

*Your*

FALL/WINTER 2019

# NC 4-H

GROWING TOMORROW'S LEADERS

**INSIDE:**

**Wayne County  
4-H Makes Robots  
STEMulating**

**Volunteers give  
time valued at  
\$4.3 million**

**General Fund  
gifts increased by  
46% in 2 years**

**NC STATE**

**EXTENSION**

[go.ncsu.edu/NC4-H](http://go.ncsu.edu/NC4-H)



## DEAR FRIEND IN 4-H,

As part of the 4-H family, you help youth in North Carolina define the vision for their lives. Every 4-Her, from the youngest cloverbud to alumni, can recall a time when a donor or volunteer impacted their 4-H career. Little ones can remember going to camp thanks to you. Youth go to conferences and attend workshops that grow their leadership skills because of someone's gift.

College students who hope to attend the school of their dreams and impact their communities and their world remember the opportunities you provide. The leadership skills they learn, the friendships they make, the service projects they complete—all thanks to 4-H—will stay with them for a lifetime.

None of what we do would be possible without your support. 4-H provides an opportunity for everyone to grow and learn, to better themselves and their community. The ability to do all of this comes from people who believe in helping today's youth become the best they can be. People who want to see these youth rise up and be ready to take on life with a confident, can-do attitude. You are helping to build the leaders of tomorrow and are helping them define a vision that will last a lifetime. Thank you for your support.

### North Carolina 4-H 2019-2020 State Officer Team

Written by Emily Worth, *President*  
Jessy-Kate Glenn, *Vice President*  
Leah Jackson, *Secretary and Treasurer*  
Kyler Glover, *Reporter*

## ABOUT 4-H

In North Carolina, 4-H is delivered by N.C. Cooperative Extension, a strategic partnership between NC State University, N.C. A&T State University, the U.S. Department of Agriculture's National Institute of Food and Agriculture (USDA-NIFA), and 101 local governments statewide.

## ABOUT NC STATE EXTENSION

NC State Extension is the local and statewide outreach provider of North Carolina's preeminent research enterprise - NC State University. NC State Extension translates research-based knowledge in the areas of agriculture, food and nutrition, and 4-H youth development into everyday solutions that create economic, intellectual and societal prosperity for the state.

### COVER PHOTO:

Elizabeth Poirier, a member of the 4-H Roto Raptors club, works on the electrical board for "Strike Raptor," the club's 2019 robot.

## CLOVER STEM:

# 4-H'ERS IN WAYNE COUNTY EMBRACE ENGINEERING, ROBOTICS

Whirr. Buzz. Blip, blip, blip. Perhaps not the sounds that many associate with N.C. 4-H. But for the Roto Raptors 4-H Robotics Club in Wayne County, if you can't design it, engineer it, code it or win with it, it just doesn't sound like their brand of 4-H.

It's a hot August evening in Goldsboro, North Carolina, and kids are gathering by the dozens outside of SPXFLOW, a proud sponsor of the award-winning 4-H Roto Raptors, whose facilities house the "lair," as club headquarters is affectionately known. So what's the buzz, whirr and blip? That's just Don—an award-winning robot built by the Raptors. A terrific ambassador, Don is out tonight to entice youth to jump into STEM (Science, Technology, Engineering, Math) by joining 4-H.

"We have 25 prospective members signed up to visit our club's recruitment event tonight," said Anne Finch, volunteer leader who co-founded the group 10 years ago while homeschooling her two boys. "After starting with five homeschoolers, we now have around 40 members," she continued.

Interest in the 4-H Roto Raptors club has grown well past Wayne County, with members driving from five neighboring counties over the last few years. This year alone, two club members make the drive west from Lenoir County.



Strike Raptor delivers a hatch panel to the 3rd level of the rocket ship during district competition at UNC Pembroke.

## 4-H and First Robotics Competitions: A Perfect Match

STEM education is a growing focus for 4-H, and a natural extension of the organization's agricultural roots. Stephen Finch, Anne's youngest son and 4-H alumnus who now serves as a junior advisor to the 4-H Roto Raptors, says he believes that 4-H clubs are the "perfect model" for STEM-oriented activities.



Stephen Finch, 4-H alumnus

"4-H offers the [Extension] agents, the resources, the trainings—the things future [STEM] leaders need. Being involved in 4-H STEM camps and electricity programs in Wayne County has served my passion for technology and programming. I completely owe that to this club," he said.

While identified as a 4-H club, the Roto Raptors participate in and compete through First Robotics Competitions (FRC), an international organization designed to develop future science and technology leaders and innovators.

**"Being involved in 4-H STEM camps and electricity programs in Wayne County has served my passion for technology and programming. I completely owe that to this club."**

**Stephen Finch**

"4-H and FRC fit hand-in-glove," said Anne Finch. "In 4-H, we learn by doing with hands-on training. 4-H is solid and well-known; FRC is our niche," she said. Finch works closely with N.C. Cooperative Extension's 4-H agent in Wayne County, Jessica Hogan, ensuring that the club incorporates the full 4-H experience into its activities.

## Bringing Home the Hardware

In the U.S., more than 4,000 FRC teams compete across the nation at events that involve more than just building the best robot. Beyond the engineering tasks, clubs are judged on their problem-solving; their presentations, including materials and interviews; and their overall teamwork both within the club and with other competing groups.

As a 4-H club, the Roto Raptors are well-prepared to demonstrate leadership, record keeping, marketing and public speaking in the competitive arena. And 4-H's electricity and new robotics curricula make the Roto Raptors even more competitive.

For the past three years, the 4-H Roto Raptors have brought home a streak of national championships along with numerous district and state awards. The lair is decorated with banners celebrating Chairman's Awards (highly coveted recognition at each competition), while trophies and other honors fill every shelf, nook and cranny.

For Amanda Edmundson, communications officer for the club and a high school senior who met Anne Finch through homeschooling, competitions are a big draw. "The excitement can be overwhelming, so much so that you forget to be nervous. It is so much fun," she said.

## Influencing the Future

The successes of the 4-H Roto Raptors cannot solely be captured by looking at the trophies and banners in the lair. The real "wins" come in the achievement of the members. Like one former team captain who taught himself how to program with JAVA and build electronics. After earning a degree from NC State University, this alumnus now works for Red Hat.

Success came quickly to former club member, Kamar Brown, who attends N.C. A&T State University on a full-ride engineering scholarship. Brown's sister, Eboni, is a current co-leader of the club and was, according to Anne Finch, instrumental in helping the club achieve the Chairman's Award from FRC at last year's district event.



4-H Roto Raptors club members (left to right): Niko Martin, Dillon Yousif, Eboni Brown, and Amanda Edmundson

While the younger Brown has a strong interest in science, her contributions to the club often focus on developing business plans, working with sponsors, serving as the voice of the club for competition interviews and presentations, and developing materials to educate and inform about the club's projects.

For the Finch family, the 4-H Roto Raptors inspired elder son, Christopher, to pursue a degree from Capitol Technology University in electrical engineering. He credits the club with getting him excited about electrical engineering, programming and robotics. At the time of the interview, Finch had just accepted a position with Collins Aerospace.



The 4-H Roto Raptors receive the Chairman's award at district competition.

### Encouraging Women in STEM

Eboni Brown, self-described “advocate for science,” wants to see more girls involved in STEM. “Men dominate STEM fields,” she said. “Young women need to know there is more out there for us, especially in STEM. We can be the Curies. We can be Nobel Prize winners.”

Anne Finch is particularly pleased at the progress made by the club’s female members. She credits 4-H with building confidence through mentorship and role modeling and proudly shared that the team’s co-leaders for this year are both female.

In a club first, the 4-H Roto Raptors competed in an all-female robotics competition in Cary on October 19, 2019.



Students at Meadow Lane School build a moon habitat through the First Lego League Jr. program delivered by 4-H.

### Not All Fun and Games (OK, really, it kind of is)

Competition season for the 4-H Roto Raptors runs from late winter through the summer, with January and February being months of intensive design and build. But outside of these windows, the club does not slow down. In fact, recruitment becomes a priority during the down time.

“I learned about the club through Y [YMCA] summer camp,” said eighth-grader Niko Martin, who decided to visit the 4-H club when he was looking for “something more curricular” than his typical sports-related activities. “I am definitely interested in engineering. While I haven’t done advanced machinery or electrical yet, I’m excited to try it.”

In addition to finding club members like Martin at their many demonstrations, the Roto Raptors, in particular the marketing team, spend much of the off-season communicating with sponsors and recruiting new partners as the cost of entry for competitions can run upwards of \$4,000, not including travel expenses or the cost of building the robot itself.

But of all the off-season activities, the favorite of the senior-most club members is working with younger children to instill an interest in STEM fields. “4-H recently welcomed First Lego League Jr. in the county. That program, run by Barbara Byers, is a 12-week program offered through the schools that helps children develop problem-solving skills,” said Anne Finch.

### Into the New Club Year

Robot demonstrations, fair tours, and fun and games over, the recruitment event winds down. But for the Roto Raptors, things are really just getting started.



“It is exciting to see so many new faces this year,” said Dillon Yousif, club safety officer and high school senior. “It’s going to be cool to teach and mentor such a large group.” With youth like these 4-H’ers in charge, it’s going to be a great year. ■

Follow the Roto Raptors on Facebook: [@4HRoboticsTeam3737](https://www.facebook.com/4HRoboticsTeam3737)

# Head TO CLEARER THINKING

By Kathryn Stulpin

Extension's 4-H program has made a tremendous impact on my life and the lives of many others. 4-H taught me many life lessons that I will carry with me for the rest of my days, from how to give speeches and run meetings, to the importance of citizenship and the ability to befriend people from all walks of life. And most importantly, 4-H gave me courage. 4-H taught me that I don't have to be afraid to try, even if things may not always go according to plan.

I now have the courage to step outside of my comfort zone and the motivation to strive to "make the best better" both within and outside of the program. My journey started with small steps when I was younger, like running for my first leadership role or attempting to grow a mini-garden. As I got older, I became more and more involved with the program. I seized the opportunities 4-H offered because I enjoyed being able to learn and participate in a variety of programs.

I am incredibly grateful for all of the opportunities, such as state office and being a teen group leader, that 4-H has given me. I discovered how much I love teaching and helping people. 4-H has allowed me to work with many youth over the years, being able to teach them about topics from public speaking to electrical circuitry.

I know without a doubt that 4-H has made a meaningful impact on my life. While I've aged out of the program, I will continue to give back to Extension's 4-H efforts and support our youth as they continue to make the best better through their 4-H careers and communities. ■



4-H Alumna Kathryn Stulpin

# I Pledge My Head, Hands

## Hands TO GREATER SERVICE

By Tanya Heath

In Edgecombe County, the 4-H Caregivers Program brings youth from several 4-H community and special interest groups together to give back to their communities. The program, coordinated through N.C. Cooperative Extension, promotes participation in meaningful community service opportunities while enriching the 4-H learning experience through teaching civic responsibility and encouraging lifelong civic engagement.

"I have seen tremendous growth in both of my boys thanks to participation in 4-H. They have been taught to look for opportunities to help others and have increased confidence in themselves," said 4-H parent, Kathy Bradley.

A key focus for the group is environmental stewardship. Youth participate in numerous clean-up and beautification projects, sharing environmental information in the community, and helping elderly community members with yard work.

Youth involved in Extension's 4-H Caregivers of Edgecombe County have the opportunity to serve a variety of people and organizations. Group projects provide life lessons and memories that leaders believe will give youth a sense of purpose and a dedication to serving others.

What's the most valuable part of being involved with 4-H Caregivers? Youth member Jeffrey Bradley may have said it best, "4-H is a great way to make friends while serving others." ■



The Edgecombe Caregivers donated 10 fans to a local animal shelter this summer.

# Heart TO GREATER LOYALTY

By Melinda Barrick

How does one describe the heart of Extension's 4-H program? Maybe it's the time, effort and love shown through the actions of its youth and adult volunteers. During my 16 years of serving as a volunteer, I've witnessed the heart of 4-H in action plenty of times.

I've seen youth invest their time in helping a withdrawn nursing home resident find joy and purpose in her life as they shared a joint interest. I've witnessed youth not only serve food to men fighting a battle against drug and alcohol addiction, but also form friendships with them and encourage them on their journey.



Melinda Barrick and four of her 4-H'ers working on their 2019 booth at the Dixie Classic Fair. The booth placed second and earned the club \$150 toward service projects.

My favorite part of volunteering is helping youth grow in their leadership skills. I enjoy training youth to work together in committees, to give reports to their group, to acknowledge the successes of fellow members and to reflect together on the work they've accomplished. I love to see them become more comfortable and capable in their roles over time.

A wonderful benefit of volunteering with 4-H and N.C. Cooperative Extension is the opportunity to learn new things. I've learned about forestry, wildlife, horticulture, civics and economics, just to name a few.

4-H is an important part of my life. I volunteer because I see the value of sharing my knowledge and experience with the next generation. I believe that this is the kind of attitude that exemplifies the heart of 4-H. ■

# Hands, Heart and Health

## Health TO BETTER LIVING

The opioid epidemic. The news is rife with it. Families are torn apart by it. And 4-H at NC State University is working to end it.

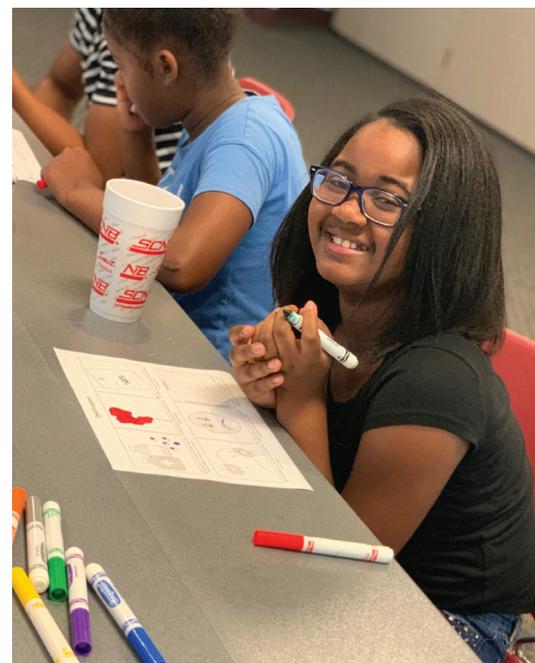
When the Adverse Childhood Experiences Study (ACES) showed that the presence of caring adults and utilization of community resources are two of the most powerful indicators of positive childhood health outcomes, NC State Extension's 4-H program stepped in.

With the award of a rural health and safety grant from USDA's National Institute of Food and Agriculture (NIFA) two years ago—the first of its kind to be awarded to a 4-H group—4-H youth specialists with NC State Extension set out to develop a grassroots effort, called the Empowering Youth and Families Program (EYFP), targeting middle school youth and their families.

"4-H creates a protective environment that pulls these positive indicators together," said Amy Chilcote, Extension Associate for 4-H at NC State. "We can bring parent and child together in a community opioid conversation geared toward prevention."

Recently, EYFP received support for an additional two years through the NIFA grant, as well as funding from the Substance Abuse and Mental Health Services Administration, a branch of the U.S. Department of Health and Human Services. ■

Learn more about EYFP opioid prevention at [www.opioidpreventionnc.org](http://www.opioidpreventionnc.org)



Lee County youth engage in opioid prevention activities at a recent event.

## A DAY IN THE LIFE: BUILDING OPPORTUNITY IN BERTIE COUNTY

By Guy A. Holley, *Extension 4-H Agent, Bertie County*

Growing up in Gates County in rural northeastern North Carolina during the '90s, there wasn't much to do outside of school other than recreational sports programs. Thankfully, my parents pushed us to experience more than just athletics and traditional school. They did that through 4-H.

I grew up in 4-H from age 5, thanks to my mother's position as 4-H agent and, later, Extension Director for Bertie County. I was involved in programming that helped address our area's needs on levels that I am just realizing as the current 4-H agent for Bertie County. I knew some of the work involved in building a sustainable, impactful program through watching my mother work; however, I had no idea what this role really entailed until got behind the scenes.

Working in a Tier 1 county where minorities make up 61 percent of the population and the community faces poverty and low operating budgets, much of my time is spent writing and executing grants. As a result, we have improved and



Zariyah Jordan touches a crab with the support of 4-H agent, Guy Holley. Jordan attended camp at the Eastern 4-H Center thanks to the generosity of the A.R.M.S. Foundation.

revitalized programs like the Tri-County Livestock Show and Sale; a swimming program to address the drowning rates of youth to ages 9 through 14; cooking and health-oriented programs; access to our state's camping program for teen leaders who want to compete at the district and state levels; and a hydroponics program with the AgriScience Early College (growing vegetables, herbs and animal fodder to improve access to foods for limited-resource populations).

I also spend a lot of time establishing trust and making connections in the community through programming in different schools and attending community events. With the community involved and parents wanting more of the programs for their youth, we can then establish a more solid 4-H club base that will have the impacts that I know 4-H can have. ■

## BEHIND THE SCENES: AT CAMP WITH SARAH ALEXI

By Sarah Alexi

The comment I hear most when I tell people I work as a summer camp counselor is, "Wow, that sounds like a lot of fun!" And while it is a fun job, it is so much more than that.

My name is Sarah Alexi and I have worked as a camp counselor at NC State University's Millstone 4-H Camp the past two summers. I can honestly say that my camp experience has provided me with an abundance of skills that I'll be able to use in my daily life and future career.



One of the most rewarding experiences from this job is the opportunity to watch kids grow as people. I had a camper who didn't want to leave her bunk for icebreakers one day; she said her bed was the closest thing she had to home. By the end of the week, she was a camper that everyone in the cabin looked up to. Watching her grow from a shy child into a leader was inspiring. Every week I experienced situations that truly opened my eyes.

As a camp counselor, I also acquired tools that will benefit me in whatever career path I choose. Among the most important skills I've learned is the ability to work on a team. I've met a lot of people during my two years, each of whom led in their own unique way. Working on diverse teams can be challenging, but I learned to adapt to various leadership styles.

Working as a 4-H camp counselor allowed me to learn more about the 4-H program and incorporate it into the curriculum. It also provided a different perspective each day. One day I could be lifeguarding, and the next I could be a high ropes instructor. Whether I was teaching a program or leading a cabin, I was able to make a lasting impact on a child's life. That is the most rewarding thing I can imagine.

Discover more about NC State's Millstone 4-H Camp at [go.ncsu.edu/Millstone4HCamp](http://go.ncsu.edu/Millstone4HCamp) ■

## CLUB FOCUS:

# MITCHELL COUNTY'S CREATIVE CLOVERS COMBINE SERVICE AND FUN

By Creative Clovers 4-H Club, N.C. Cooperative Extension - Mitchell County Center

**The Creative Clovers 4-H Club is really two clubs – a Cloverbud club for younger 4-H'ers and a Junior 4-H club. Our juniors have been meeting for three years and we have 12 members.**

One of our favorite projects is to volunteer to help our community. We have gone to the Brian Center to take cards we made, flowers and to sing carols up and down the halls. The best part was seeing how happy the people were when we went into their rooms. Another project was to collect peanut butter and jelly for the Guardian ad Litem children. We got our churches and families to give school supplies for students who didn't have money to buy them.

Our favorite community service project was to help Extension's Jones County Center 4-H program when Hurricane Florence hit them in 2018. 4-H families lost their homes and two schools were not usable. We gave all the tips we made from selling jam at the Rhododendron Festival and Apple Butter Festival to their county. That was \$321. We also collected school supplies and filled backpacks to send to the 4-H'ers in Jones County.



Mitchell County Creative Clovers 4-H'ers pack backpacks to send to 4-H'ers in Jones County who were impacted by Hurricane Florence in 2018.

We have been making and selling jams and jellies at festivals in our county. We have to set up the booth, talk to people to get them to buy, keep track of sales and write mini-receipts. After we are finished, we count the money, write deposit slips and take the money to our bank. We even get to see our banker.

Our goal is to pay for a citizenship trip to D.C. in 2020. The Clovers always have fun programs. We've gone on field



Creative Clovers 4-H'ers collected food for local children in the Guardian ad Litem program.

trips to the N.C. Mountain State Fair to see our entries, to Raleigh for 4-H Citizenship North Carolina Focus, and had bonfires and roasted marshmallows.

This last winter we completed 4-H project records. Whew, that was hard work! When we look at our records, we see how much we have done in 4-H. We're also very proud that all of our 4-H'ers received gold or silver on their projects in seven areas.

The Clovers have also learned how to speak in public. At County Achievement Night, each of our members got to talk. We introduced club members or read the list of winners. Our parents, grandparents and leaders were there, too.

One of the ways we are improving public speaking is to do presentations. We started with a group training in February and chose our topics. Then we did research, put together our PowerPoints or posters, selected our props and practiced, practiced, practiced. After the county competition, we went to district and then to state. At state, our members

won four golds, one silver and three honors. Boy, were we excited!

We laugh a lot and have a great time with each other. We are the Creative Clovers 4-H Club from N.C. Cooperative Extension's Mitchell County Center. ■

Our club members all worked on what to say in this article. It was fun to remember all our great times together.

# 4-H VOLUNTEERS EMBODY THE SEASON OF GIVING ALL YEAR

By NC State Extension Staff

**One of the greatest joys for a child is receiving a gift – something chosen especially for them. Something they desired. Or something unexpected that brings delight. Receiving a gift is special.**

**One of the greatest joys for a parent is the day the child discovers the joy of giving a gift. The satisfaction of choosing something especially for someone else. The day they learn that giving a gift is even more special.**

4-H volunteers personify the joy of giving every day. They lead clubs designed especially to appeal to youth in interest areas such as horses, food and nutrition, poultry, target sports and robotics. They guide children by leading service projects and modeling 4-H values. They give of themselves – the most special gift of all.

Volunteers are part of the village that helps raise our youth to be responsible, caring adults who have a sense of direction for their lives and a service mentality. As a 4-H volunteer, you build the youth who are responsible for tomorrow and who will serve as the village for the next generation.

## **Cultivating Volunteers**

Whether you grew up in the 4-H family or are just starting to learn about 4-H, there are meaningful opportunities for you here. In North Carolina, more than 229,000 youth are part of 4-H, but to reach more youth we need motivated individuals like you.

Already a 4-H volunteer? Please share the joy of your experience with friends and neighbors, in face-to-face conversation and through social media. Help us lead others to 4-H so they, too, can share their energy, their wisdom, and their experience with tomorrow's leaders. ■

Current volunteers are encouraged to share their volunteer stories with us at [go.ncsu.edu/4-H\\_VolunteerStories](http://go.ncsu.edu/4-H_VolunteerStories)



Volunteers judge state 4-H crafts at the NC State Fair.

*Learn more about volunteering by visiting or contacting the 4-h program at your local N.C. Cooperative Extension Center.*

## **Volunteer Opportunities:**

Club Leader  
Club Volunteer  
Project Volunteer  
Presentation Coach or Judge  
Record Book Judge  
Competition Judge  
Advisory Committee Member

## HEARTS TO GIVING:

# GIFTS TO 4-H PRIORITIES FUND GO WHERE THE NEED IS GREATEST

Because of the generosity of our donors, 4-H is impacting the lives of more than 200,000 of North Carolina's youth. Many donors choose to support specific needs, but an opportunity to support some of our most urgent needs can be addressed through gifts to 4-H Priorities, part of the General Fund.

Gifts made to 4-H Priorities allow 4-H leadership to direct funding toward less predictable, high-need issues as they arise. Historically, these dollars have filled the gap when scholarships were not funded equitably across the organization, when key events needed support to be fully realized, and when clubs or deserving individual youth needed assistance to attend district, state, or national events but sponsorship dollars were not available.

In 2018, 4-H Priorities proved to be an invaluable source of relief in the aftermath of Hurricane Florence, as 4-H clubs, members and families in our state faced myriad losses and challenging times, making it difficult for youth to participate in 4-H activities and events. When you give to the 4-H Priorities, you know that your support will go where it is needed the most.

As you reflect on how you will support 4-H in the future, know that all of your gifts of time, talent and financial support are received with gratitude and appreciation. From your 4-H family, thank you. ■



## CALENDAR OF EVENTS NOVEMBER, 2019 - MAY, 2020

<b>Eastern National 4-H Horse Roundup (same as Congress)</b> .....	<b>November 8-10, 2019</b>
<b>Volunteer Leaders' Conference, Durham, NC</b> .....	<b>January 31 - February 2, 2020</b>
<b>Scholarship &amp; Honor Club Application State Deadline</b> .....	<b>February 3, 2020</b>
<b>Project Records, Portfolio &amp; Group Award State Deadline</b> .....	<b>March 2, 2020</b>
<b>State Hippology and Horse Bowl Contest</b> .....	<b>March 7, 2020</b>
<b>Volunteer Leaders' Officer Seminar, Cary, NC</b> .....	<b>March 20-21, 2020</b>
<b>National 4-H Conference, Chevy Chase, MD</b> .....	<b>March 28 - April 2, 2020</b>
<b>State 4-H Horse Judging Contest</b> .....	<b>Mid April, 2020 (date TBD)</b>
<b>4-H Record Book Judging</b> .....	<b>April 24-26, 2020</b>
<b>4-H Portfolio Judging</b> .....	<b>April 27-29, 2020</b>
<b>17th Annual On the Dock of the Bay camp fundraiser, Eastern 4-H Center</b> .....	<b>May 2, 2020</b>
<b>4-H Ambassador Portfolio State Deadline</b> .....	<b>May 15, 2020</b>
<b>East, West, South, and North Qualifying Horse Shows</b> .....	<b>Early-Mid May, 2020</b>



# WHEN YOU WALK WITH 4-H, THEY WIN.

Thank you for investing in the youth and future of North Carolina and for giving to 4-H Priorities.



**NC STATE**

EXTENSION

[go.ncsu.edu/support4H](http://go.ncsu.edu/support4H)