



UNIVERSITY OF MISSOURI EXTENSION

Knox County

2023 Annual Report

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**SERVE
MISSOURI.**

**DELIVER
MIZZOU.**



Extension
University of Missouri

an equal opportunity/ADA institution



Office of Extension
and Engagement
University of Missouri

OFFICE OF THE VICE CHANCELLOR
FOR EXTENSION AND ENGAGEMENT
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Columbia, MO 65211
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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,

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

Who we are

Faculty and staff



Crystal Murr
4-H Youth Program Associate

Jennifer Eldridge-Houser
PhD, Community Health Engagement Specialist

Jill Talbot
County Office Support

Lisa Doster
Extension Engagement Specialist

Zac Erwin
Livestock Specialist

Jennifer Schutter
Horticulture Specialist

Nick Wesslak
Agronomy Specialist

Carrie Elsen
Nutrition and Health Specialist

Jeremiah Terrell
Human Development Specialist

Council members

Andrew Hodge, Chairman
Chase Brenizer, Vice-chairman
Lisa Bosch, Secretary
Miranda Glasgow, Treasurer
David Fagin
Karie Holman
Frances Jones
Mike Ellison
Jeffrey Doss
Sadie Moore
Nancy Douglas
Matthew Reel
Lisa Penn
Tracy Mallett
Delmar Strange
Ronnie Leckbee



County commissioners

Les Cardwell, Presiding Commissioner
Ronnie Leckbee, Eastern District Commissioner
Luther Green, Western District Commissioner

Budget and more

Appropriations budget

Income

County Appropriations **54,436**

Expenses

Salaries/Benefits 51,997

Part Time Clerical 1,000

Payroll Taxes/Liabilities 2,160

Telephone 1,439

Total Expenses 56,596



Extension
Knox County
University of Missouri

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



Local Support

Did you know you can donate directly to Knox 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.

UM System County Impacts

2024 UM Systemwide Impact Data Sheets



University of Missouri System
COLUMBIA | KANSAS CITY | ROLLA | ST. LOUIS

Knox County

UM System Footprint in the county in 2023



FY23 county students

12 students

- 10 Undergraduates
- 2 Graduate and professional students
- 9 Full-time students
- 3 Part-time students



County employees and retirees

13 people employed by UM

- 9 Campuses
- 4 MU Health Care

4 UM retirees and beneficiaries

UM salary and retirement income:

\$865,314

UM state tax revenue: \$27,614

UM federal tax revenue: \$131,343



County alumni

Selected school alumni

- 1 Medicine
- 8 Nursing
- 9 Health Professions
- 1 Dentistry
- 3 Veterinary Medicine
- 47 Agriculture
- 12 Engineering
- 3 Law

Alumni teaching K-12

- 6 teachers
- 12.8% of all district teachers
- 1 principal or administrator
- 50.0% of all district principals and administrators



County breakdown

MU

- 9 students
- 100 alumni
- 9 employees

UMKC

- 1 student
- 4 alumni
- 0 employees

Missouri S&T

- 2 students
- 10 alumni
- 0 employees

UMSL

- 0 students
- 4 alumni
- 0 employees



County properties and offices

MU Extension in: Knox County



County population: 3,782



County services provided

Health care (FY23)

- 461 in-state patients seen at MU Health Care, with \$223,594 of uncompensated care
- MU Health Care's Missouri Telehealth Network recorded 136 visits to 95 patients having ZIP codes associated with the county

Extension (2022)

- 1,132 Total educational contacts from MU Extension to residents of the county, including:
- 121 contacts related to productive farming, better gardening, and managing natural resources
- 1,011 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development



The university advances Missouri citizens and communities through its mission of teaching, research, public service, and economic development across our four campuses and University of Missouri Extension.

Prepared in December 2023, based on the best available and most recent data. Data sources include: Missouri Office of Administration • UM IR • MU Institute for Public Policy • Center for Applied Research and Engagement Systems (CARES) • MU • UMKC • Missouri S&T • UMSL • UM System • UM Health Care • MU Extension • US Census Bureau • US Dept. of Health and Human Services • National Science Foundation

UM System County Impacts

2024 UM Systemwide Impact Data Sheets

Knox County

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.



\$3.1
billion

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)



University of Missouri System
COLUMBIA | KANSAS CITY | ROLLA | ST. LOUIS

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

27,256

students receiving financial aid

\$536.0M

financial aid awarded

UMKC

11,859

students receiving financial aid

\$217.3M

financial aid awarded

Missouri S&T

6,748

students receiving financial aid

\$117.7M

financial aid awarded

UMSL

8,489

students receiving financial aid

\$102.8M

financial aid awarded



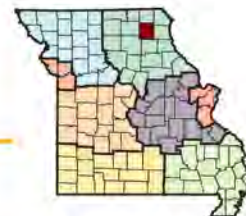
UM System's MOREnet (Missouri Research and Education Network) provides internet connectivity, access, support and training to 58 higher education institutions (230,000 students), 485 K-12 school districts (832,000 students) and 132 public libraries (serving nearly 3 million Missourians) in 2022.

- 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

KNOX 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

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



Economic opportunity

Increase MU Extension and Engagement's 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: *Economic Mobility*

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 part-time 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.

2022 Average Earnings (\$)

\$34,802

Knox



Missouri

\$62,528 🟡

Data Source: US Department of Commerce, [US Bureau of Economic Analysis Regional Economic Accounts](#). 2007-2022.

Cost-Burdened Households (30%)

Cost-burdened households, where housing costs exceed 30% of total annual household income, is one measure of the relationship between cost of living and income. Households with high housing costs have fewer dollars remaining for other expenditures and are more likely to live paycheck-to-paycheck. The 19.06% of households in the report area are considered cost-burdened. This is below the state average of 24.99%.

Cost-Burdened Households, Percent

19.06%

Knox

Missouri

24.99%

Data Source: US Census Bureau, [American Community Survey](#), 2017-21.

Missouri Grand Challenges: Local Solutions



KNOX COUNTY

Knowing Missouri's Needs

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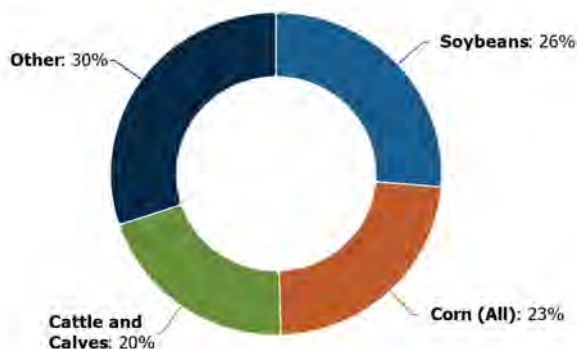
Knowing Local Challenges



CHALLENGE 1: Economic Opportunity: Agricultural Economics

Leading Agricultural Products

Total Commodity Sales: \$97,852,000



Data Source: US Department of Agriculture, National Agricultural Statistics Service, [Census of Agriculture](#). 2017.

Net Farm Income

Net farm income (total sales, government payments, and other farm-related income minus total farm expenses) reflects the strength of the local agricultural community and can be an important measure for lenders and policy makers. The report area had a combined net farm income of \$23,573,000 in 2017, an average of \$37,006 per farm. This compares favorably to the statewide average farm income of \$29,485.

Report Area	Total Farms	Average Farm Income
Knox	637	\$37,006
Missouri	95,320	\$29,485

Data Source: US Department of Agriculture, National Agricultural Statistics Service, [Census of Agriculture](#). 2017.

Grand Challenges



CHALLENGE 2: Educational Access and Excellence: *Early Childhood Education*

Access to Early Childhood Education

Head Start is an early childhood education program for at-risk children through age 5. Families utilizing Head Start have better success meeting developmental goals and achieving economic stability. In 2018, there were 2 Head Start programs in the report area, or 75.76 per 10,000 population. Access to head start is higher in this area than in the state.

Head Start Programs, Rate (Per 10,000 Children Under Age 5)

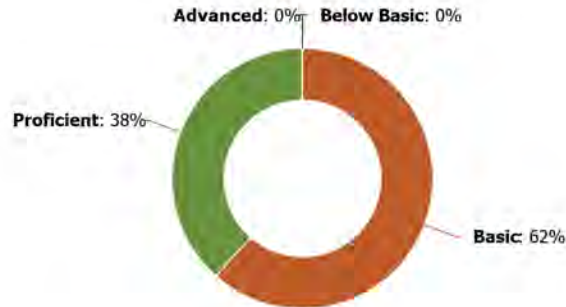
75.76 Missouri 11.76

Knox

Data Source: US Department of Health & Human Services, [HRSA - Administration for Children and Families](#), 2022.

English Language Arts Proficiency

Starting in the 4th grade, public schools emphasize proficiency in reading and reading comprehension. The ability to comprehend becomes the foundation to find and process information in later years and it is important to prevent children from falling behind. Of the 30.00 fourth graders tested in 2018, the known total number of students who had a basic level of English Language Arts was 16.00. The number tested as below basic was 0.00, basic was 16.00, proficient was 10.00, and advanced was 0.00.



Data Source: [Missouri Department of Elementary & Secondary Education](#), 2022.



CHALLENGE 3: Healthy Futures: *Mental Health*

Deaths of Despair

This indicator reports the rate of death due to intentional self-harm (suicide), alcohol-related disease, and drug overdoses per 100,000 population. Figures are reported as rates age-adjusted to year 2000 standard. Rates are resummairized 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.

Mortality Rate, 2014-2020

Suppressed Missouri 52.01 😞

Knox

Data Source: Centers for Disease Control and Prevention, [CDC - National Vital Statistics System](#). Accessed via [CDC WONDER](#), 2014-20.

Poor Mental Health Days

Self-reported mental health status is a widely used measure of health-related quality of life. In 2020, adults in the report area averaged of 5.1 mentally unhealthy days per month, which is higher than the state average of 4.9. This measure of mental health status has worsened since 2016, when adults in the report area averaged 4.4 mentally unhealthy days per month.

Average Poor Mental Health Days per Month, 2020

5.1 Missouri 4.9 😞

Knox



Data Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](#). Accessed via [County Health Rankings](#), 2020.

CHALLENGE 4: Agriculture: *Value Added from Agriculture*

Value-added agriculture refers to production or manufacturing processes, marketing, or services that increase the value of primary agricultural commodities. In 2021, the total value-added derived from agriculture, forestry and related economic activity was an estimated \$34.9 billion. Meat processing, food processing, animal and pet food manufacturing, and crop production and related industries are Missouri's top value-added products: \$9.5 billion and 155,425 jobs from livestock production and related industries alone. [Learn more about Missouri Agriculture's Economic Impact.](#)

Percent of Total Value Added from Agriculture

53.70 Missouri 21.98

Knox



MU EXTENSION **Serves MISSOURI and Delivers MIZZOU** through credible statewide programs

Missouri 4-H for ages 8 – 18



Community clubs are organized by volunteer club leaders and teams of recognized volunteers. Members attend club meetings, elect officers, enroll in projects and plan learning and community service activities. Some clubs opt to be single-project clubs, where all members focus on the same project.



4-H Natural Resources programs employ hands-on activities in climate science, environmental sustainability, renewable energy, sportfishing and wildlife conservation. The **Shooting Sports program**, which teaches marksmanship, safe firearm use, hunting and archery principles, is a prime illustration of how 4-H programs promote holistic youth development and responsible citizenship. Supported by caring adult leaders, these programs offer opportunities to cultivate life skills, self-worth and conservation ethics.



Missouri 4-H Agriculture and STEM programs employ hands-on activities that foster problem-solving, creativity, critical thinking and exploration in engineering and technology. Agriculture programming emphasizes biology, environmental science, agri-science, veterinary science and engaging activities such as animal care and agronomy. STEM programs delve into computer science, robotics, aerospace, physics, chemistry and veterinary science.



Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Knox County

Missouri 4-H

Local Impact

A community of 250 youth building life skills, contributing to their community, and becoming college and career ready.

Two in every five Knox County youth under the age of eighteen participated in a MU Extension 4-H Youth Development program in 2023.

4-H Members

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 can concentrate on one focus area, or they can try a variety of programs throughout their 4-H experience.

Knox County served youth through three community clubs, two SPIN Clubs, three In-school 4-H Clubs, and one After-school 4-H Club offering long-term educational experiences in which members learn life skills such as decision making, public speaking, and working with others.

- There were 75 members enrolled in community clubs in Knox County during the 2022-2023 4-H Year.
- Over 90% of 4-H members were engaged in science related projects and experiences.
- Collectively youth participated in 825 hours of community club work in Knox County.
- More than 175 hours of community service projects were completed by 4-H members and volunteers during the 2022-2023 4-H Year.

4-H Volunteers

- Knox County 4-H members were supported by 47 enrolled, screened and oriented adult volunteers supporting the development of youth in 2023.
- Volunteers contributed approximately 4,000 hours to the Knox County 4-H program valued at nearly \$150,000.

4-H Projects

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 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.

Knox County 4-H community club members enrolled in a combined total of 192 projects in 2023. The top project areas included:

- CLOVER KIDS
- BEEF
- OUTDOORS ADVENTURES (HIKING)
- PHOTOGRAPHY
- ARTS & CRAFTS
- SWINE
- SHOOTING SPORTS
- HORSELESS HORSE & HORSE KNOWLEDGE
- HORSE RIDING
- ROBOTICS



Knox County

Missouri 4-H

Local Profiles and Stories



State 4-H Fashion Revue 2023

Michaela (right) represented Knox County for the third year in a row at the state 4-H Fashion Revue and competed in the Senior Division of Purchased Casual. Bella (left) competed in the Senior Division of Purchased Dressy and placed third in her category.

Fair Participation

- There were 283 exhibits at the 2023 Knox County 4-H/FFA Fair from 45 4-H members and 7 FFA members, who are also supported through youth programming. 38 4-H and FFA members exhibited 157 entries in the Art Hall Division.
- 18 Knox County youth exhibited 10 entries in the 4-H Building and 35 entries in livestock shows at the Missouri State Fair.



Horseless Horse and Horse Riding

The Horseless Horse and Horse Knowledge project was led by 4-H volunteer and Knox County Office Support, Jill Talbot and her daughter, Lexi.

Horseless Horse and Horse Knowledge is for all members who want to learn about horses, including those without their own horse or pony. Horse Riding introduces basic riding skills and styles. Because a member's knowledge might be at a different level from his or her riding skills, members may sign up for both projects.



Photo by Echo Menges, The Edina Sentinel



MU EXTENSION **Serves MISSOURI and Delivers MIZZOU** through credible statewide programs

Missouri 4-H for ages 8 – 18



4-H In-school clubs meet during the school day. Members participate in projects that supplement their existing lessons. Clubs may meet for short periods or span the full 4-H program year. Members can elect officers and plan learning activities with options of public speaking, community service and links to career readiness.



A **SPIN club** focuses on a specific topic led by an expert in the field. While community clubs may meet over the full 4-H program year, SPIN clubs meet for set periods, typically from several weeks to a couple months. SPIN clubs can elect officers and plan learning activities with options of public speaking, community service and links to career readiness.



4-H's Healthy Living programming teaches skills for healthy choices and lifestyles, enhancing overall well-being and equipping youths to tackle life's challenges. Emphasizing social-emotional health, 4-H fitness, health, nutrition and safety programs cultivate confident, caring young leaders who prioritize mental and physical well-being.

Legend



Agricultural Growth
& Stewardship



Economic
Opportunity



Educational
Access &
Excellence



Health
& Well-Being

Knox County

Missouri 4-H

Local Profiles and Stories



4-H SNAC Kids in the Kitchen

Twenty-seven Knox County R-1 fourth-grade students participated in Missouri's Student Nutrition Advisory Council (SNAC) Initiative, developed in collaboration with MU Extension Family Nutrition Education program.

4-H SNAC creates 4-H clubs that focus on teaching nutrition in combination with leadership and citizenship skills which are central to 4-H. This curriculum encourages youth to eat healthier meals and snacks, because of hands-on cooking experiences.



Soccer for Success 4-H SNAC Club

Knox County 4-H Council President Chase Brenizer and 4-H YPA Crystal Murr partnered with KCR-1 Elementary to bring Soccer for Success 4-H SNAC Club to summer school students in June. There were 18 graduates in grades 3-5 enrolled in 2023.

Soccer for Success is a sports-based youth development program that creates positive social change in underserved communities. The program was built by the U.S. Soccer Foundation and its partners to teach healthy lifestyles through the game of soccer to youth in communities. National 4-H Council and Missouri 4-H have formed partnerships for program implementation as part of Missouri's Healthy Habits and 4-H healthy living program offerings, in addition to being approved for Missouri's Student Nutrition Advisory Council (SNAC) Initiative, developed in collaboration with MU Extension Family Nutrition Education program.

Soccer equipment and jerseys were funded in part by the Missouri 4-H Foundation, 4-H Healthy Habits grant, and Knox County Extension.

The Missouri 4-H Foundation collaborated with Healthy Blue to offer mini grants of up to \$500 per county to help 4-H SNAC clubs across the State of Missouri implement leadership projects. 36 counties were awarded a total of \$18,000 through this mini grant, including two in Knox County.



Knox County

Missouri 4-H

Local Profiles and Stories



Knox County 4-H/FFA Fair Royalty

King Carter (top left) "At first, I joined 4-H because I really wanted to go shoot guns with my friends, but then I thought it helped me with being a better person."

Prince Kayden (top right) "What I like most about 4-H is the different projects you can join and the friendships you make. I have also been involved in many community service projects, my favorite being 4-H Feeding Missouri."

Princess Nora (bottom left) "I joined 4-H because I love animals and wanted to show them. I remember going to my older brother's 4-H meetings and thinking I can't wait to be old enough to go to my own meetings."

Knox County

Missouri 4-H

Local Profiles and Stories



4-H School Enrichment-Embryology

Forty-one Knox County youth participated in the "Chick It Out" 4-H Embryology program. The students cared for their fertilized eggs during incubation, learned about chick development and observed the chicks after they hatched. Core teaching material covers operation of the incubator, embryonic development, and nutrition. Knox County educators say the program adds value to science class within the topics of animal nutrition, animal development, electricity, human nutrition, human development, disabilities, death, and incubator mechanics.

Crystal Murr, 4-H YPA gave presentations at each location, which included education about chick development, egg dissection, candling eggs, the 21-day chick cycle, and STEM experiments.



Knox County 4-H Feeding Missouri

In our partnership with Feeding Missouri and Missouri Farmers Care Drive to Feed Kids, counties engaged in a friendly competition to combat food insecurity by volunteering and collecting food and funds. From Jan - April 4-H members competed to raise meals for local families through food drives, fundraisers, volunteer work, and educational activities. This year, Knox County 4-H collected 370 lbs. of food, volunteered almost 50 hours of community service, and donated \$10 to the Knox County Food Cupboard, valued at more than 4,500 meals for Knox County residents.





MU EXTENSION **Serves MISSOURI and Delivers MIZZOU**
 through credible statewide programs
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.



The Missouri Master Gardener program

enables people of all ages to get in-depth horticultural training and then apply what they've learned to improve their communities and educate others about gardening.



In 2022, almost 4,000 Missouri Master Gardeners completed over 133,000 VOLUNTEER HOURS throughout the state.



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.

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Knox County

Agriculture and Environment

Local Impact

Agronomy:

There were 18 participants from Knox County who attended the PPAT training and received licensing.



Farm Succession Planning:

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. Knox County had 1 participant.

Women in Agriculture:

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. Three Knox 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.



Knox County

Agriculture and Environment

Local Profiles and Stories



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

Feedlot School:

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.

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, **539** heifers were enrolled from **Knox** 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. 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.



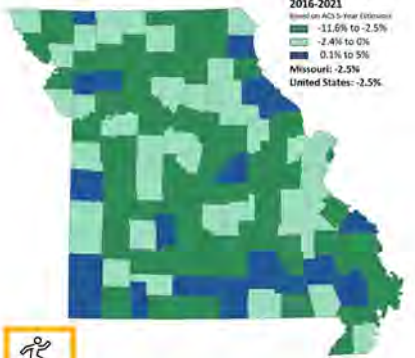


MU EXTENSION **Serves MISSOURI and Delivers MIZZOU** through credible statewide programs **Business and Community**



The annual **Connecting Entrepreneurial Communities** conference is designed for stakeholders, economic developers, businesses, local government, educators and nonprofits interested in increasing their communities' potential for entrepreneurship. In 2023, the conference offered breakout sessions in Benton County's shops and businesses, providing firsthand insight into the world of entrepreneurial communities.

The 2023 conference drew **104 ATTENDEES**, generating an estimated initial economic impact of around **\$33,000 FOR BENTON COUNTY**.



The **Missouri Economy Indicators (MEI)** series explores business, industry and workforce topics that affect Missouri's economy. The data is shared through newsletters and on social media. MU Extension faculty and staff receive talking points and collateral to share with local stakeholders.

In 2022, MEI published 15 issues, and MEI online resources were accessed MORE THAN 5,000 TIMES. Two out of five MEI newsletter recipients reported using the information to help guide policy or decision-making in their work.



Missourians from all walks of life celebrated the **2023 Missouri Good Neighbor Week**, Sept. 28 to Oct. 4, by completing and reporting neighboring acts and nominating others as the most engaged neighbors in their counties.

In 2023, the goal was to document 15,000 acts of neighboring. That goal was surpassed with 19,752 Missourians being positively affected during MISSOURI GOOD NEIGHBOR WEEK.

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



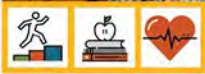
Health & Well-Being



MU EXTENSION **Serves MISSOURI and Delivers MIZZOU**
 through credible statewide programs
Community and Professional Health Education



The **Missouri Research-Extension** (MO-RE) Protocol program focuses on strengthening the bridge between leading scientific research and community-based practice by creating a dissemination and implementation protocol that will facilitate acceleration of relevant knowledge into the most vulnerable Missouri communities through Community Health Engagement and Outreach.



Adverse childhood experiences (ACEs) can lead to trauma and increased risks of substance use disorders, including opioid and alcohol misuse.

Show-Me ACEs

- offers educational opportunities to professionals, communities, and individuals to help mitigate the impact of ACEs within communities
- empowers individuals to make trauma-informed decisions related to ACEs and chronic stress



Resilience is the capacity to adapt when faced with adversity. **WeCanPROSPER Resilience Training** is a 2.5 hour training for participants to evaluate their personal resilience, tap into resources and create an action plan to enhance their resilience.

100% of participants indicate that the skills and techniques they learned will help them become **MORE RESILIENT.**

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Knox County

Community and Professional Health Education

Local Profiles and Stories



Sat at the Substance Abuse Resource table at the Family Prom and invited parents to join Bright Futures on April 23rd.



Presented an oral presentation at the Mid America Regional Council Age Positive Conference in Kansas City, MO

Stay Strong, Stay Healthy



A class designed to help folks build the strength they need to enjoy good health as they age. Stay Strong, Stay Healthy (SSSH) is an eight-week exercise program that incorporates the latest research to help participants develop the fitness, flexibility and balance that will enable them to live independently longer.

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. Taught a Virtual Stay Strong Stay Healthy every Tuesday and Thursday 2:30-3:30 May 30th – July 27th

Make "tastings" and set up a booth to promote classes in Knox County on April 13th. Health Fair booth at the Knox County Community Center on April 13th.





MU EXTENSION **Serves MISSOURI and Delivers MIZZOU**
 through credible statewide programs
First Responder Education



Established in 2002, the **Fire Officer Certificate Program** is designed for those who wish to further their professional development without the time and expense of traditional college classes. This program has been developed and evaluated to ensure it provides structured curriculum delivery and academic rigor. The program requires completion of 288 hours of instruction within three years.



The LETI **School Protection Officer Program** provides basic training for school faculty and administrators to become school protection officers. The three-week academy typically runs during June and exceeds the hourly requirements for state recognition and certification.



LETI's **National Animal Cruelty Investigations School** provides training on investigating abuse and neglect of animals. Multi-level courses prepare future animal care workers to handle most types of incidents. Several jurisdictions throughout the country require the National Animal Cruelty Investigations School's training for employment as animal cruelty investigators.

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being



MU EXTENSION **Serves MISSOURI and Delivers MIZZOU**
 through credible statewide programs
Health and Human Sciences



Studies show that people with strong family bonds tend to have lower stress levels.

Building Strong Families helps families amplify their strengths, tackle challenges and make confident, informed decisions to build resilient family units.

“This course made me more self-sufficient and improved my family’s access to quality food.”



MU Extension offers research-based **home food preservation** courses and publications to help people cut food waste and save money.



Mental Health First Aid equips people to recognize and respond to signs of mental illness and substance use disorders.

The youth version of the program is designed to support adolescents ages 12-17 facing mental health or addiction challenges, while the adult version focuses on adults age 18 and older. Participants learn how to offer initial assistance and guide individuals toward the care they need.

In Missouri, approximately 1 MILLION ADULTS and 72,000 ADOLESCENTS suffer from MENTAL HEALTH ISSUES.*

*Missouri Department of Mental Health 2020 Status Report

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Local Impact



Tackling the Tough Skills:

Tackling the Tough Skills is a two-hour, five session, curriculum for building “soft skills” for work and life.

Topics include Attitude, Responsibility, Communication, Problem Solving, Preparing for the Workplace.

Participants were able to:

- Recognize how their attitudes have affected their lives
- Brainstorm ways to change negative self-attitudes
- Recognize their personal strengths, and see how in doing so they felt more responsibility in their lives
- Consider what commitments they were willing to make and to keep
- Make a plan for the future

This program had 30 contacts in Knox County and was delivered in partnership with the 2nd Circuit Treatment Court.



Cooking Matters Edina:

Carrie Elsen was the instructor for the Cooking Matters program, specifically Cooking Matters for Adults, and taught this course at Knox County at the Community building in Edina. I marketed the program to the 2nd Circuit Treatment Court Program participants. I had 9 individuals participating in the class from Knox and Lewis Counties. The course focuses on how to prepare healthy delicious meals, health literacy skills and education, and cost saving measures for home cooking. **Customer quotes from the class included:** “Everything was fun and very exciting! It was very beneficial to my life.” - Female Participant. “It taught me healthy alternatives and I love it- Female Participant” - Female participant. “I am learning how to cook, and my kids are loving it”- Male Participant.



Freeze It!:

Carrie Elsen was then instructor for the Edina, MO Class: The Freezer Meal Solutions Class started in May with the 2nd Circuit Treatment Court Program participants at the Community Building from 5:00 pm to 7:00 pm. The **Freeze It! Program** focuses on the nutritional aspects of food, how food impacts our lifestyles, and health. This course is important to consumers because one-third of Americans eat fast food daily (AARP, 2018). Fast food consumption increases fat, sodium, and calorie intake (CDC, 2018). Adults have decreased consumption of home-prepared foods since 1965. Meal planning relates to healthier diets and less obesity (Drucrot et al., 2017). The MU Freezer It! curriculum is newly piloted and designed to increase the frequency of home-prepared meals by teaching freezer preservation, meal preparation, and food-waste reduction. I had 10 individuals participating in the class from Knox and Lewis Counties. 40 contacts