Fly Numbers

Submitted by: Greg Pittman, CEC, Jackson County

Horn flies (HF) are the most significant pest of pastured cattle throughout North America. Each HF pierces the cow's skin 30 times per day, taking a small amount of blood and causing discomfort. The study was to determine if image-based assessments could be sufficiently accurate when assessing HF populations.

Fungicide Efficacy Against Botryosphaeria Canker On Leyland Cypress

Submitted by: Tripp Williams, CEC, Columbia County

Leyland cypress (*Cupressocyparis × leylandii* Dallim.) has been the green industries' standard and the most popular screening evergreen used on the market. *Botryosphaeria* canker is a major disease of Leyland cypress, and it is found extensively throughout Georgia. An isolate of *Lasiodiplodia theobromae* was used in this fungicide study.



Need

Beef cattle operations are challenged with staying profitable amidst high input cost and tight margins. The Georgia farm gate value report for the beef cattle industry in the state was \$596 million in 2017. The beef cattle industry reaches all 159 counties in Georgia. In Franklin County, the farm gate value for beef cattle is just over \$11 million ranking it third among Georgia counties for beef cattle production. The main goal for this project was to increase profits for local beef cattle producers.

Chute Side Beef Quality Assurance

Fitzpatrick,* R.¹ ; Duggin, J.²; Fordham, L.³

¹Extension Agent, University of Georgia Extension, Franklin County, Carnesville, Georgia 30521, ²State Beef Cattle Specialist, University of Georgia, Calhoun, Georgia 30701 ³Animal Science Professor, Emmanuel College, Franklin Springs, Georgia 30639

Introduction

Beef Producer education is vital to provide current research-based information to the beef cattle producers of Georgia. A variety of programming was offered covering a diverse range of topics to local and statewide cattle producers. Topics included: nutrition, handling and Beef Quality Assurance. All of these programs have a direct impact on cattle producers. In 2019, a chute side Beef Quality Assurance (BQA) course was offered to producers in Franklin County and surrounding areas.



Materials & Methods



In order to best serve the producers of Franklin County the county extension agent, in collaboration with state beef cattle specialists, the Georgia Cattlemen's Association, and the agriculture department at Emmanuel College, offered programs to beef producers in Franklin County. The culmination of these programs being the Beef Quality Assurance producer certification. Beef Quality Assurance is a nationally coordinated, state implemented program that provides systematic information to U.S. beef producers and beef consumers of how common sense husbandry techniques can be coupled with accepted scientific knowledge to raise cattle under optimum management and environmental conditions. BQA guidelines are designed to make certain all beef consumers can take pride in what they purchase – and can trust and have confidence in the entire beef industry.

Conclusions

A total of Forty-four participants from 20 different counties and two states, representing approximately 8800 head of beef cattle were certified in beef quality assurance at the Franklin County Course. A recent study from Colorado State University measured the monetary value of having BQA certification on beef operations. Research was conducted to determine how a BQA Certification listing affected the sale price of beef calves and feeder cattle marketed through video auctions. The study resulted in a premium of \$16.80 per head or an estimated \$2.71/cwt. Assuming an 80% calf crop the potential impact of the Franklin County BQA certification offered in 2019 was \$118,272 to the participants.



MONROE COUNTY HEIFER EVALUATION AND REPRODUCTIVE DEVELOPMENT: ASSISTING PRODUCERS SELECT AND MARKET SUPERIOR REPLACEMENT HEIFERS FOR ADDITIONAL REVENUE OPPORTUNITIES

Jackson,* C.B.¹

¹County Extension Agent, UGA Cooperative Extension, Monroe County, Forsyth, GA 31029



Figure 1 – Recording heifer data chute-side



Figure 2 – Data Measurement Devices: Allflex EID Reader, Tru-Test Indicator and tape measure

Abstract

Replacement heifers are vital to the continuation of sustainable and profitable beef cattle production. Because producers are continuously seeking to improve efficiencies in brood cows and herd genetics, it is in the best interest of the producer to retain only females that excel reproductive and confirmation standards. Through the Monroe County Heifer Evaluation and Reproductive Development (HERD) program, beef cattle producers in Monroe County are able to select and market superior replacement heifers for additional revenue opportunities. Working closely with eight producers more than twenty different measures of data on reproduction, disposition, breeding, pedigree and gain were recorded by the Extension Agent on 450 heifers during the period of November 2018 through April 2019. After the initial screening test, the better quality heifers were selected as HERD program heifers while heifers that did not meet minimum requirements were culled. Sixty heifers were catalogued for the Monroe County HERD Bred Heifer Sale. From the sale, a total of \$104,150 of revenue was generated for Monroe County producers from an average sale price of \$2,107 per heifer and the overall highest selling heifer was \$3,800. Artificially Inseminated heifers sold, on average, \$959 more than similar heifers that were bull-bred. After fifteen successful years, the Monroe County HERD sale is continuously proving that Georgia producers are in demand of genetically superior bred-heifers in order to continue to improve their own herd genetics and are willing to pay a premium.

Introduction

The estimated economic value of beef cows in Georgia account for \$455 million, or 76%, of the \$592 million beef cattle industry according to the 2017 Farm Gate Value Report. Beef cattle producers need to take advantage of increased demand for high quality breeding stock. Because replacement heifers are vital to the continuation of sustainable and profitable beef cattle production; it is in the best interest of the producer to only retain females that excel both reproductively and in confirmation standards.

The Monroe County Heifer Evaluation and Reproductive Development (HERD) program has established an outstanding on-farm program for heifer development and value added marketing that is modeled after the University of Georgia HERD program.



Figure 3 – Pregnancy verification three weeks prior to the HERD Sale by Dr. Hays Fyke.



Figure 5 – 2019 Monroe County HERD Sale Heifers are sorted by breeding.

Materials & Methods

Twenty different measures of data on reproduction, disposition, breeding, pedigree and gain were recorded on 450 heifers during the period of November 2018 through April 2019. Heifers were tagged with an Electronic Identification (EID) tag and data points were recorded chute-side using an Allflex EID reader and Tru-Test Indicator. All program heifers were synchronized using CIDRs (Controlled Internal Drug Release) and Lutalyse and bred by Artificial Insemination (A.I.) to proven, superior A.I. sires known for calving ease, growth rate and carcass traits. Natural service sires known for calving ease were used as cover bulls and put in with the heifers two weeks following the A.I. program. (Figures 1 and 2)

Producers vaccinated their heifers at least four weeks prior to beginning the program for IBR/BVD/P13/BRSV, 7-Way Blackleg, 5-Way Lepto, and Pasteurella Bacterin Toxoid. Heifers were also dewormed. In addition, heifers were tested free for Persistently Infected-BVD. Heifers are confirmed safe-in-calf at least three weeks prior to the sale by a veterinarian. (Figure 3)



Figure 4 – 15th Monroe County HERD Sale on-farm auction held May 11, 2019 on Sleepy Creek Farm

Impacts and Discussion

Eight farms in Monroe and surrounding counties developed approximately 450 commercial heifers using the HERD protocol. After an initial screening test the better quality heifers were developed as HERD program heifers. Heifers that did not meet minimum reproductive requirements, had poor disposition scores, or pregnant were eliminated from the HERD program and culled. Producers retained only heifers that passed all data check points and confirmed safe-in-calf for breeding stock. Participating producers had the opportunity to nominate HERD heifers to the annual on-farm sale. Sixty heifers were catalogued for the 15th Monroe County HERD Bred Heifer Sale held on May 11, 2019 at Sleepy Creek Farm. From the sale, a total of **\$104,150 of revenue was generated for Monroe County producers** with an average sale price of \$2,107 per heifer and the overall highest selling heifer was \$3,800. Heifers that were A.I sired and A.I bred sold, on average, \$959 more than heifers that were bull-sired and bull-bred. The Monroe HERD Sale was more economically beneficial to producers than the UGA HERD sales held in Tifton and Calhoun where the sale averages were \$1,688 and \$1,260 respectively. (Figures 4 and 5) (Table 1)

After fifteen successful years, the Monroe County HERD sale is continuously proving that Georgia producers are in demand of genetically superior bred-heifers in order to continue to improve their own herd genetics and are willing to pay a premium.

15th Monroe County HERD Sale Average by Sire/Breeding Saturday May 11, 2019							
A.I. Sired/A.I. Bred		Bull Sired/A.I. Bred		A.I. Sired/ Bull Bred		Bull Sired/Bull Bred	
AIS/AIB AVG	\$ 2,561	BS/AIB AVG	\$ 2,078	AIS/BB AVG	\$ 1,777	BS/BB AVG	\$ 1,603
19 HERD Sale AVG	\$ 2,107	19 HERD Sale AVG	\$ 2,107	19 HERD Sale AVG	\$ 2,107	19 HERD Sale AVG	\$ 2,107
Above Sale AVG	\$ 454	Below Sale AVG	\$ (29)	Below Sale AVG	\$ (330)	Below Sale AVG	\$ (505)
High	\$ 3,800	High	\$ 3,500	High	\$ 2,050	High	\$ 1,875
Low	\$ 1,500	Low	\$ 1,500	Low	\$ 1,550	Low	\$ 1,350

Table 1 – Price Comparison of Heifers Sold Based on Parentage and Breeding

Acknowledgements

Special thank you to: John Pope, former Monroe County Extension Agent, Phil Ham, Monroe County HERD Sale Chair, Sleepy Creek Farm, Benny Bostick, Double F Farm, Bowden & Evans, Copelan Farm, S&S Farm, Shady Dale Farm, Dr. Jeff Davis, DVM, Dr. Hays Fyke, DVM, and Monroe County Cattlemen's Association

Developing an Image-Based Assessment Technique for On-Host Horn Fly Numbers



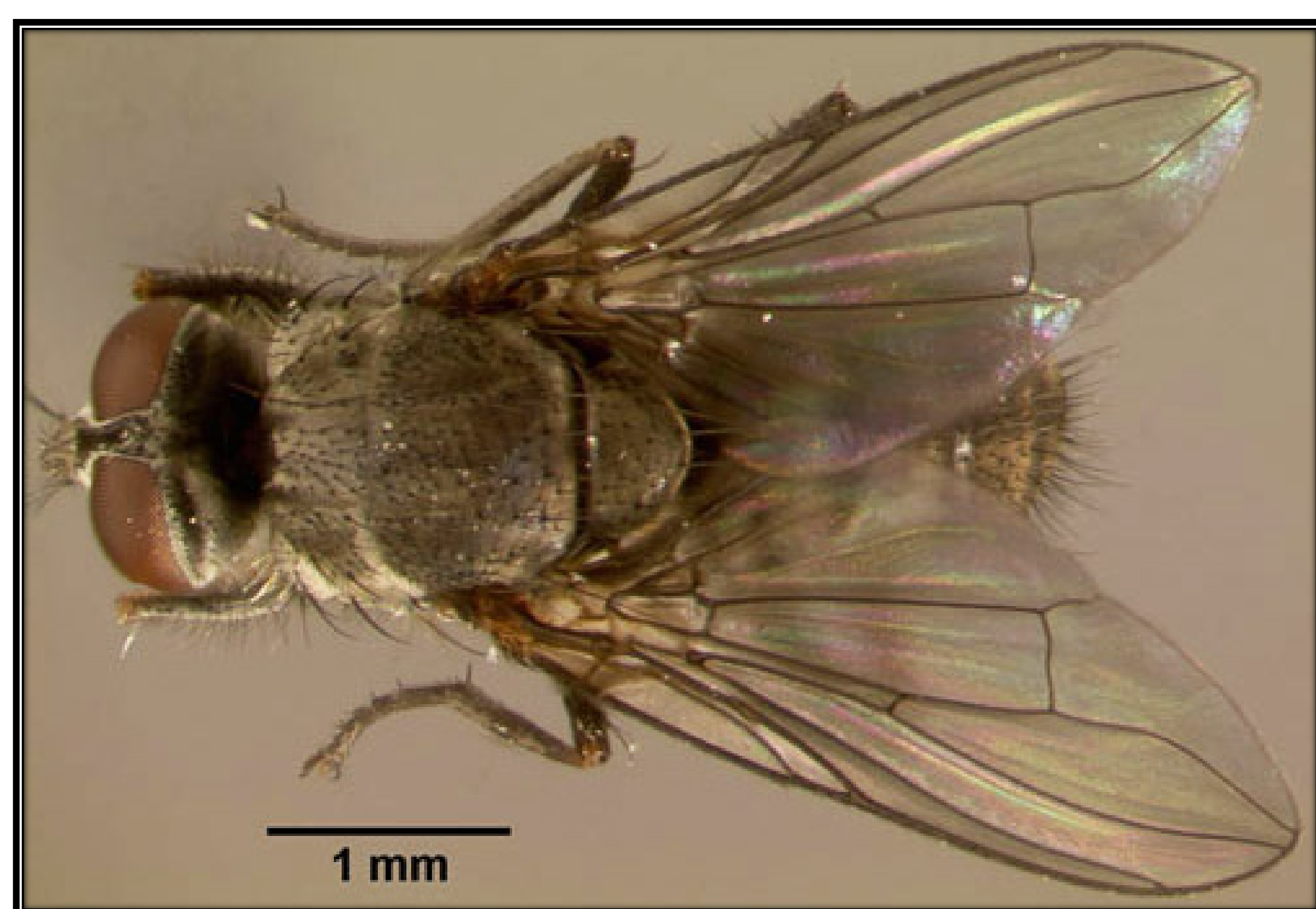
Greg Pittman¹, David Daniel², Amanda Warner³, Taylor Krause³, Dean Pringle³, Nancy Hinkle⁴, and Romdhane Rekaya³

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Introduction

- Horn flies (HF) are a major nuisance to livestock
- Each HF consumes > 30 blood meals per day resulting in:
 - Elevated heart and respiratory rates
 - Reduced growth (18% reduction in yearling weight)
 - Reduced feed efficiency and milk production
- Economic losses > \$1 billion on pastured cattle annually
- Several control methods have been proposed:
 - **Fly breeding prevention** by limiting fly access to fresh manure
 - **Reduction of adult fly population** through the use of insecticides, traps, etc.
 - Limited by need of multiple applications during a season, economic and logistic costs, migration of HF from neighboring untreated herds, and environmental impact
- Intensive and sometimes inappropriate use of insecticides has led to HF developing resistance as well as reduction in predation of HF by other insects

- Several studies have clearly shown differences in resistance/tolerance of HF between breeds of cattle and among animals within the same breed
- Genetic analyses of HF resistance traits in cattle (e.g. number of flies attracted) have shown sufficient genetic variation, with heritability ranging from 10 to 80%

Objectives

1. Assess correlations between several measurements of horn fly abundance related phenotypes
2. Evaluate effectiveness of different sampling approaches for estimation of horn fly abundance based on digital images

Data Collection and Procedures

- The study was carried out during the summer of 2019
 - Two data collections (June and August)
 - Herds had not been treated for fly control
- Cattle were assessed for attractiveness to horn flies
 - Subjective scoring by 4 trained evaluators
 - Instantaneous counts of horn flies on one side of animal
- High resolution digital images were taken from one side of each evaluated animal
 - All flies in the rectangle shown in Fig 2 were manually counted (**Image_All**)
 - The established rectangle was subdivided into small squares and counts were determined on a specified number of randomly chosen squares (**Image_R1**) or on 20%, 10 and 5% of squares falling in high, moderate and low fly abundance areas (**Image_R2**).
- Field counts were compared with counts from digital images

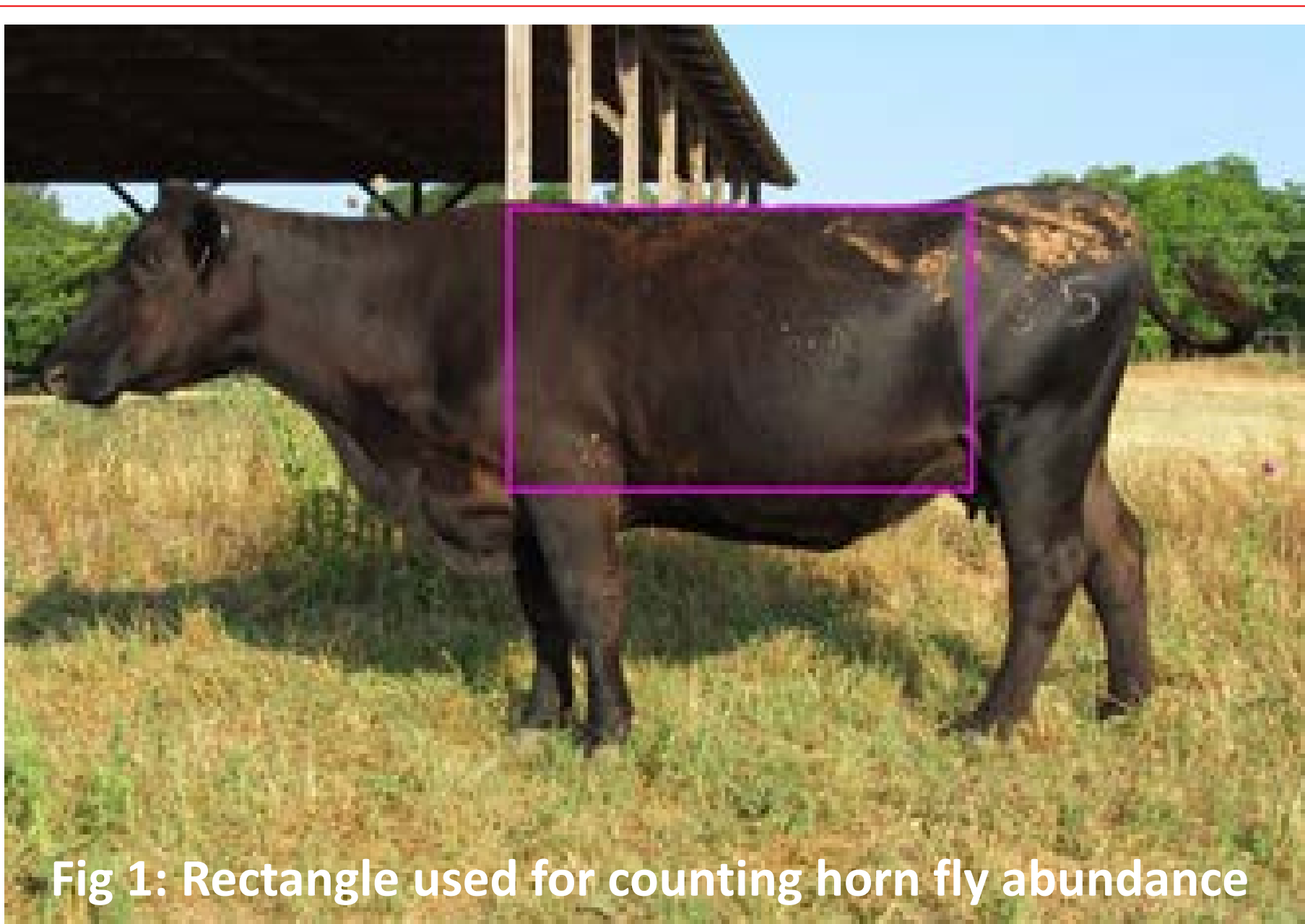


Fig 1: Rectangle used for counting horn fly abundance

Results

Table 1: Subjective assessment of horn flies

Farm	# cows	Average	Min	Max	SD
JPC	221	539.6	100	1700	307.2
Calhoun	210	489.5	50	1500	296.3
Eatonton	145	384.5	100	750	161.5

- Substantial phenotypic variations between animals in HF abundance
- Similar HF abundance at JPC and Calhoun , while slightly lower in Eatonton
- Averages across the three locations are much higher than the economic injury level (200 flies per animal)

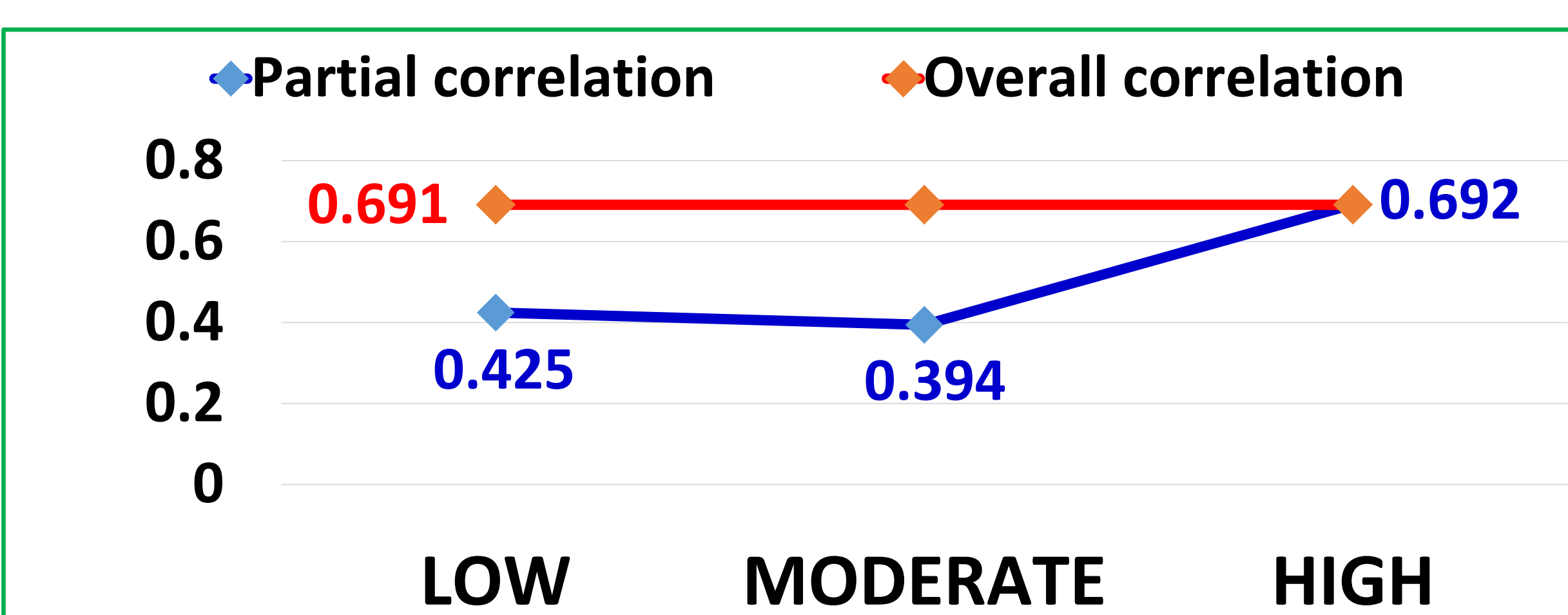


Fig 3: Correlations among evaluators

- Reasonable concordance across evaluators in assessing HF abundance ($r=0.70$)
- Noticeable differences between evaluators for low and moderate abundance
- Large discrepancies are in general due to movement of the animal

Table 2: Correlations between subjective and image-based counts of horn fly abundance

Method	Subj. count	Image based count		
		Image_All	Image_R1	Image_R2
Subj. count	1	0.67	0.63	0.64
Image_All		1	0.91	0.94
Image_R1			1	0.98
Image_R2				1

- Correlations between the subjective and the image-based counts ranged between 0.63-0.67, suggesting that the latter can be used to assess fly abundance
- Correlation between image-based counts was high, confirming the ability to assess HF abundance simply by counting flies in a limited number of randomly selected squares
- Accuracy of the image-based counts can be further improved by counting more than one image per animal

Conclusions

- The majority of cows assessed in this study had fly counts substantially higher than the economic injury threshold
- Image-based analysis of fly counts is sufficiently accurate to provide an automated method for large scale assessment of HF abundance
- Sufficient variation in fly counts exists among cows to allow for genetic selection

Acknowledgments

Special thanks to the Georgia Commodity Commission for Beef for financial support (grant #RGABF0001025701) and to the staff at J.P. Campbell REC, Eatonton Beef Research Unit, and Northwest Georgia REC in Calhoun for their time and efforts

FUNGICIDE EFFICACY AGAINST BOTRYOSPHAERIA CANKER ON LEYLAND CYPRESS

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INTRODUCTION

Leyland cypress (*Cupressocyparis × leylandii* Dallim.) has been the green industries’ standard and the most popular screening evergreen used on the market. Leyland cypress is not native to North America, and has a USDA hardiness zone rating from 6 through 10A (Dirr, 1998). Botryosphaeria canker is a major disease of Leyland cypress especially in Southeastern landscapes, and it is found extensively throughout Georgia. Canker diseases on landscape plants, particularly Leyland cypress, are reported to be associated with drought stress (Stouts, 1973) and wounding (Sinclair et al., 1987; Tisserat et al., 1991). Symptoms of Botryosphaeria canker are reddish-brown branch discoloration; branch dieback; and sunken, sometimes resinous branch and trunk cankers (Windham et al., 1996). Botryosphaeria cankers can be found on almost all woody landscape plants. There are several species of fungi that cause Botryosphaeria cankers. The predominant species recovered from plant samples submitted to the UGA Plant Disease Clinic is *Lasiodiplodia theobromae* (Pat.) Griffon & Maubl. (syn. *Botryosphaeria rhodina* and *Botrydiplodia theobromae*) (Jean Williams-Woodward, personal communication). This fungus enters plant tissues through wounds and produces a canker that can expand both longitudinally and horizontally to girdle branches. Management of Botryosphaeria canker is limited to pruning and removing infected branches and attempts to reduce plant stress and wounding. Fungicide control is limited to non-existent. Genetic resistance to this disease is also minimal for woody landscape plant taxa (Sandrock et al., 2000).

MATERIALS AND METHODS

Plant Material

Leyland cypress rooted liners were obtained from a local nursery (Griffith Propagation Nursery, Watkinsville, GA). Liners were transplanted into 6-inch plastic pots filled with 90% composted pine bark and 10% sand rooting medium. Stem diameter of the plants at planting were 1 cm. Plants were maintained in the UGA Plant Pathology greenhouse for the duration of the trial. Plants were hand-irrigated using a watering wand directed toward the rooting medium twice daily.

Inoculum production and inoculation

An isolate of *Lasiodiplodia theobromae* originally recovered from Leyland cypress was used in this study. The fungus was grown on potato dextrose agar (PDA) (BD Difco; Fisher Scientific) petri plates for 3 weeks at 22°C on the laboratory bench. Prior to inoculation, 8.75 mm circular plugs were cut into the agar plates using a sterile #4 cork borer. Plants were inoculated by selecting an area of the main stem and scarring the area with a wood rasp to create a wound 10-mm in length along the stem. Wounding broke through the bark into the cambial tissues, but did not wound deeply to the center of the stem. Immediately after wounding, an agar plug was aseptically removed from the petri plate and placed directly over the wound with the fungal growth in contact with the cambial tissue. Sterile distilled water was used to moisten a square of sterile gauze padding, which was placed over the agar plug and held in place by wrapping with parafilm (Parafilm M™ Wrapping Film, Fisher Scientific) to completely cover the fungal plug and gauze (Figure 1). The parafilm and gauze was removed two weeks after inoculation to allow for canker development.

Fungicide Treatment	Rate per 100 gal	Leyland Cypress		
		Canker length (mm) ¹	Canker width (mm) ²	Disease Severity Rating ³
Water	-----	20.6 a ⁴	5.5	3.7 a
BAS 75007F	6 fl. oz	18.5 ab	4.8	3.7 a
BAS 75007F	8 fl. oz	14.7 b	5.3	3.0 a
BAS 75007F	10 fl. oz	14.4 b	4.5	2.0 b
Banner Maxx	8 fl. oz	17.5 ab	4.7	3.7 a

¹ Mean canker length measured in mm for six single-plant replications of each fungicide treatment.

² Mean canker width measured in mm for six single-plant replications of each fungicide treatment.

³ Disease severity was assessed using a 1-5 rating scale, where 1 = healed wound, no infection noted; 2 = wound expansion, but stem callusing almost healed wound; 3 = wound expanded and oozing (for Leyland cypress), minor callus formation; 4 = wound expanded more than ½ diameter or stem, girdling occurring; and 5 = dead stem.

⁴ Numbers followed by the same letter are significantly different (*P* ≤ 0.05) using Oneway analysis of variance. Means were separated using Student’s t-test for least significant difference.



Figure 1. Leyland cypress stem inoculation site containing wound, agar plug of *Lasiodiplodia theobromae*, moistened gauze wrapped completely in Parafilm to maintain moisture.



Figure 2. Inoculated Leyland cypress stem wound two weeks after inoculation following removal of gauze and parafilm wrapping.



Figure 3. Inoculated Leyland cypress stem six weeks after inoculation. Sap oozing and stem discoloration beyond the wound site is evident.

EXPERIMENTAL DESIGN

The protocol for the fungicide product evaluation consisted of five treatments with six single-plant replications per treatment per plant species. The trial protocol was conducted separately on both Leyland cypress and Japanese privet. The trial protocol consisted of five treatments including a non-fungicide (water) treatment, three rates (6, 8, and 10 fl. oz/100 gal) of the experimental fungicide BAS 75007F (BASF Corp., Research Triangle Park, NC), and one rate (8 fl. oz/100 gal) of Banner Maxx (propiconazole; Syngenta Crop Protection LLC, Greensboro, NC). Treatments were placed in a randomized complete block design on the greenhouse bench covering an area of approximately 4’ X 5’ of bench space. Fungicide treatments were applied to the foliage and stems using hand-held pump sprayers until run-off. Plants were treated twice at 14-day intervals prior to inoculation to assure uptake of the fungicide within plant tissues. After inoculation, two additional fungicide applications were made at 14-day intervals. Plants were treated for a total of four applications over a 56-day period. Greenhouse temperatures ranged from 24-30°C during the day to 21-24°C at night for the duration of the trial. Plants were monitored throughout the experiment for indications of canker development such as stem discoloration, sunken tissue, resin flow and callus formation. Botryosphaeria canker development was measured 6-weeks after inoculation by measuring canker length and width (mm).

RESULTS

Evidence of infection and canker development was evident following the removal of the parafilm and gauze wrapping two weeks after inoculation (Figure 2 and 3). Infection resulted in the death of one Leyland cypress stem in each of the water-only, Banner Maxx, and the 8 fl. oz/100 gal rate of the experimental fungicide, BAS 75007F, treated plants. All fungicide treatments reduced canker development as measured by canker length (mm) for the inoculated Leyland cypress (Table 1); however, only the BAS 75007F at the mid to high rate (8 to 10 fl. oz/100 gal) compared to the water-only control significantly reduced canker expansion along the stem. These two rates of BAS 75005F also significantly reduce disease severity symptoms compared to the Banner Maxx and the water-only control. BAS 75007F at the lowest rate (6 fl. oz/100 gal) was not significantly different from the Banner Maxx treated plants nor the water-only control. Canker width on Leyland cypress was not significantly different among the fungicide treatments. Data from this trial suggests that the mid to higher rates of the experimental product, BAS 75005F, are more effective in reducing Botryosphaeria canker on Leyland cypress compared to an industry standard, Banner Maxx, and no fungicide treatment. The experimental product, BAS 75005F, did reduced canker development compared to either no fungicide or the Banner Maxx treatments. A definitive recommendation on the best rate to use against Botryosphaeria canker cannot be determined from the study. It’s my opinion that the mid to higher rates should be used as there was more canker development evident on Leyland cypress and callusing at the wound sites of the Japanese privet may have hindered accurate canker measurement.

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Extension Outreach

Seminole County Extension Aids County and Citizens in Hurricane Michael Recovery

Submitted by: Cindy Meadows, CEA, Seminole County

Additional Team Member: Andrew Warner

Hurricane Michael caused catastrophic damage in Florida's panhandle and extreme Southwestern Georgia. One of the hardest hit areas in Georgia was Seminole County. This area of the state is extremely rich in agricultural production. The timing of Hurricane Michael could not have been any worse. Farmers were at the very beginning of harvest season. As a result, in just a few hours crops were destroyed, infrastructure was damaged, and thousands of families were left without electricity.

Seminole County Extension Aids County and Citizens in Hurricane Michael Recovery

Meadows, C.L.¹ and Warner A.C.¹

¹ Extension Agent, UGA Extension, Seminole County, Donalsonville, Georgia 39845



Summary

Hurricane Michael caused catastrophic damage in Florida's panhandle and extreme Southwestern Georgia. One of the hardest hit areas in Georgia was Seminole County. This area of the state is extremely rich in agricultural production. The timing of Hurricane Michael could not have been any worse. Farmers were at the very beginning of harvest season. Crops were ready to be harvested and removed from the field, but there wasn't enough time as the hurricane's landfall was imminent. As a result, in just a few hours crops were destroyed, infrastructure was damaged, and thousands of families were left without electricity.



Response

The County Manager and County Board of Commissioners called Seminole County Extension Agents Cindy Meadows and Andrew Warner to assist them at the emergency command center. The agents reported to the command center every day to assist with needs of Seminole County and its citizens.

In the weeks following the storm, the Meadows and Warner estimate providing 150 hours helping with recovery efforts in Seminole County. The breadth and depth of their leadership and service was incredible. They coordinated multiple tours for local, state and federal officials including Emergency Management agencies to assess agricultural and other damage from the storm. Additionally, they assisted with many tasks associated with county governments' needs. They delivered meals to 150 members of the National Guard Army Reserves that mobilized in the county's agricultural pavilion; meals to inmates conducting debris clean up; assisted neighbors with sawing and removing tree limbs and other debris; picked up hundreds of jugs blown roadside; delivered supplies where needed throughout county; provided cattle fence repair; clean up and temporary repair of the County Extension office grounds, roof, building and any task asked of them.

Additionally, the Extension agents worked with Seminole County Young Farmers to host two meetings for growers. These educational programs provided much needed information that helped farmers with everything from fence repair to updates from the United States Department of Agriculture's Farm Service Agency. Options for federal assistance on crop damage and assessments were continually shared. Meadows and Warner were also called on multiple occasions to set up and assist with TV interviews and media coverage from Atlanta, Dothan, and The University of Georgia's Office of Communication and Media team.

Situation

On October 10, 2018, the lives of all 9,000 citizens turned upside down as the eye of storm, Hurricane Michael, paid a visit to Seminole County. The storm's powerful eye wall swept north-northeast through Seminole County — still as a Category 3 storm, with sustained winds up to 115 mph and gusts of up to 150 mph — delivering destruction in every square inch of the county. Hurricane Michael shocked the community with terrifying power, downing live oaks and pines and damaging hundreds of homes, uprooting acres of pecan trees and sweeping away the highly anticipated bountiful yields of the year's harvest. The morning after the storm 100 percent of Seminole County residents were without electrical power because of snapped poles and thousands of trees being blown onto lines, and for the most part, every road in the county was blocked by fallen trees and/or debris. The farms and everything else took a severe beating. The damage was so widespread that the Georgia Agriculture Department estimates a \$2 billion hit to the state's economy.

Impact

Serving the citizens of Seminole County in the aftermath of Hurricane Michael was priority number one for UGA Extension agents Cindy Meadows and Andrew Warner. The economic value of their service is significant; however, the social and emotional value to humanity is immeasurable. Although the storm clean up and meeting needs of citizens continued for months following, power was eventually restored after several weeks, students returned to school and Extension programming began to resume. Warner continued supporting farmers and producers with federal disaster news, information and regional meetings. Meadows provided 4-H youth programming at the Extension office and in schools to help return a sense of normalcy back to youth. Upon returning to school in early November, Meadows worked with teachers to prepare over 30 fourth through sixth graders to participate in 4-H Project Achievement, a written and oral communication contest that builds confidence and public speaking skills in youth. They traveled to Moultrie to compete with 70% of the 4-H'ers earning first, second or third place awards. Meadows also conducted other life-skill building activities and service projects with youth and volunteers to help them experience being part of the recovery of Seminole County. From debris clean up to pumpkin carving, college tours, state and region fair projects, 4-H youth leadership conferences at Rock Eagle 4-H Center and so much more, Meadows and Warner engaged over 370 youth in opportunities to help them continue to learn and grow amidst the daily struggles of hurricane recovery and loss. In fact, Seminole County's local leadership selected them as Co-Citizens of the Year for 2018. The Donalsonville News story included this quote "Meadows and Warner are praised by their nominator and the judges for their countless selfless acts performed for the betterment of Seminole County and its citizens before, during, and after Hurricane Michael."



Family & Consumer Sciences

Gleaning Program Provides Fresh Produce to Limited Income Families

Submitted by: Becky Collins, CEC, Appling County

Additional Team Members: Shane Curry, Appling Co. Ag Agent; Rachel Stewart, Tattnall Co. FACS Agent
To improve the health of Appling County, 34,642 pounds fresh food was donated to feed limited income families, with 73 volunteers who donated or gleaned fresh produce and/or donated fresh meat. FACS agent also provided educational materials to the Food Bank for some of the produce donated.

Healthy Georgia Wellness

Submitted by: Rachel Stewart, CEC, Tattnall County

Additional Team Members: Ali Berg, Terri Black, Becky Collins, Georgeanne Cook, Marnie Dekle, Lisa Jordan, Susan Moore, Jackie Ogden, Laura Smith, Carrie Vanderver

Healthy Georgia Wellness is a grab and go curriculum designed to improve participants' physical, cognitive, and emotional well-being, so that they can lead healthier, happier and less stressful lives. The lessons were designed to be used in a group setting without computers, smartboards, or projectors. Topics covered the Whole person Wellness concept.



Gleaning Program Provides Fresh Produce to Limited Income Families

Becky Collins, Family and Consumer Sciences Agent, Appling County
Shane Curry, Agricultural and Natural Resources Agent, Appling County
Rachel Stewart, Family and Consumer Sciences Agent, Tattnall County

Situation

The overall health of Appling County citizens is below the state and the nation. Appling County ranks higher in incidences of obesity, cardiovascular disease, stroke, diabetes and cancer. These causes of death are chronic diseases for which nutrition and physical activity are modifiable risk factors. In addition, only 26% of the population of Appling County has access to exercise opportunities, which is below state norms at 77%, according to County Health Rankings.

Response

As one of the eleven counties chosen to receive funding from Healthcare Georgia Foundation Two Georgias Initiative, Appling County formed the Coalition for a Healthy Appling County (CHAC) in 2017. Two of the goals of the Strategic Plan were to *empower all Appling County residents to eat a healthy diet* and to *empower all Appling County residents to be physically active*. As chair of the Healthy Eating Committee, FACS agent helped choose strategies to meet the main goal of this committee. One of the strategies chosen was to support the establishment of a gleaning program.

This project actually addresses both goals mentioned above by providing fresh produce to limited income individuals and families, and promotes physical activity to those who glean. In addition, it has helped foster community and a sense of belonging among the volunteers who enjoy working together for a good cause.



Locally Grown Produce Gleaned:

Sweet Potatoes

Cabbage

Turnip Greens

New Potatoes

Vidalia Onions

Sweet Corn

Field Peas

Zucchini

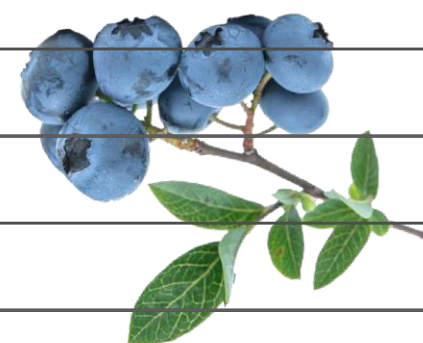
Strawberries

Blueberries

Canteloupe

Honeydew

Satsuma Tangerines



Impact

This project has impacted Appling County citizens in many ways, whether they received food or volunteered their time to give back to their community. Food was donated to several organizations: the Appling County Food Bank; the Appling County Senior Center; Pineland Behavioral Health Center; Called to Love; and the Georgia Baptist Children's Home.

The gleaning program has given adults and youth opportunities to give back. 4-H'ers have gleaned produce multiple times. When **four** 4-H'ers decided to donate one of their Market Hog Show pigs to the food bank, this food was added to the gleaning total, resulting in **34,642** pounds of fresh food donated to limited income citizens of Appling and surrounding counties.

In addition to the gleaning project, **225** citizens of Appling County have received educational materials. These bulletins included nutrition facts, food safety advice and recipes for the fresh produce received.

Through the gleaning program, the original goals – *to empower all Appling County residents to eat a healthy diet* and to *empower all Appling County residents to be physically active* – are being met with the help of volunteer adults and youth. The main objective of this project is to strengthen the overall health of Appling County, raising it above the state and national levels.

Results

The Coalition for a Healthy Appling County formed the Appling County Glean Team in October 2018, under the direction of Society of St. Andrew. **Ten** farmers from Appling and surrounding counties have been involved by donating their produce that was left after the harvest. One farmer has donated an acre of his land to plant a garden just for this project. **Nine** volunteers have been trained to be Field Supervisors. **Fifty-nine** volunteers have gleaned, with a total of **383 volunteer hours**, with a value of **\$10,417.60**, based on Independent Sector–Dollar Value of a Volunteer. Some of the volunteers included 4-H'ers, clients from the Appling County Senior Center and from Pineland Adult Mental Health Service Center.

Since the project's inception, the volunteers have gleaned **33** times, and one farm donated pallets of blueberries **seven** times. This year, **four** pigs from the 4-H Market Hog show were donated to the food bank by 4-H'ers. In total, **33,992** pounds of fresh produce and **650** pounds of meat have been donated to feed limited income citizens of Appling and surrounding counties. In order to educate those receiving food, FACS agent also provided Farm, Fresh and Fast brochures for the food bank to disperse with some of the produce that was gleaned.

Testimonies

"This wonderful program allows people who wouldn't normally go to the store to buy fresh fruits and vegetables to eat healthy. I feel that the farmers enjoy not having to waste their crop and be able to bless people too. I've so enjoyed helping with this worthy cause. It's been a blessing to me and to others."
Jeanette Hayes, gleaning volunteer and Appling County Senior Center client

"For the people we serve and the food bank volunteers, receiving fresh fruits and vegetables makes their day! Not only for the people we serve, but those people who are serving especially enjoy being able to serve fresh produce to the clients. You know, most people just don't get fresh produce anymore. It is very rewarding. People get excited about fresh produce!" Pastor Karl Sexton, overseer of Appling County Food Bank

Collaborators:

Appling County Food Bank
Appling County Senior Center
Appling County 4-H Club
Called to Love, Inc.
Georgia Baptist Children's Home
Pineland Behavioral Health Center
Share Health Southeast Georgia
Society of St. Andrew
Local Growers:
Appling Blueberry
Branch Farms
Hilda Carter Farm
Randy Deloach Farms
Timmy Farmer Farm
G&R Farms
Maxwell Leggett Farm
Rodney Maxwell Farm
Miles Berry Farm
Michigan Blueberry Growers



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Situation

In rural Georgia Health Indicators for Heart Disease, Cancer, Hypertension, and Stroke are extremely high. Among the average adult, many are overweight with high stress levels. UGA Extension is called on to answer the question of how to help individuals and communities to improve their overall health and increase their quality of life.

The need for educating the community on wellness goes further than nutrition, weight management, and chronic disease prevention. It includes looking at the whole person. Key dimensions of Wellness include Physical, Social, Emotional, Environmental, Mental, and Spiritual.

Southeast FACS Agents are constantly receiving many requests for lunch-n-learn programs delivered without the aid of smartboards, computers, and projectors. Meeting community needs and creating a “culture of health” was the driving force for this project.

Response

The Southeast District Family and Consumer Sciences Agents developed the **Healthy Georgia Wellness Curriculum**. The curriculum is designed to encompass a wide variety of topics that focus on the wellness of an individual and/or the entire family. This program can benefit both rural and urban FACS programming efforts. It promotes all Georgians' health needs including consumers' fiscal health. The program is designed to be used as a lunch-n-learn for employee and community education. The curriculum was piloted in 2018. After revision, the final package was completed in 2019. The curriculum is currently being taught in 20 additional counties across Georgia.

These lessons are meant to be used in a group setting and have no PowerPoint, but offer hands-on activities that can be taught in a 30 to 45 minute timeframe. These lessons could be used for an Employee Wellness Program. Healthy Georgia Wellness Curriculum includes these topics:

Smart Goals	Food Safety
Adequate Sleep	Stress-less Meal Planning
Let's Get Physical	Dining Out
Preventing Portion Distortion	Financial Wellness
Understanding Food Labels	Clean is the Foundation of Everything
The Power of a Can	Health & Wellness Apps
Mindful Eating	Stress Less, Live More

Consumers are constantly in search of ways to make their lives healthier, happier, and less stressful. With the topics chosen, it is the hope of the SE FACS Agents that this curriculum will be a go-to for providing ample information in a small amount of time and commitment from our clientele.

UGA Extension: Healthy Georgia Wellness Education

Stewart R, Vanderver C, Berg A, Jordan L, Collins B, Black T, Cook G, Dekle M, Everson D, Faulk K, Hubbard R, Moore S, Ogden J, Smith L, Bales D, Turner P, Andress E, Rupured M, Harrison J



Results

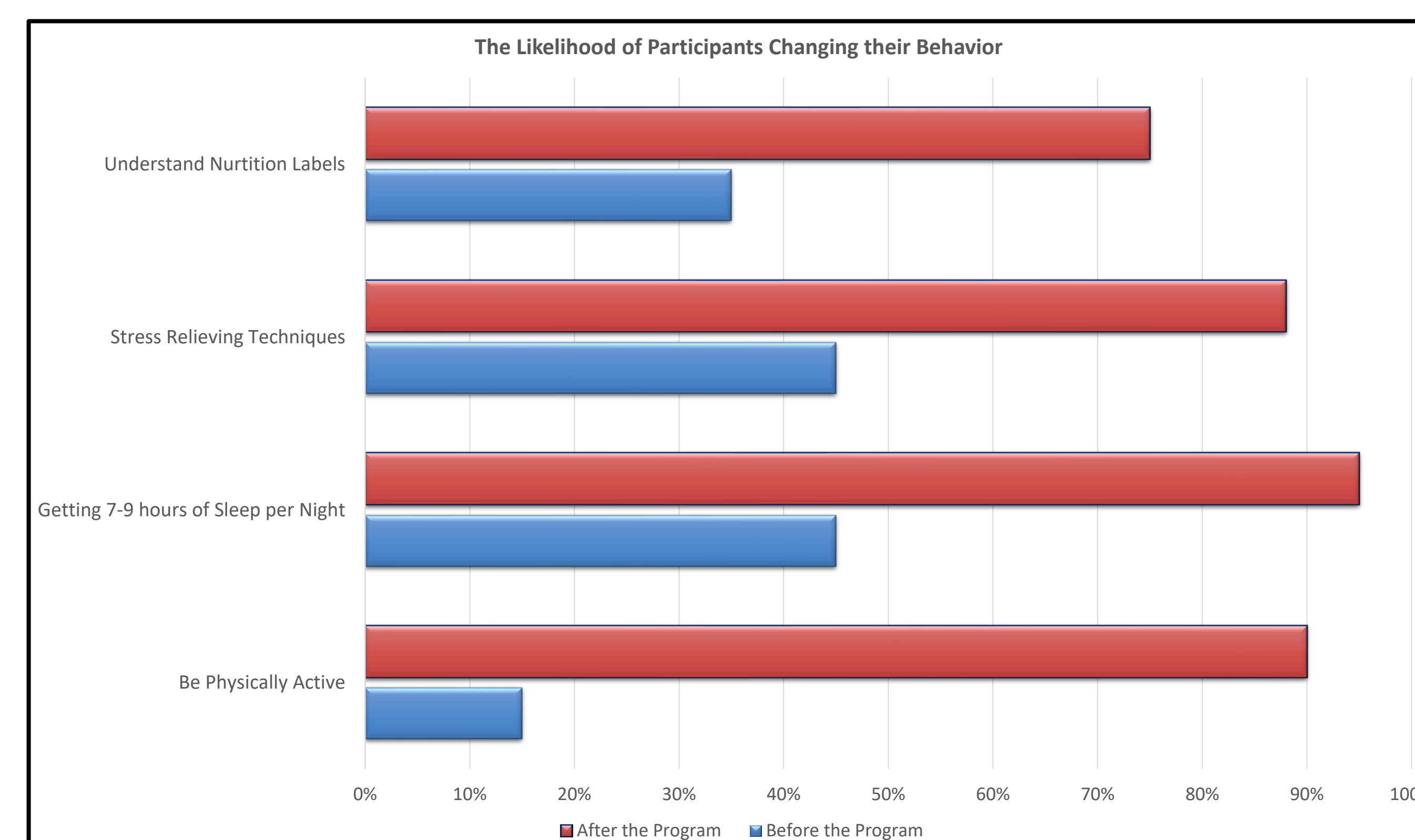
Since its inception, **1,070 employees and community based educational adults** completed this class for a total of **1,589 contact hours**. The data on participants attending training was obtained from class evaluations and the Qualtrics online survey.

Evidence of Impact on participants/clientele/audience:

100% of participants noted they learned/gained knowledge in the class with 95% stating they felt extremely knowledgeable after the sessions. Evaluations measured participants' intentions to use the information with 90% stating they will definitely use the information after the program. **92%** indicated improving knowledge on reading nutrition labels and 80% improved their knowledge on the importance of eating less foods high in fat, sugar, and sodium.

Participant evaluations noted they plan to do the following regularly:

- **90%** Keep a record of their sleep pattern to compare how they are feeling
- **87%** To use the deep breathing exercise for managing stress
- **80%** Decrease sugary drinks
- **75%** Increase physical activity in their daily lives
- **65%** To decrease portion sizes
- **60%** To divide expenses to manage them better



Results

Comments from participants on evaluations of the most beneficial part of the program to them:

- Learning about the portion sizes
- Ways to see signs of sleep deprivation
- Ideas on how to incorporate physical activities in a tight schedule
- Techniques for managing stress
- Seeing the Choose My Plate image and understanding it
- Understanding how to read the new food label
- How to set up a budget
- Learning how much sugar was in certain drinks and snacks

In the evaluation, participants state the amount of money they believe they will save over the next month as a result of attending the class. Ninety percent felt their financial benefit was in the \$50-\$99 category, with 5% in the \$10-\$49 category. Also, the participants indicate how they felt on a scale of 1 to 5 as a result of the classes, with a 5 having the most positive feeling. Ninety percent indicated they felt better from the sessions. Eighty-five percent indicated they felt less stress and more in-control as a result of attending the sessions.

Impact

The Healthy Georgia Wellness program is encouraging employers to take part in the lives of their employees. The wellness program is encouraging employees to actively change risky behaviors and lifestyles to improve their quality of life. Importantly, this program is becoming part of a developing culture of health in many communities where employers are investing in the education and wellness of their employees. In some communities, employers are offering incentives for employees who participate and actively engage in the program.

HGWC has been included in community health improvement plans. Thus, it is improving community health directly through the program and indirectly through the other efforts and programs it has inspired, while expanding the reach of FACS Extension.

