

UNIVERSITY OF MISSOURI EXTENSION Clark County 2023 Annual Report

SERVE MISSOURI. DELIVER

MIZZOU[°].

111 E Court St Suite 10 Kahoka, MO 63445 660-727-3339



an equal opportunity/ADA institution



EMAIL: cchiggins@missouri.edu

December 2023

Dear county commissioners and friends of MU Extension and Engagement,

Thank you for your important partnership with the University of Missouri Extension this past year.

I want to highlight three areas that address needs you helped us identify.

You may recall that the FY 23 state budget provided a one-time \$5 million infusion to MU Extension for growth. Of that, we allocated about \$3 million for field faculty in the areas of agriculture, 4-H, health/human development and business and community development.

Through a dedicated hiring effort, and thanks to that allocation, we have hired 168 new employees since November 2022. That includes 72 academic/faculty members, most of whom are field specialists in a priority area noted above, and 96 staff members (e.g., office administrators, youth and food and nutrition associates, etc.).

We also returned more faculty to local program delivery that best serves your county's needs, while preserving the partnership and relationship building work you value. Our extension and engagement specialists focus full-time on that work as they serve their assigned multi-county groups. Currently, 19 have been hired, with two more in the pipeline.

Finally, we are prioritizing our work with county extension councils. In the new role of partnership and council development director, Lorin Fahrmeier focuses on strengthening council representation and governance. This role will build stronger links with regional, educational and campus leadership to better identify and address local priorities.

At the UM System level, our engagement work across four universities and with leaders across the state makes a difference in areas of greatest need: broadband, workforce development, health access, food security and healthy futures for our youth.

Your county annual report shows what we are accomplishing together as we Serve Missouri and Deliver Mizzou. We look forward to strengthening that partnership with county commissioners and community stakeholders in the coming year.

Sincerely,

Chal Hijs

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

MU Extension in Clark County



111 E. Court St. Suite 10 Kahoka, MO 63445-1441 PHONE:660-727-3339 FAX:660-727-2247 EMAIL: clarkco@missouri.edu http://extension.missouri.edu/clark

December 31, 2023

Dear Commissioners and Citizens:

University of Missouri Extension has been serving the citizens in Clark County since 1933. In that time Extension has worked to improve the quality of life for the people here and will continue this effort in the future.

This Annual Report of the Clark County University of Missouri Extension Council is a summary of educational programs and activities of University Extension, which is a part of the University of Missouri System. In addition to the educational programs, we offer locally, our office provides a place to link to resources from around the state and nation. We also offer many services including soil, feed and hay testing, insect and plant identification; and a wealth of publications, to name a few. Through programs in 4-H, youth, agriculture, human environmental sciences, community development, business development and continuing education, one of our aims is to make Clark County a better place in which to live and work. We think our Annual Report indicates we are accomplishing that goal even through a world pandemic.

On behalf of all the faculty and staff of University of Missouri Extension it is an honor to extend the educational resources of the nationwide Land Grant University System to the citizens of our county. We salute the many volunteers, community leaders, extension council members, and staff who have all given of their time and talents to make this a successful year.

We hope you will take the time to learn more about educational programs that will be provided by University of Missouri Extension in Clark County in the future. Please visit us on the Web at <u>http://extension.missouri.edu/clark</u> and find more information there.

Sincerely,

Teri Hooper Extension Council Chair Kari Bevans Extension Council Secretary

Lisa Doster Extension Engagement Specialist

Teri Hooper	Chairman	
	Eastern District	
Donna Flood	Vice-Chairman	
	Eastern District	
Kari Bevans	Secretary	
	Eastern District	
David Boltz	Treasurer	
	Eastern District	
Lynn Kleine	Eastern District	
Christopher Pea	arl	
	Eastern District	
Ashley Justice	Western District	
Alice St. Clair	Western District	
Myrna Daughtry		
	Western District	
Danni Waterman		
	Western District	
Abe Boudreau	MFA	
Steve Krueger	County	
	Commissioner	
Kellen Krueger		
•		
Jack Fry	Farm Bureau City of Kahoka	

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Who we are

Faculty and staff



Lisa Doster Extension Engagement Specialist Igdoster@missouri.edu



Wendy Atterberg Family Nutrition Education Program Associate rayw@missouri.edu



Unity Hamner Administrative Assistant/Bookkeeper unityhamner@missouri.edu



Vanessa Gray Youth Program Associate vgray@missouri.edu



Katie Hogan Field Specialist in 4-H Youth Development hoganka@missouri.edu

Council members

Teri Hooper, Chairman Donna Flood, Vice-Chair Kari Bevans, Secretary David Boltz, Treasurer Danni Waterman, Western Ashley Justice, Western Myrna Daughtry, Western Alice St. Clair, Western Christopher Pearl, Eastern Lynn Kleine, Eastern Abe Boudreau, MFA Jack Fry, City of Kahoka Kellen Krueger, Farm Bureau Steve Krueger, Commissioner



County commissioners

Steve Krueger, Presiding Commissioner Joe Humes, Western Commissioner Henry Dienst, Eastern Commissioner

Appropriations budget

Income

County Appropriations Total Income	39,914.76 40,337.28
Expenses	
Salaries/Benefits	30,336.21
Travel	2,414.44
Telephone	2,677.67
Office Supplies/Service	2,167.55
Postage	508.85
Advertising	194.50
Insurance	1,555.00
Miscellaneous	483.06
Total Expenses	40,337.28



SERVE MISSOURI. DELIVER MIZZOU.

MU Extension is a unique funding partnership.

Extension funding is a three-way partnership of federal, state and county government. Federal and state money, through the University of Missouri system, pay professional staff salaries, training costs, computers and communication equipment. County funds support the local office, secretarial and youth assistant salaries, staff mileage and council expenses.

The Clark County Extension Council, faculty and staff would like to express our appreciation to the Clark County Commissioners for their continued support of extension programs.



Local Support

Did you know you can donate directly to Clark County Extension with a gift to be used immediately or as an endowment contribution for long term efforts. Monies put into the endowment are left forever to earn interest with the county office benefiting each year. You can also direct your donation to a specific program such as 4-H or Master Gardeners.

Clark County Extension

Farm/City Night

The Clark County Extension Council hosted the 37th annual Farm/City Night on March 11, 2023, at the CCR-1 Middle School in Kahoka, Missouri with over 300 people in attendance. Clark County Farm Bureau served a soup and sandwich supper and local businesses set up display booths. Century Farm designations were presented to the Hall Family, James Verlin McAfee, and Ed & Debbie Otte. Teri Hooper and David Boltz received Leaders Honor Roll for their contributions to University of Missouri Extension through their leadership and service to the community. The audience enjoyed The Peterson Farm Brother, who are entertaining and educational agriculturalists. The Extension Council is grateful for the community support in the planning and preparation for Farm/City Night.









Century Farms

The Missouri Century Farms program has been recognizing farms since 1976. This program has been sustained as an annual event with over 100 farms being recognized each year. In 2008, the Missouri Farm Bureau became a cosponsor along with University of Missouri's College of Agriculture, Food, and Natural Resources and University of Missouri Extension of the Missouri Century Farm Program. The Century Farm program recognizes farms with at least 40 acres of land that have been owned by the same family for over 100 years, and still make a financial contribution to the overall farm income. The Clark County Extension Council was proud to recognize the 2023 Missouri Century Farm recipients: Hall Family, James Verlin McAfee, and Ed & Debbie Otte.

State Fair Farm Family

The Brad and Heather Nelson family were selected as the 2022-2023 Clark County State Fair Farm Family. Brad and Heather, along with children Caleb and Jedidiah, will join over 100 other families during the Farm Family Day of the 2023 Missouri State Fair. Farm Family Day recognizes the outstanding contributions made by farm families to the state of Missouri and to Missouri agriculture. The event is sponsored by University of Missouri Extension, University Of Missouri College of Agriculture, Food and Natural Resources, Missouri State Fair, and Missouri Farm Bureau.





Clark County Fair Family

The Sam and Mary Jean Wheeler family were chosen by the Clark County University of Missouri Extension Council as recipient of the 2023 Clark County Fair Family. The Extension Council provides this award to honor families who have made major contributions through the generations to the community, 4H, University of Missouri Extension, and the Clark County Fair.

Flagship Scholarship

Hayley Shuman and Christopher Williams were selected as the 2023 Clark County recipient of the University of Missouri Flagship Scholarship. The University of Missouri Flagship Scholarship is worth up to \$15,000 per year and will cover tuition and fees, as well as other educational expenses, including room, board, and books at MU. The scholarship was made possible from a donation given by Mark McAndrew and his wife Stephanie to honor the late Jack and Ladene McAndrew, Mark's parents. Recipients give back at least 20 hours per year in their communities promoting education and college attendance.







FY23 county students

28 students

- 27 Undergraduates
- 1 Graduate and professional student
- 24 Full-time students
- 4 Part-time students
- 11 Pell grant recipients (aid year 2023)



County employees and retirees

6 people employed by UM

- 5 Campuses
- 1 MU Health Care
 0 UM retirees and beneficiaries

UM salary and retirement income: \$119,164 UM state tax revenue: \$3,365 UM federal tax revenue: \$14,588

County alumni

Selected school alumni

- 5 Nursing
- 13 Health Professions
- 2 Dentistry
- 2 Pharmacy
- 1 Optometry
- · 2 Veterinary Medicine
- 36 Agriculture
- 5 Engineering
- · 3 Law

Alumni teaching K-12

- · 4 teachers
- 4.6% of all district teachers



County breakdown

MU

- · 24 students
- 102 alumni
- 5 employees

UMKC

- 1 student
- 6 alumni
- 0 employees

Missouri S&T

- · 2 students
- · 2 alumni
- 0 employees

UMSL

- 1 student
- 3 alumni
- 0 employees

County properties and offices

MU Extension in: Clark County



County population: 6,649

(2)

County services provided

Health care (FY23)

- 205 in-state patients seen at MU Health Care, with \$226,855 of
- uncompensated care
- MU Health Care's Missouri Telehealth Network recorded 32 visits to 25 patients having ZIP codes associated with the county

Extension (2022)

- 3,727 Total educational contacts from MU Extension to residents of the county, including:
- 28 contacts related to productive farming, better gardening, and managing natural resources
- 3,699 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development

University of Missouri System

UM System Statewide Footprint

Economic and Community Development Highlights

 In 2022, Business Development Specialists worked with small businesses and entrepreneurs statewide to create or retain 81,645 jobs.





For every dollar invested from 2019 to 2021, the MU Extension Business Development Program has returned \$133 in economic impact for its clients by increasing sales more than \$1.6 billion. For a total impact of \$3.1 billion, the program has generated more. than 37,000 jobs and attracted nearly \$451 million in capital investments and \$1.5 billion in government contracts.

 Between FY17 and FY22, UM System brought Missouri more than \$1.46 billion in federal and private research funds, funded primarily from outside the state, but spent within the state.



In FY23, UM System was issued 33 patents and filed 61 new U.S. patent applications.

 In FY23, the UM System awarded 805 design and construction project contracts throughout Missouri, for a total investment of \$279.2 million in the state.



In FY23, to improve access to medical and health related services, MU Health Care's Missouri Telehealth Network's Show-Me ECHO program provided 18,381 hrs of case-based instruction to 2,938 learners located in 112 of 114 Missouri counties and the city of St. Louis.

Education and Training Provided



41,992 police, fire fighters, and medical professionals attending continuing education (2022)



Agriculture and natural resource programs served 174,692 farmers and related businesses (2022)



311,749 youth and stakeholder educational contacts in 4-H clubs, schools, camps and other programs (2022)



Education Highlights

FY23 Financial Aid Awards

In FY23, 67.3% of the UM System's 80,702 students received financial aid totaling \$973.7 million

MU		UMKC	
27,256	\$536.0M	11,859	\$217.3M
students receiving financial aid	financial aid awarded	students receiving financial aid	financial aid awarded
Missouri S&T		UMSL	
a state	And a second second	2	and a second second

6,748 students receiving linancial aid

\$117.7M linancial aid awarded

8,489 students receiving

\$102.8M

financial aid

financial ald awarded



UM System's MOREnet (Missouri Research and Education Network) provides internet connectivity, access, support and training to 58 higher education institutions (230,000 students), 485 K-12 school districts (832,000 students) and 132 public libraries (serving nearly 3 million Missourians) in 2022.

- · UM System awarded 50.5% of the 32,098 Bachelor's or higher degrees awarded by Missouri four-year public institutions in 2022-23.
- UM System awarded 36.6% of the 1,935 research doctorates and 26.9% of the 3,593 professional doctorates awarded by Missouri public and not-for-profit private institutions in 2022-23.
- In FY23, UM System's \$37.9 million in National Science Foundation (NSF) grants represented 88.3% of all NSF grants made to Missouri public colleges and universities.
- In 2023, over 10,900 Missourians accessed mobroadband.org, part of the UM System Broadband Initiative which helped the statewide build-out of high-speed internet infrastructure. MU Extension also supported residents in making individual challenges to the FCC that resulted in \$810,000 in additional funding for the state of Missouri.

Supporting the University of Missouri is an investment in the future of Missouri.

Missouri Grand Challenges: Local Solutions

CLARK COUNTY



Knowing Missouri's Needs

MU Extension asked Missourians to share the greatest challenges they and their communities face.

We heard that feedback and made big changes in the way we work with council and local partners to improve lives. Locally, a network of county engagement and subject matter specialists now share MU's knowledge, research and engagement, targeting programs, information and assistance in:

- agriculture and environment
- youth and family
- business and community
- health and safety

Economic opportunity Increase MU Extension and Engagement's

For each grand challenge, MU Extension and Engagement targets a specific gain by 2023:

> economic impact to the State of Missouri from \$1 billion to \$1.5 billion overall, and from \$88 billion to \$100 billion in agriculture, the top economic sector



Educational access and excellence Increase participation in postsecondary education from 66% to 70%

Health and well-being Improve Missouri's health ranking from 40th to 35th in the nation

Knowing Local Challenges

CHALLENGE 1: Economic Opportunity: Labor Market

Average Earnings per Job

Average earnings per job can reflect the type of economy, skill of employees, and availability of jobs and workers in an area. Average earnings is calculated by dividing total full-time and part-time employment by total earnings. Earnings is the sum of three components of personal income--wages and salaries, supplements to wages and salaries, and proprietors' income. Full-time and parttime jobs are counted at equal weight. Both employment for wages and salaries and proprietors employment are included, but the employment of unpaid family workers and volunteers is not included. Average earnings per job is a measure of the wages paid at jobs in the county not the earnings of people who live in the county. The dollar figures shown are not adjusted for inflation.





Data Source: US Department of Commerce, US Bureau of Economic Analysis Regional Economic Accounts. 2007-2022.

Labor Force Participation

The labor force participation rate is a measure of an economy's active workforce and includes people who are employed and those seeking employment. According to the 2015 - 2019 American Community Survey, of the 5,152 persons of working age in the report area, 58.33% are included in the labor force. This rate falls short of the Missouri labor force participation rate of 62.82%.

Labor Force Participation Rate

Missouri

58.33%

62.82%

Clark

Data Source: US Census Bureau, American Community Survey. 2017-21.

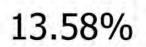


CHALLENGE 2: Educational Access and Excellence: Educational Attainment

Adult Educational Attainment

Educational attainment shows the distribution of the highest level of education achieved in the report area, and helps schools and businesses understand the needs of adults, whether it be workforce training or the ability to develop science, technology, engineering, and mathematics opportunities. Educational attainment is calculated for persons over 25 and is an estimated average for the period from 2017 to 2021.

No High School Diploma



Missouri 9.02%

Clark

Data Source: US Census Bureau, American Community Survey. 2017-21.

Bachelors Degree: 8% Graduate or

Professional

Degree: 4%

Associates

Some College: 18%

52.01 😥

Degree: 11%

Data Source: US Census Bureau, American Community Survey. 2017-21.

CHALLENGE 3: Healthy Futures: Mental Health

Deaths of Despair

This indicator reports the rate of death due to intentional selfharm (suicide), alcohol-related disease, and drug overdoses per 100,000 population. Figures are reported as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because despair is an indicator of poor mental health.





Clark

Data Source: Centers for Disease Control and Prevention, <u>CDC - National Vital</u> <u>Statistics System</u>. Accessed via <u>CDC WONDER</u>. 2014-20.

Poor Mental Health Days

In the report area, 18.1% of adults have at least some college education and 19.2% of adults have an associate's level degree or higher. However, 44.9% stopped their formal educational

attainment after completing high school, and 13.6% of adults did not complete high school.

Self-reported mental health status is a widely used measure of health-related quality of life. In 2018, adults in the report area averaged of 5.0 mentally unhealthy days per month, which is higher than the state average of 4.9. This measure of mental health status has worsened since 2014, when adults in the report area averaged 4.4 mentally unhealthy days per month.

No High School

Diploma: 14%

High School Only: 45%

Average Poor Mental Health Days per Month, 2018



Data Source: Centers for Disease Control and Prevention, <u>Behavioral Risk Factor</u> Surveillance System, Accessed via <u>County Health Rankings</u>, 2020.



CHALLENGE 4: Agricultural Growth & Stewardship: Soils Testing

Recent public initiatives and USDA programs are putting a focus on producers to improve the health of their soil. The USDA-NRCS defines soil health as the continued capacity of the soil to function as a vital, living ecosystem that sustains plants, animals and humans. A variety of practices can improve soil health, including regular monitoring, sampling and testing protocols. The MU Soil and Plant Testing Laboratory provides testing and unbiased, research-based recommendations for economically viable and environmentally safe nutrient management practices across Missouri.

Report Area	Agriculture	Home and Garden	Community Areas	Research	Total
Clark	4	3	0	41	48
Missouri	11,785	4,192	315	3,708	20,000

Data Source: University of Missouri Extension Soil and Plant Testing Laboratory Annual Summary, 2022.



Extension Clark County University of Missouri





Clark County

Missouri 4-H

4-H Members

Three in every ten Clark County youth under the age of eighteen participated in a MU Extension 4-H Youth Development program in 2023. 4-H programs are 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. Clark County served youth through 5 community clubs.

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

Clark County Enrollment

 136 club members spread between 5 different community clubs: Antioch, Ashton Cloverleafs, Fox River Clovers, Shamrock, & Willing Workers

• Over 350 4-H members were engaged in science related projects and experiences.

Antioch Club Members (right)



4-H members during the 4-H Feeding Missouri Initiative(left) by doing under this 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.

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

2023 Clark County Fair: 1108 exhibits from 4-H members and Clover Kids, 27 youth participated in a total of 9 different events

- State Fair exhibits from Clark County: 2 in 4-H building and 5 in the livestock show
- State-level Recognition forms completed: 14
- Members attending State 4-H Teen Conference:6
- Members participating in the spring Northeast Region Energizer in Kirksville: 14
- Members participating in the fall Northeast Region 4-H Round Up in Macon: 5 and 3 volunteers
 - MOVE Across Missouri participants: 3 youth
 - 2,880 meals were donated through the 4-H Feeding Missouri Initiative



Clark County

4-H Members



2022-2023 Top 4-H Project Areas:		
Arts & Crafts	Woodworking	
Photography	Beef	
Swine	Sheep	
Horse Riding	Meat Goats	
Cake Decorating	Sewing	
Gardening	Welding	



Missouri 4-H

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 Clark County youth participating in 4-H events on a college campus receive a bachelor's degree, 4-H would help young people acquire \$211,000,000 more in lifetime earnings.











Clark County

Missouri 4-H

4-H Volunteers

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.

- 131 Community Club 4-H members were supported by 27 enrolled, screened and oriented adult volunteers supporting the development of youth in 2023.
- Volunteers contributed approximately 2700 hours to the Clark County 4-H program valued at \$85,860.

4-H School Enrichment – Making Butter

During the Making Butter program, students review the transfer of energy resulting in the heavy whipping cream derived from the milk used to make the butter, as well as the chemical formula for photosynthesis which provide the glucose contained in the grass which fed the cows to produce the milk. Students learned the differences between beef cows and dairy cows, as well as breeds of each. Students also learned about the process of milling wheat into flour and making flour into bread. The learned the science behind how butter is made.

- There were 54 5th grade students in Clark County who participated in the Making Butter Experience.
- Students participated in a collective of 54 hours of learning through the "Making Butter" program.

Impacts of Programming

This program provided 54 combined hours of science and nutrition related programming for Clark County students presented by Extension faculty and staff in conjunction with the classroom teacher. Students developed an awareness of the world around them through science and connected agricultural products with where they come from, resulting in more informed consumers with an appreciation for the agricultural producers providing safe, reliable food sources. The experience provided students the opportunity to apply skills already learned in a practical, real-world situation, which helps them to see the value and application of topics learned through formal education.







Clark County

4-H School Enrichment - Embryology

During the Embryology program, students learn about the 21-day development occurring within a fertilized, incubated egg that can results 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 is 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.

Missouri 4-H

Impacts of School Enrichment 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.

There were 280 students from sixteen classrooms who participated in the Hatching Chicks in the Classroom program in 2023.
Students participated in a collective of 1800-2000 hours of learning through the "Chick it Out" program.









Missouri 4-H

Clark County 4-H Members Tell Their Story

Katie Hogan &

Vanessa Gray 4-H YS/YPA

- "The things I like best about 4-H are learning all the different skills and all the friends I have made. I like actually doing the projects but I do not like all of the paperwork. Being in 4-H has helped me be a better teammate in all the sports I play too, I have learned to be more confident and have better listening skills." - Clark County 4-H Member, 9 years old
- "The biggest thing I've learned has been self-confidence. I learned how to overcome my fear of standing in front of a group of people and speaking ot them on top of that. I learned responsibility for myself, but also how to be responsible for another living being through my animal 4-H projects. I learned that it's not about winning all the time and it's okay if you don't come in first place. I also learned that it's okay to cry and that it is hard to say goodbye to 4-H projects." - Clark County 4-H Member, 8 years old

Findings from a 2022-2023 evaluation study shows that Missouri 4-H:

Missouri 4-H Inspires Kids to Do • 100% said they are willing to work	Missouri 4-H Grows True Leaders • 100% said they like	 4-H Builds Leadership and Communication Skills 100% help others reach their goals 	 4-H Builds Social and Emotional Skills 94% said they keep trying until they
 willing to work hard on something difficult. 100% set personal goals. 100% said they try to learn from their mistakes. 100% said they treat others the way they want to be treated. 	 to learn about people who are different than them. 83% said they think about others' feelings before they say something. 83% reported feeling comfortable being a leader. 	 reach their goals. 83% are comfortable speaking in a group. 100% said they show respect for other's ideas. 67% can work with someone who made them upset. 100% Look for ways to involve all members of a group. 	 trying until they reach their goals. 89% stop to think about their choices when making a decision. 100% reported that they like to learn new things. 100% of Missouri 4- H'ers surveyed said they are willing to try something they might get wrong.







2023

Night



Zac Erwin Livestock Specialist

Clark County

24TH Missouri Livestock Symposium

The Missouri Livestock Symposium (MLS) started in 2000 as a means of providing the latest research and best management practices to area livestock producers and landowners. The MLS has evolved into an annual educational program attracting hundreds of livestock producers from across the Midwest and is considered a source for professional development by area agricultural educators and professionals. The MLS involves a 20-member all-volunteer planning committee contributing approximately 672 hours annually to planning and another 293 hours for event implementation.

The Missouri Livestock Symposium features a true multidisciplinary and cross-agency approach to program planning with a diverse committee consisting of producers, Extension specialists, University researchers, and governmental liaisons. The inclusion of diverse backgrounds and people strengthens the program direction and overall program delivery.

Agriculture and Environment

Strong attendance was noted in the 2023 Livestock Symposium. Keynote speaker, Corbitt Wall, DV Auction Market Analyst, headlined the return as he spoke about "The Packer's Playbook". Many notable topics and speakers were featured on Saturday, December 2nd as livestock producers looked for answers and interaction with the experts in livestock production.



Large crowd on hand Saturday December 2nd as Wesley Tucker, MU Extension Agribusiness Specialist speaks in the Forages Section. (left)

Corbitt Wall delivering the keynote address at the 24th Missouri Livestock Symposium. (right)







Brian Bertelson, US Premium Beef, presents to the school. (above)

Feedlot School

"Missouri was once a top 10 state for feeding cattle, but much of that institutional knowledge was lost decades ago," said Eric Bailey, assistant professor of animal sciences and state beef nutrition extension specialist. "With recent increases in packing plant capacity in Missouri, MU Extension identified a need to provide educational opportunities to farmers wanting to feed out cattle."

This is the fourth Feedlot School offered by MU Extension in recent years.

"There has been considerable interest from beef producers in northern and, specifically, northeast Missouri to explore more diversified strategies within their operations," said Zac Erwin, livestock specialist in Adair County. "Nearly a decade of slim to negative profit margins at the cow/calf level will cause producers to think about doing things differently."

With the beef industry on a slow march toward becoming more vertically integrated, Erwin said, producers that are diversified are realizing they may hold a competitive advantage. Diversification is "the ultimate risk-management strategy," he said.

Over half of the feedlot school attendees currently feed cattle in Missouri and 40% plan to begin feeding cattle in Missouri following school attendance. 96% of those that attended plan to increase their on-farm feeding capacity. The Feedlot School contributes to MU Extension's goal of doubling the economic impact of agriculture production in Missouri by 2030 through educating farmers on all aspects of cattle feeding.



Zac Erwin & Brenda Schreck *Livestock Specialist*



Agriculture and Environment

The Missouri Show-Me-Select Replacement Heifer Program strives to enhance beef herd reproductive efficiency, boost farm income and establish dependable sources of quality replacement cows in Missouri.



Since its inception more than 900 FARMS have enrolled, with an estimated statewide impact of \$200 MILLION.

Show-Me-Select Replacement Heifer Program

The Show-Me-Select program focuses on increased adoption rate by farmers in Missouri of management practices that offer potential to improve long-term reproductive efficiency of their herds and resulting profitability. Also focusing on increasing marketing opportunities for and adding value to Missouri-raised heifers with the creation of reliable sources of quality replacement heifers in terms of genetics and management.

In 2023 305 heifers were enrolled from Clark County in the Missouri Show-Me-Select Replacement heifer program. Show-Me-Select producers sell heifers in sanctioned Show-Me-Select Heifer Sales held annually at Kirksville Livestock, LLC and F & T Livestock in Palmyra, MO. SMS producers also sell in other public auctions and private treaty. In 2023, 841 Show-Me-Select heifers, totaling \$2,245,873, sold through SMS sales for an average price per head of \$2,670.

Show-Me-Select Replacement Heifer Program

Analyzing data from these sales show that Show-Me-Select tagged heifers when compared to those that do not carry the Trademarked tag, realize a 274-dollar increase in value. That equates to an added value of \$230,434 returned to participating producers in Northeast Missouri. Several area producers purchased heifers at these sales.



The Show-Me-Select (SMS) program focuses on increased adoption rate of management practices by Missouri farmers, offers potential to improve long-term herd reproductive efficiency and increases profitability. Program participants learn about the importance of pre-breeding examinations and how it affects their operation on an economic and productivity level. Three Clark County beef producers enrolled in the SMS program this year and two consigned to a sale. The northeast region has two Show-Me-Select Heifer sales held in Palmyra, Missouri each year. Five hundred and seven heifers sold in the spring and fall sales, with a combined average price of \$2,576.

The SMS program focuses on increasing marketing opportunities for, and adding value to, Missouri-raised heifers with the creation of reliable sources of quality replacement heifers in terms of genetics and management. By increasing the quality of reproductive efficiency in their beef herds, producers in northeastern Missouri added \$1,328,523 to the local economy.

Agriculture and Environment

Local Profiles and Stories

WOMEN IN AGRICULTURE WORKSHOP

Brenda Schreck

Livestock and Youth Specialist

University of Missouri Extension, Missouri Department of Agriculture, Missouri Department of Conservation, • USDA Farm Service Agency employees presented a hands-on workshop geared to women involved in agriculture in northeast Missouri. 2 Clark County workshop participants heard a state update from the Missouri Department of Agriculture Director Chris Chinn as well as presentations on soil health and testing, aging trees, fall gardening and an update on USDA FSA programs. Participants also enjoyed a hands-on activity of melting and pouring their own soaps as well as observing a candle making demonstration.

By offering programs targeting women in agriculture, MU Extension empowers women to make informed decisions about farm and home management.

92% of participants rated their overall

satisfaction of the Workshop as "very good" or better

- 87.5% of respondents rated their over
- impression of the information gained at the • Workshop
- as Very Good or better •
- 96% of respondents rated their overall •
- impression of the materials presented at the
 - Workshop as Very useful or better



Food Safety Modernization Act

Food Safety Modernization Act (FSMA) aims to ensure the United States food supply is safe by shifting the focus from responding to preventing contamination in livestock foods. MU Extension livestock specialist Brenda Schreck met with agriculture firms that provide and/or process livestock feed. Schreck created one new firm plan in the state and continues to maintain 23 in the northeast region.

•

Discussions were held on the implementation of documentation for animal feed safety preventive controls on-site, and the firm's efforts for animal feed safety as required by FDA. Feed safety manuals aid firms in maintaining accurate documentation of preventive measures as they are conducted on-site.



Nick Wesslak Agronomy Field Specialist

Clark County



Soil Sample

The regional agronomist (Nick Wesslak) and regional horticulturalists (Justin Keay and Jenniffer Schutter) oversaw the soil sampling program at the county level and made recommendations to clients based upon their soil sample results for the eight northeast counties of the state of Missouri. There was a total of 282 participants. Clark County had 11 samples processed. Participants in the soil sampling program learned about their soil fertility levels and received research-based recommendations to achieve their desired yield goal of their particular crop(s) and were able to get more in-depth recommendations from specialists, such as when a particular herbicide the producer was considering using had an application rate that was dependent upon soil texture and/or organic matter content of the soil. Marion County Extension donated a soil analysis to the Missouri Disabled Sportsmen organization and Nick aided in herbicide recommendations based upon those soil results and the sunflower crop being grown. This Missouri Disabled Sportsmen organization holds events such as dove hunts, for disabled veterans and children. The dove hunt that was conducted in 2023 occurred in Shelby County and saw close to 100 doves being collected.

Private Pesticide Applicator Training

Agriculture and Environment

The Missouri Integrated Pest Management

Program, funded by USDA grants, has been an important extension program for 30-plus years. Mizzou IPM distributes articles, pest monitoring data and publications on how to improve the application of integrated pest management strategies and systems.

The MU Soil Testing Program delivers research-based nutrient and lime recommendations to more than **32,500** customers annually.

Nick Wesslak consulted with 596 different individual agricultural contacts on topics related to row crops, forage crops, and horticulture crops across his eight different assigned counties plus two outside counties. Only 35 contacts were related to horticulture. Clark had 21 contacts.



Clark County PPAT Training 2023. (Above)

Nick Wesslak taught 28 participants for private pesticide applicator training (PPAT) in Clark County. 197 total applicants were trained for PPAT licensing by Nick Wesslak in the Northeast Region. Nick presented at the 2023 Pesticide Safety Education ISE on the MU Extension Pesticide Safety Education Program's (PSEP) Vision of Excellence, in which he covered a short history of MU Extension's PSEP program including a current state of the program update, MU Extension's PSEP program goals, and metrics of how success could be measured for PSEP programming efforts. There was a total of 50 participants at this event, which was held in Columbia.



Nick Wesslak Agronomy Field Specialist

Clark County

Agriculture and Environment

Local Profiles and Stories

Women In Agriculture Workshop

Nick Wesslak presented on soil health and soil testing at the Women in Ag event held in Lewis County. Topics he discussed were focused on soil health and an in-depth discussion of soil test reports to answer questions that typically arise when a customer receives their soil test results. There was a total of 27 participants that day. Clark had 2 participants. Nick also conducted a similar presentation for a professional development activity for the Food and Nutrition Education Program associates to help get them ready for that year's programming. More heavy focus was placed on composting and weed management in the small garden setting for the FNEP group. This event was carried out in Lewis County and had a total of 11 participants.



Nick Wesslak presenting on soil heathy and testing. (Above)



Jennifer Schutter Horticulture Specialist

Throughout the year, citizens of Clark County receive information and advice on various gardening questions, to help them make more informed choices about their vegetable gardens, flower gardens, fruit trees, soils, lawns and landscapes and soil testing.

Garden Talk Newsletter

Twenty-two people from Clark County receive a hard copy of the Garden Talk newsletter each month. The newsletter provides them with timely gardening tips and information on a variety of horticulture topics. It also includes upcoming horticulture programs and activities. Some residents receive it electronically.



Darla Campbell Field Specialist in Community Development

Missouri Farm Lease

Clark had 3 one-on-one contacts

Forty-three people attended the two farm lease classes held in 2023 offered both online and in-person. Topics included current rents and trends, items to include in a lease, terminating a farm lease, crop and livestock share arrangements and flex leases. Additionally, I answered one-on-one questions throughout the year.

The goals of farm lease education include establishing a fair lease for all parties and minimizing disputes on lease issues. Good communication and fair lease arrangements lead to less litigation, better neighbors, and higher productivity.



Mary Sobba Agriculture Business

Clark County

Extension Tax Schools

Agriculture and Environment

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 in addition a was online. 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, penalties and defenses, form 4797 sales of property, retirement tax issues, like-kind exchange 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 3,336 hours.

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

The trainings received positive evaluations and planning is underway to offer trainings in 2024. 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.

Attendance totaled 327 people from all over the state.

Clark County had three participants.





Agriculture Lender Seminars

Eighty-three lenders from 25 Missouri counties and Illinois attended this year's seminars in Mexico and Brookfield. Lenders learned about crop and livestock outlook, agriculture policy, rental rates & land values, MU budgets, input costs, USDA Farm Service Agency, and Missouri Agricultural and Small Business Development Authority (MASBDA) programs. Lenders in attendance manage 6,007 farm loans totaling \$115,500,000.

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 ag-businesses through enhanced understanding of enterprise budgets, market expectations, and other decision influencing factors affecting families' and businesses' financial health.

Clark County had six participants.



Mary Sobba Agriculture Business

Clark County

Farm Succession Planning Workshops

This past summer MU Extension partnered with Missouri Department of Agriculture (MDA) to offer succession planning for Missouri farm families. MDA received federal funding to perform mediation services for agricultural producers. Farm succession disputes were listed as an eligible category for mediation services. To increase awareness of mediation services and provide families with tools needed to navigate family conflict, MDA partnered with the University of Missouri Extension to host basic farm succession planning workshops for Missouri farm families. The workshops were designed to share tools and resources and to educate participants on the importance of the following four core concepts:

- Navigating family roles and business roles to prevent conflict
- Improving communication within the family farm business
- Sharing farm management decision-making with family during short-term crises
- Organizing a plan to transition farm ownership and management responsibilities to the next generation

A series of five workshops across Missouri reached a total of 177 attendees. There were four in-person workshops (Hannibal, Marshfield, Nevada and St. Joseph) and the fifth class was held online via Zoom. The total number of

participants was 177.



Participant Feedback:

A total of 92 evaluations were returned. Participants were satisfied with the program. All respondents said they would recommend the training workshop to others. On a scale of one to four, with four being very satisfied, the workshops were ranked 3.6 or higher across five satisfaction categories. No participant said they were "not satisfied" with any part of the training.

Agriculture and Environment

Participants reported gaining new knowledge: The workshops were successful at helping participants gain new knowledge in the four key subjects. Survey respondents were asked at the end of each session to rate their knowledge on four concepts before the training (pre-test) and after the training (post-test). Participants were offered a 1 to 5 scale and asked to rate their knowledge from 1 (very low) to 5 (very high). After the training, participants offered an assessment of a 3.9 or higher indicating they felt their knowledge on the concept was "high". This assessment was higher than their perceived level of knowledge before the training began in all four categories.

More than half of all respondents indicated the intention to act

The workshops focused on providing tools to assist farm families in preparing to start farm succession planning. Practical handouts were created for each of the four core concepts and were provided in print to attendees, or electronically to Zoom registrants. In addition, the presentation named a series of suggested next steps to again encourage farm families to act. Through the evaluation summaries, more than half of all respondents indicated they intend to start addressing farm succession planning by taking one of four next steps (1) start a plan to adjust roles on the farm in the next five years, (2) schedule a family council meeting, (3) use a short-term operating plan, (4) tell someone about MDA's ag mediation services.

Farm succession planning benefits individuals and families by increasing the understanding and knowledge, leading to improved communication, and eventually leading to transitioning farm businesses. Succession planning builds stronger families. Farm businesses that successfully transition to the next generation contribute to the local tax base and contribute to vibrate and strong rural economies.

Health and Human Sciences

Supplemental Nutrition Assistance Program Education (SNAP-Ed)

The Supplemental Nutrition Assistance Program Education (SNAP-Education or SNAP-Ed) brought \$10,874,798 in federal funds to Missouri. During FY2023, Missouri's SNAP-Ed program reached over 78,000 Missourians through direct classroom education. Each person participated in an average of 6 hours of education totaling over 15,000 hours. In addition, an additional 760,135 persons participated in indirect education. Direct and indirect education resulted in over 1.8 million total contacts with Missourians.

Wendy Atterberg, NPA

Family Nutrition Education

A total of 527 participants were from Clark 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.



Schools	Agencies
Black Hawk Elementary	Giggles and Grins – Day Care
Clark County Middle School	Clark County Sr. Center
Running Fox Elementary	Kahoka Resource Center

Success stories from direct programming efforts:

For my Kindergarten classes this year I have been reading some of the different approved books with my lessons for something different for me. The kids have really enjoyed them. Today I read Mr. Putter and Tabby spill the beans and they didn't think it was long at all as they sat so quietly listening to the story. We then tried the edamame and again they did a great job trying something very different to them. Not only was it something different to the kids it was also something new for the adults in the classroom. One of the teachers said she was going to buy it to fix for her family.

I am doing some lessons at one of my local daycares that always look forward to me coming in the summer. I really enjoy doing the activities and lessons outside when we can.



Health and Human Sciences

Local Profiles and Stories

Carrie Elsen &

Houser

ennifer Eldridge

Field Specialist in Nutrition & Health



A Matter of Balance helps older adults overcome their fear of falling, increase their activity levels and reduce their risk of falls. In eight classes, participants learn fall-prevention strategies, develop personal prevention plans, acquire balance-improving exercises and make lifestyle changes to minimize their fear of falling.

"I have cleaned my house of clutter for safety, put non-slip stickers on my tub floor, I'm getting much more regular exercise and I'm feeling stronger."

Matter of Balance

Session dates: 8/14/2023 - 10/16/2023

Jennifer Eldridge Houser and Carrie Elsen co-taught Matter of Balance to 8 participants. This course was marketed and delivered in Kahoka MO at the Clark County Senior Center.. MOB program is for older adults who experience concerns about falling and restricting their activities. A Matter of Balance is an award-winning, evidence-based program designed to manage falls and increase activity levels. This program emphasizes practical strategies to manage falls. Participants learned to view falls as controllable, set goals for increasing activity, make changes to reduce fall risks at home, and exercise to increase strength and balance. This program had 8 people registered that includes 64 contacts.

Participant Feedback:

One Female participant, "strongly agreed that she feels more comfortable talking to a health care provider, and family, increasing activity satisfied with life, and plans to exercise after this program."



Jennifer Eldridge Houser Field Specialist in Nutrition & Health

Clark County



Health and Human Sciences

Stay Strong, Stay Healthy teaches older adults easy yet powerful exercises to boost strength, balance and daily life capabilities. Participants also gain insights into nutrition for healthy aging and active living.

After eight weeks, Stay Strong, Stay Healthy participants significantly IMPROVED their STRENGTH, BALANCE and SLEEP QUALITY.

Stay Strong, Stay Healthy

Session Dates: June 5th through August 9th. We met twice a week (Mon and Wed) from 1-2pm at the Clark County Senior Center.

In hourlong courses held twice a week, trained and certified instructor, Jenn Eldridge, lead participants through a warmup, easy-to-learn strength exercises and a cool-down. SSSH exercises are safe and effective, and we provided weights for student's use on-site. After the course Jenn provided students with a guide to use to continue strength training in the comfort of their homes.

I presented at the Northeast Family and Community Education Fall District Meeting in Kahoka by invitation from a participant in one of the classes I taught in Clark County as a Nutrition and Health Education Specialist. I spoke on the topic, "Life Expectancy: the keys to a long life". I brought my own projector, and we reviewed national, state and local statistics and discussed what we could do individually to live a longer life. The presentation was a combination of PowerPoint slides and group discussion. Folks were eager to share examples about how they had developed meaningful connections and what it has meant to them and others over the years. I asked them to write anything they had learned or how I could improve on post-it notes.

Participant Feedback:

- Enjoyed it all. Enjoyed the slides about each county and states. Keep up the good work.
- Thank you for the lovely program. Definitely will read the Blues Zones
- Liked the top 9 things at last that centenarians lived and helped them best things to remember

Gave a presentation for presentation to the FCE Regional Conference in Clark County at Steve's Steve's Family Dining on October 19 titled, "How to live to 100"



