



UNIVERSITY OF MISSOURI EXTENSION

Pike County

2024 ANNUAL REPORT



Table of Contents

Who We Are	5
Program Overviews	
Agriculture	6
Nutrition and Health.....	12
Youth and Family.....	14



Pike County
University of Missouri Extension

210 W. Main
Bowling Green, MO 63334
PHONE (573) 324-5464
E-MAIL pikeco@missouri.edu

WEBSITE <http://extension.missouri.edu/pike>

January 31, 2025

Pike County Commission
Courthouse
115 W. Main
Bowling Green, MO 63334

Dear Commissioners:

Thank you for all you do for the people of Pike County and for MU Extension of Pike County. When you support University of Missouri Extension, Pike County benefits!

- The 4-H program offers long-term, educational experiences in which members learn leadership and build initiative while building connections for a bright future.
- The Horticulture program offers research-backed information through classes and consultations to help Missouri's fruit and vegetable producers grow crops profitably and sustainably.
- The Family Nutrition Program provided kid-friendly, hands-on lessons, which included taste-testing healthy foods and practicing skills that lead to good health.
- The Livestock Education Program provided training in beef improvement, artificial insemination, heifer development and educational programs for youth with livestock.
- The Agronomy Education Program provided private pesticide applicator training and had one-on-one consultations with producers to create awareness of the science and technology available to reduce expenses and improve profitability of their grazing livestock operations.
- The Agriculture Business Program provided training which brings results for our agricultural economy.
- Focus on Kids benefits the community by teaching parents that co-parenting their children after divorce is not only important for the success of their children, but also to reduce education, special services, juvenile and adult legal system costs for Pike County.

Sincerely,

Handwritten signature of Chris Nation in cursive.

Chris Nation
Extension Council Chairman

Handwritten signature of James E. Meyer in cursive.

Jim Meyer
Extension Engagement Specialist



Office of Extension
and Engagement
University of Missouri

Vice Chancellor's Office
108 Whitten Hall
Columbia, MO 65211
PHONE 573-882-2394
EMAIL cchiggins@missouri.edu

December 2024

Dear county commissioners, elected leaders and friends of MU Extension and Engagement,

As we reflect on the past year, I want to express my deep gratitude for your support of MU Extension and for your partnership in enhancing the lives of Missourians.

Your support for MU Extension fuels Missouri's agriculture, strengthens families, prepares our youth and promotes the health, well-being and vitality of our communities. Over the past year, our programs have focused on addressing key needs throughout the state:

- **Expanding access to 4-H:** To make 4-H more accessible, we've introduced more in-school and after-school clubs, reducing barriers and creating opportunities for young Missourians to develop essential skills and leadership abilities.
- **Supporting agriculture and land stewardship:** We're addressing critical issues such as succession planning for family farms, rural mental health, agricultural business management and land stewardship. These initiatives are helping Missouri's farmers plan for the future and preserve the health of our land for future generations.
- **Advancing health initiatives:** Our team of community health field specialists, covering every region of the state, works directly with local leaders to assess health needs and bring UM System resources and expertise to these communities, supporting healthier lives and stronger communities.
- **Promoting economic development:** MU Extension is helping to create economic opportunities by working with individuals, supporting businesses in their growth and collaborating with communities to enhance local vibrancy. Through these efforts, we help bring new jobs, skills and possibilities to Missourians across the state.
- **Providing essential training:** Our continuing education programs prepare Missouri's firefighters and health care workers to meet the demands of their roles with the latest skills and knowledge, ensuring they are well-prepared to serve our communities.

As you read through this annual report, I hope you feel as proud as I do of the accomplishments we've achieved together. The dedication and professionalism of MU Extension's faculty and staff are inspiring, and I am grateful to work alongside them—and each of you—as we make Missouri a stronger, healthier and more vibrant place. Thank you for your continued support and partnership. Together, we are serving Missouri by delivering the University *for* Missouri.

Warm regards,

Chad Higgins, PhD
Vice Chancellor, MU Extension and Engagement
Chief Engagement Officer, UM System

Pike County Extension Council

Chris Nation
Chairman

Lucretia Steinhage
Vice Chairman

Amanda Haas
Secretary

Bridgette Reuther
Treasurer

Stephanie Alderson

Jim Allen

Brock Bailey
Commissioner Liaison

Caleb Brown

Jeff Chapuis

Melony Grote

Suzanne Hall

Kim Hunter

Eric Merritt

Rachel Robb

Susie E. Robison

Chris Smith

Adam Trower

Halie Wyble

Youth Representative on Council

Abigail Haas
Youth Representative

Pike County Commissioners

Bill Allen
Presiding

Brock Bailey
Western District

Tom Wallace
Eastern District

Pike County Faculty and Staff

Justin Keay
Field Specialist in Horticulture

Stephanie Shinn
Office Support

About us

Location:
210 W. Main
Bowling Green, MO 63334

Hours:
8:00 a.m. – Noon
1:00 – 4:30 p.m.

Contact info:
573-324-5464
pikeco@missouri.edu

Faculty Serving Pike County, (based in other counties)

Mike Krauch
Regional Director

Jim Meyer
Extension Engagement Specialist
Ralls County

Daniel Mallory
Field Specialist in Livestock
Ralls County

Lauren Richardson
Nutrition Program Associate

Rusty Lee
Field Specialist in Agronomy
Montgomery County

Oliva Brune
Field Specialist in Youth Development
Audrain County

Mary Sobba
Field Specialist in Agri-Business
Audrain County

Jeremiah Terrell
Field Specialist in Human Development
Shelby County

2024 Pike County University of Missouri Extension Council Operating Budget

Revenue

County Appropriations 31,555

Total Revenue \$31,555

Expenses

Non-Payroll Salaries (Temporary Help) \$ 4,963

Travel 2,845

Postage 1,977

Telephone 1,472

Supplies and Services 2,243

Insurance 780

Advertising/Election 95

Miscellaneous 600

Repair and Maintenance 692

Furniture/Equipment 1,522

Working Capital 0

Total Expenses \$ 17,189

Net Revenue \$ 14,366

Livestock Education in Pike County

Daniel Mallory, Field Specialist in Livestock



Show-Me-Select heifer lots awaiting sale.

SHOW-ME-SELECT HEIFER PROGRAM

MU Extension's Show-Me-Select Replacement Heifer Program teaches beef cattle producers to successfully adopt research-proven reproductive and genetic technologies developed at the University of Missouri which add value to heifers in beef herds across the state. This leads to improved profitability and sustainability of family-owned operations, positively benefitting Missouri's economy by over \$150 million since its inception in 1997.

On December 14, 2024 the Northeast Region held its 28th Annual sale. Selling 323 heifers for an average price of \$3,599.

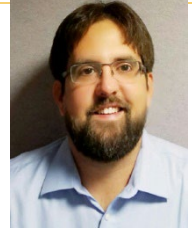
PERFORMANCE TESTED BULL SALE

The Missouri Beef Cattle Testing program is designed to help improve Missouri beef cattle in both quality and growth through breeding and selection. The northeast region is one of three remaining programs in the state to hold performance tested sales. The first sale was held in 1973, while the most current sale was held in March of 2024 and sold 34 bulls for an average price of \$4,509.



Horticulture Education

Justin Keay, Field Specialist in Horticulture



Horticulture Programming in the Northeast and East Central Regions

In 2024, there were 2,565 direct contacts from 38 educational programs that Justin organized or co-taught. Participants in these in-person and online programs are actively engaged in the learning process. Programs were in-person and online. Programs included home vegetable gardening, commercial fruit and vegetable production, on-farm produce safety tours and trainings, value-added agriculture workshops, selling local foods workshops, grant opportunities for small farmers, soil fertility management, integrated pest management, and many more. There were 475 requests for horticulture information through calls, emails, and walk-ins from 39 Missouri counties. Justin performed 22 farm visits across the Northeast and East Central regions to help small farmers solve crop production problems on their farms.

Online programming through webinars, videos, and e-newsletters has a state and national reach. The monthly Missouri Produce Growers Video Newsletter reaches over 1,100 subscribers every month with a 155 increase in subscription during 2024. Topics include fruit and vegetable production, small farm business management, pesticide safety, produce safety regulations, invasive pests, and more. Twenty-three educational videos were created and hosted on the MU IPM YouTube Channel. Videos from the newsletter received over 36,744 views in 2024.

Participants who engaged in horticulture programming learned about insects, weeds, diseases, soil health and fertility, general plant care, and variety selection. Small farmers learned how to increase their fruit and vegetable yields, grow their farm revenue, and protect Missouri's natural resources.

- Justin connected 7 small farms with MU Center for Regenerative Agriculture grant opportunities, who received a total of \$35,000 to support conservation projects on their farms.
- One-hundred and thirty-four fruit and vegetable farmers were trained on the Produce Safety Rule Food Safety Modernization Act. This training satisfies a regulatory requirement of the Food and Drug Administration.

Expanding Value-Added Production in Missouri

Adding value to fresh fruit and vegetables by processing them into finished products such as juice, ready-to-eat meal kits, sauces, and jams can help small farmers increase farm revenue and grow their farm businesses. This can allow growers to hire more staff and contribute more to the local economy. Justin hosted two all-day workshops to help producers understand marketing opportunities, food safety, and regulatory compliance to help producers bring their products to market.



Justin teaching at the Selling Local Foods workshop in Hannibal.

Training Growers on Federal Requirements for Produce Safety

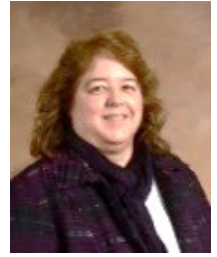
The Food Safety and Modernization Act Produce Safety Rule places regulatory requirements on produce growers to ensure consumers are provided with safe produce, free of common pathogens such as E. coli and Salmonella. In partnership with Missouri Farmers Union, Justin hosted four on-farm produce safety tours, where participants learned how to implement federal regulatory requirements on their farms and to ensure the produce they provide to consumers is safe. In addition to on-farm tours, Justin helped train 134 growers during six separate Food Safety Modernization Act Produce Safety Rule trainings.



Justin teaching farmers about federal produce safety regulations at a farm.

Agricultural Business

Mary Sobba, Field Specialist in Agri-Business



Agriculture Lenders' Seminar

Seventy-two lenders from 20 Missouri counties and Illinois attended an ag lender seminar in Mexico. There were two participants from Pike County. Lenders learned about crop and livestock outlook, agriculture policy, rental rates and land values, MU budgets, wind and solar leasing, input costs and enterprise budgets, Missouri farm business management summary and Missouri Agricultural and Small Business Development Authority (MASBDA) programs.

By attending University of Missouri's Agricultural Lenders' seminars, lenders gain knowledge to help their clients make better decisions based on objective education and resources. More information and better decisions benefit their portfolio of producers, landowners, and agribusinesses through enhanced understanding of enterprise budgets, market expectations, and other decision influencing factors affecting families' and businesses' financial health. Lenders in attendance manage farm loans totaling \$155,250,000.

Missouri Farm Lease Workshop

Area participants participated in workshops offered in Kirksville and Bowling Green during the Fall of 2024. There was one participant that attended from Pike County. The classes reinforced the importance of good, clear communication and how it can lead to good lease agreements for both parties and encourage a healthy landlord-tenant relationship. Topics covered were current farmland rental rates, specific items to include in a farm lease, how to legally terminate a farm lease in Missouri, and lease scenarios.

Each class used a unique evaluation tool. The class in Kirksville was asked to rate their farm lease knowledge both before the class and after the class. The average before the class was 5.83 on a 10-point scale. The average after the class was 8.0, on the same scale, for an increase of 2.17.

Both classes were asked what they gained from the class: 78% understood that a farm lease is a legal, binding contract; 89% have a better idea of fair rental rates; 89% understand the correct way to terminate leases and where to find resources. Participants were asked what actions they planned to take in the next year because of taking the class. The responses included: 78% plan to make changes to the next lease; 67% plan to use a written lease instead of a verbal lease and 55% plan to review current leases.

By taking the class, participants gain insight from both the landowner and tenant perspective, which encourages leases that are fair for both parties. This promotes optimal land use leading to more sustainable profitability.

The class encourages better landlord-tenant communication, which lowers conflict and avoids costly litigation.

Extension Tax Schools

University of Missouri Extension ag economics department and ag business specialists worked together to coordinate one summer and three fall tax schools. The summer school was in person and live online. Fall schools were in Columbia and Springfield and one online school. The schools were designed for those who prepare taxes including enrolled agents, tax preparers, CPAs, individuals, and attorneys.

The training included updates on legislation, rulings and cases, individual taxpayer issues, agricultural and natural resources topics, ethics, trusts and estates, agriculture and natural resource tax issues, business tax issues, business entity tax issues, IRS issues, related party issues, real estate rental activity issues, limited liability company issues, and international tax issues. The schools were approved for 8 and 16 hours of continuing education credit by the IRS, Missouri Bar and for CFP continuing education. Total continuing education hours reported to IRS for the schools was 3,776 hours.

The teaching teams included CPAs, a former IRS stakeholder liaison, an IRS certified retired ag economics professor, an attorney, a certified financial planner, Missouri Department of Revenue and extension ag business specialists.

The evaluations had many positive comments and helpful suggestions. Planning is underway to offer trainings in 2025. Local county residents benefit when local tax preparers have the opportunity to gain knowledge, which benefits their clients and communities. The tax schools are a program of the ag business and policy program of MU Extension, coordinated by Mary Sobba with help from a team of ag business specialists throughout the state.

The resources for the schools included the IRS, the National Income Tax Workbook from the Land Grant University Tax Education Foundation, and materials written by the instructors.

The 2024 school attendance totaled three hundred fifty people. The participants were from throughout Missouri. Pike County had three participants in the summer tax school and two participants in the fall tax school.



Family Nutrition Education Programs (FNEP)

Nutrition Program Associate



SNAP-Ed Public Value Statement 2024

The Supplemental Nutrition Assistance Program Education (SNAP-Education or SNAP-Ed) brought \$11,145,237 in federal funds to Missouri. The funds support engagement with 74,864 Supplemental Nutrition Assistance Program (SNAP) recipients and eligible citizens of Missouri who learned about being active and healthy eating on a budget. This year we had 1,164,143 indirect educational contacts through newsletters, health fairs, food pantries, and the Show Me Nutrition helpline.

There were 23,422 direct and indirect contacts made in Pike County.

Participants in SNAP-Ed learn the importance of making healthier meals and snack choices, eating breakfast more often, are more willing to try new foods, increase their physical activity, and make healthier food choices. Those who practice healthy eating and are physically active are more likely to contribute to a healthy labor force and enjoy a high quality of life throughout the lifespan.

This vital programming effort also reduces healthcare costs over the participant’s lifetime, saving taxpayer money in reduced public healthcare benefits and insurance premiums.

Programming Partners

Schools	Agencies
Bowling Green Elementary	Hope Center of Pike County
Frankford Elementary	Pike County Health Department
	Louisiana Community Food Pantry
	Pike County Food Stamp Office
	Learning Center
	Twin Pike Family YMCA

Success Stories:

Nutrition Program Associate, Lauren Richardson, has been offering SNAP outreach to Louisiana Community Food Pantry clients. She has assisted several clients in completing the application.

- One individual explained that getting to the Food Stamp Office was hard for him as he did not have any transportation means other than walking an extensive distance. Lauren was able to assist with completion of and turning in the SNAP application. Several weeks later Lauren spoke to the client. This client was so excited to share that he was able to receive SNAP benefits. He shared his plan for self-stabilization as he had been charging groceries to an account that accrued interest to be able to feed himself each week. This was extremely hard as his only form of income is his disability check. He stated that his plan is to pay off this credit and cook home cooked meals using the indirect education provided by the Nutrition Program Associate. The client shared his appreciation for education and resources on how to improve his meal planning and stretch his food budget while using his SNAP benefits. The Outreach services offered by the Family Nutrition Education Program helped this individual plan for a healthier future. The client expressed, "Every dollar of my (SNAP) benefits will be used to eat healthier and plan ahead."

While teaching Show Me Nutrition Food Group Express in Mrs. Brush's 2nd grade class students were encouraged to choose a variety of colors of fruits and vegetables each day. Students at Bowling Green Elementary have a salad bar with fresh produce each day that they can serve themselves from.

- Mrs. Brush shared that a student from her classroom was at lunch today and shared with her that she was choosing a variety of colors, fruits, and vegetables from the salad bar. She stated that the student shared that her Nutrition Program Associate, Lauren Richardson, would be so proud! Mrs. Lauren then asked the student later before her next nutrition lesson about her visit to the salad bar. The student was excited to share.
- "Before nutrition lessons I didn't think about the choices I was making. Now I try new foods including fruits and vegetables from the salad bar."



Pictured above left, Lauren educating Bowling Green students about container gardening. Right, Amanda Lehenbauer assisted with the YMCA summer partnership.

Human Development Education

Jeremiah Terrell, M.Ed, Field Specialist in Human Development and Family Science



PROGRAM: FOCUS ON KIDS

A 2.5 hour class, ordered by state statute, for all divorcing parents with kids still at home. The program reviews the five predictors of positive outcomes for children when their parents' divorce. Through class discussion and viewing video vignettes, parents are reminded of the importance of keeping their children out of the conflict. This program was provided on the second Tuesday of each month in 2024. This program had 30 contacts in Pike County and was done in partnership with the 45th Circuit Court.

Participants learn that:

- Avoiding conflict in front of the child improves the child's outcomes.
- Open and frequent communication between parents **must** be maintained.
- Children need to know both parents love them and will remain in their lives and that the divorce isn't the child's fault.
- Importance of listening to their children.

Program: Taking Care of You

Taking Care of You is a multi-session program offering practical strategies and experiences to help deal with the stress in life. Managing life's challenges in a healthy way allows you to take better care of yourself and your overall health.

A rigorous program evaluation showed decreased stress levels and improved lifestyle behaviors.

As a result of the program, participants:

- Cultivate positive emotions and resiliency to stress
- Discover opportunities in life's challenges
- Develop improved responses to stress in terms of their thoughts, emotions and behaviors
- Take better care of one's health-body, mind and spirit

This program had 40 contacts in Pike County and was done in partnership with the Northeast Correctional Center.

Pike County 4-H

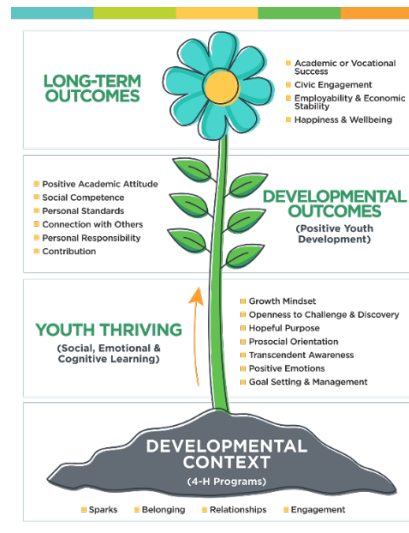
Olivia Brune, 4-H Youth Specialist



A community of 429 youth building life skills, contributing to their community, and becoming college and career ready.

1 in every 10 Pike County youth under the age of eighteen participated in a MU Extension 4-H Youth Development program in 2024.

4-H Youth Development programs are guided by the 4-H Thriving Model, which is a framework to illustrate the connection between high quality 4-H programs and indicators of youth thriving with developmental outcomes which ultimately leads to the long-term outcomes of youth who experience academic or vocational success, are civically engaged, are employable and economically stable, and experience happiness and wellbeing.



4-H Members

4-H programs are also grounded in the belief that youth learn best by doing. Through hands-on projects like science, health, agriculture, and civic engagement in a positive environment, youth receive guidance from adult mentors and are encouraged to take on proactive leadership roles. Youth have the opportunity to concentrate on one focus area, or they can try a variety of programs throughout their 4-H experience. Pike County served youth through five community clubs offering long-term educational experiences in which members learn life skills such as decision-making, public speaking, and working with others.

- There were 197 youth reached through community clubs in Pike County during the 2023-2024 4-H Year.
- Over 167 4-H members were engaged in science related projects and experiences.
- Collectively youth participated in 1,773 hours of community club work in Pike County.
- Over 899 hours of community service projects were completed by 4-H members and volunteers during the 2023-2024 4-H Year.

4-H members have demonstrated learning through the following activities:

- 19 youth participated in a total of 10 different events during the 2024 Pike County 4-H Achievement Event.
- 47 youth attended the 2024 Pike County Recognition Event. Members were recognized for their hard work and accomplishments throughout the year.
- 2 members participated in the Northeast Region Energizer held in the spring of 2024 in Palmyra.
- 1,484 exhibits at the 2024 Pike County Fair from 201 4-H members and FFA members, who are also supported through youth programming.
- Pike County youth exhibited over 96 exhibits in the 4-H Building at the Missouri State Fair and 2 youth received Best of Show for their projects.
- 1 member participated in the State 4-H Teen Conference, which offered youth a fantastic opportunity to experience being developing leaders in 4-H. This event provides a safe and enjoyable campus experience where youth can enhance their skills and forge new friendships.
- 3 youth from Pike County attended the 2024 Missouri Equine Career Tour. Participants traveled to Colorado, with stops along the way, to explore equine related college and career opportunities.
- Pike County was represented at 4-H Camp Crowder with 3 members attending as Camp Counselors. 8 members attended 4-H Camp Derricotte as campers and 3 attended 4-H Camp Derricotte as Camp Counselors. Members made friends, participated in STEM activities, and enjoyed the outdoors.
- 2 youth from Pike County participated in the State Shoot events and 1 youth from Pike County represented Missouri on the state teams at the National 4-H Shoot.
- 2 youth from Pike County received the Missouri State 4-H Foundation Scholarship.
- 5 youth participated in MOVE Across Missouri, where youth and adults are encouraged to track their physical activity and fitness in their daily life, learning about healthy lifestyles.

4-H Clubs offer in-depth educational experiences in which members learn life skills such as decision making, public speaking, and working with others. Members learn by doing under the guidance of adult volunteers, who lead a wide variety of projects that support 4-H members in finding their SPARK. Club and project leaders also involve youth and teens in community service, leadership opportunities, and educational trips. 4-H project work and related educational experiences help youth explore interests in citizenship, communication, and leadership.

Pike County members enrolled in a combined total of 791 projects in 2024. The top project areas included:

- Arts & Crafts
- Photography
- Cake Decorating
- Gardening
- Country Cured Bacon
- Woodworking
- Foods
- Poultry
- Scrapbooking
- Beef
- Breads
- Swine

Impacts of 4-H Programming

- 4-H members are twice as likely to go to college compared to their non-4-H peers and they tend to pursue careers in STEM fields (Lerner & Lerner, 2011).
- 4-H also prepares youth for the workplace. Youth must be prepared to live and work in a world we cannot completely envision- competing for jobs that do not yet exist, using technologies that have yet to be identified. 4-H is the only youth development program with direct access to technological advances in agriculture, life sciences, and social sciences from the university system. This brings relevant science content and hands-on learning that helps youth thrive (Arnold, Bourdeau, & Nott, 2013).
- Youth who earn a bachelor's degree increase their annual earnings by \$2 million over their lifetime. (U.S. News and World report, 2011) If 50% of the Pike County youth participating in 4-H events on a college campus receive a bachelor's degree, 4-H would help young people acquire \$1,000,000 more in lifetime earnings.

4-H Volunteers

- Pike County 4-H members were supported by 59 enrolled, screened and oriented adult volunteers supporting the development of youth in 2024.
- Volunteers contributed 5,900 hours to the Pike County 4-H program valued at \$197,591.

Volunteers participate in development opportunities like project leader training and club leader summits, in addition to ongoing support from MU Extension youth faculty and staff gaining knowledge in how to offer a valuable learning experience for the youth they are working with while maintaining a safe, supportive environment. Volunteers create, support, and are a vital part of the 4-H community. Dedicated volunteers help to organize club meetings, fundraisers and events. They also provide learning opportunities for youth in their projects, teaching life skills and instilling qualities of character like respect and responsibility in members. Adult volunteers serve as mentors for our youth, helping them transition into caring, healthy adults who contribute back to their communities, which is priceless.

Pike County 4-H Members: Their Story and Things They Have Learned Through 4-H

- “4-H has helped me to step out of my comfort zone to learn how to speak in front of a lot of people.” – Pike County 4-H Member, Age 14
- “Never doubt that a small group of thoughtful people can change the world.” - Pike County 4-H Member, Age 18
- “I wish we could do 4-H every day!” – Pike County 4-H Member, Age 8

4-H School Enrichment- Embryology

- There were 244 students from 11 classrooms who participated in the Hatching Chicks in the Classroom program in 2024.
- Students participated in over 1,464 hours of learning with the “Chick It Out” program.

During the Embryology program, students learn about the 21-day development occurring within a fertilized, incubated egg that can result in the hatching of a chick. Students identify the parts of an egg and discover what each part provides for the developing chick. Students learn how to tell if an egg is raw or boiled and explore the strength of the egg’s shell providing protection to the developing chicks. Students review the necessity of hand washing due to potential contamination caused by salmonella in poultry and poultry products. Students often gain experience with death and disabilities. Throughout the experience, students are charged with rotating the eggs three times a day and are responsible for checking to make sure the incubator has water and is maintaining the correct temperature. Once the chicks hatch, the students care for them, providing feed, water, warmth, and a calm environment.

Impacts of Programming

Students practice life skills including decision making and responsibility, helping them to develop qualities that will shape their development into adults. Students are provided with the opportunity for a practical experience that connects with the core subjects of communication arts, math, science, and health. Youth with hands-on experience with science are more likely to pursue science-related careers, which are critical to our county, state, national, and global economy. Students are conscious of the need to practice proper hand washing techniques to prevent the spread of illness and disease. Students also learn compassion and develop an understanding of how to accept individuals with disabilities, as well as how disabilities can be compensated for.

Resources

Arnold, M., Bourdeau, V., & Nott, B. (2013). Measuring science inquiry skills in youth development programs: The Science Process Skills Inventory, *Journal of Youth Development*, 8(1).

Arnold, M. E. (2018). From Context to Outcomes: A Thriving Model for 4-H Youth Development Programs. *Journal of Human Sciences and Extension*, 6(1), 11. <https://doi.org/10.54718/NBNL5438>

Independent Sector. (2023). *Value of Volunteer Time Report | Independent Sector Resources*. Independent Sector. <https://independentsector.org/resource/value-of-volunteer-time/>

Lerner, R.M., Lerner, J.V. (2011). The positive development of youth: Report of the findings from the first seven years of the *4-H Study of Positive Youth Development*. Retrieved from <http://www.4-h.org/about/youth-development-research/>.

U.S. News and World Report (2011). How Higher Education Affects Lifetime Salary. Retrieved from <https://www.usnews.com/education/best-colleges/articles/2011/08/05/how-higher-education-affects-lifetime-salary>

4-H Highlights



4-H members and volunteers preparing to serve at 4-H Springfest.



4-H'ers participating in 4-H Achievement Event.



These 4-H club members are excited to be a part of the Apple Fest parade.

