







UNIVERSITY OF MISSOURI EXTENSION

# **Lincoln County**

2023 Annual Report

SERVE MISSOURI.

DELIVER MIZZOU.

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### OFFICE OF THE VICE CHANCELLOR FOR EXTENSION AND ENGAGEMENT

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PHONE 573-882-2394

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,

Chad Higgins, PhD

Chal Hijs

Interim Vice Chancellor, MU Extension and Engagement

Chief Engagement Officer, UM System

### Who we are

### **Faculty and staff**



Rhonda Shafer Field Specialist in 4-H Youth Development

Charles Ellis Field Specialist in Agricultural Engineering

Lauren Richardson Nutrition Program Associate

Betty Schlueter Office Support

Justin Keay Field Specialist in Horticulture

Brianna Anderson Field Specialist in Human Development

Rusty Lee Field Specialist in Agronomy

Tyler Hall Field Specialist in Nutrition and Health

Mary Sobba Field Specialist in Ag Business

Daniel Mallory Field Specialist in Livestock

Matthew Herring
East Central Regional Director

Elizabeth Anderson Extension and Engagement Specialist

### Council members 2023-2024

Nann Green, Chair
Amanda Grimstead, Vice Chair
Anna Noxon, Secretary
Paul Dudley, Treasurer
Richard Hardy
Jessica Heisner
Sharon Keim
Theresa Pope
Tony Ryan
Larry Shramek
Melissa Skibinski
Joseph Kaimann – Commissioner
Steven Jones – City of Troy



Special thank you to Betty Schlueter for over 49 years of service – have a wonderful retirement!

### **County commissioners**

Joseph Kaimann
Presiding Commissioner

Mike Mueller Associate Commissioner District 1

Matt Bass Associate Commissioner District 2

### **Budget and more**

### **Appropriations budget**

Income County Appropriations Funds Reallocation Total Income	77,500 12,764 <b>90,264</b>
Expenses	
Salaries/Benefits	52,750
Travel	2,620
Postage	2,264
Telephone	2,110
Office Supplies/Service	9,153
Utilities	2,846
Insurance	3,446
Capital Repairs	15,075
Total Expenses	90,264

# Keep up with MU Extension in Lincoln County!

Follow us on Facebook!



Check out our website: https://extension.missouri.edu/counties/lincoln

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



### **Local Support**

Did you know you can donate directly to Lincoln 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

### **Lincoln County**



### UM System Footprint in the county in 2023



#### FY23 county students

#### 403 students

- 339 Undergraduates
- 64 Graduate and professional students
- 299 Full-time students
- 104 Part-time students
- · 86 Pell grant recipients (aid year 2023)



#### County employees and retirees

#### 55 people employed by UM

- 48 Campuses
- · 6 MU Health Care
- 1 UM System

9 UM retirees and beneficiaries UM salary and retirement income: \$2.2 million

UM state tax revenue: \$71,470 UM federal tax revenue: \$361,724



### County alumni

#### Selected school alumni

- 2 Medicine
- 147 Nursing
- 63 Health Professions
- · 8 Dentistry
- 4 Pharmacy
- 1 Optometry
- · 27 Veterinary Medicine
- 323 Agriculture
- 213 Engineering
- 24 Law

#### Alumni teaching K-12

- · 125 teachers
- · 17.8% of all district teachers
- · 9 principals and administrators
- 23.7% of all district principals and administrators



#### County breakdown

#### MU

- 197 students
- 936 alumni
- 31 employees

#### UMKC

- · 26 students
- · 41 alumni
- 0 employees

#### Missouri S&T

- 62 students
- 196 alumni
- 5 employees

#### UMSL

- 118 students
- 826 alumni
- 12 employees



#### County properties and offices

MU Extension in: Lincoln County



County population: 58,689



#### County services provided

#### Health care (FY23)

- 295 in-state patients seen at MU Health Care, with \$41,119 of uncompensated care
- 16 in-state patients seen at UMSL Center for Eye Care with a statewide average of \$34.82 per patient in uncompensated care
- 6 in-state patients seen at UMKC School of Dentistry with a statewide average of \$43.61 per patient in uncompensated care
- MU Health Care's Missouri Telehealth Network recorded 257 visits to 115 patients having ZIP codes associated with the county

### Extension (2022)

- 34,143 Total educational contacts from MU Extension to residents of the county, including:
- 3,194 contacts related to productive farming, better gardening, and managing natural resources
- 30,860 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development
- 89 contacts related to starting businesses, developing community leaders, or renewing the local economy

### **UM System County Impacts**

2024 UM Systemwide Impact Data Sheets

### **Lincoln 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.



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.

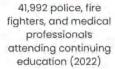
 In FY23, the UM System awarded 805 design and construction project contracts throughout Missouri, for a total investment of \$279.2 million in the state.



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**







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 ald owarded

students receiving

financial aid awarded

Missouri S&T

UMSL

6,748 students receiving linancial aid \$117.7M

8,489

\$102.8M

students receiving financial aid

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 2002-23
- 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.

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









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Data last updated 12/18/2023

### Missouri Grand Challenges: Local Solutions

LINCOLN 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: Business Dynamics

#### **Business Growth/Change**

The rate of business change reflects the net gain or loss in total establishments. The report area saw a net gain of 74 businesses between 2011 and 2021. There were 939 establishment "births" and 865 "deaths" contributing to the change. The rate of change was 9.06% over the ten year period, which is higher than the state average of 8.04%.

#### **Establishment Net Change Rate**

9.06%

Missouri 8.04%

Lincoln

Data Source: US Census Bureau, Business Dynamics Statistics. 2011-2021.

### **Largest Job Sectors**

Understanding the local economy is vital to describing a community. In this region, the largest sector by employment size is Government and government enterprises , which employs 2,436 people. The average wage for the industry is \$63,355. Retail trade and Construction are the next largest sectors, and they employ 2,410 and 2,253 workers, respectively.

Job Sector	Total Employment	Average Wage
Government and government enterprises	2,436	\$63,355
Retail trade	2,410	\$29,913
Construction	2,253	\$41,021

Data Source: US Department of Commerce, <u>US Bureau of Economic Analysis</u>. 2022.

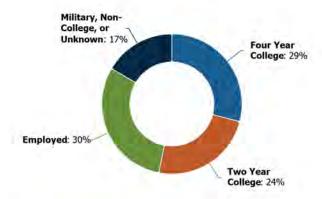
### **Grand Challenges**



### CHALLENGE 2: Educational Access and Excellence: College and Career Readiness

### **Post High School Report**

The 12-month post-graduation activity of recent high school graduates can inform communities about postsecondary education, career readiness, and characteristics of the future workforce. In 2022, of 623 graduates surveyed in the report area, 181 went to a four-year college, 149 to a two-year college, 190 directly entered the job market. The remaining 103 are reported as in the military, not in college, or unknown.



Data Source: Missouri Department of Elementary & Secondary Education, 2022.



### CHALLENGE 3: Healthy Futures: Mental Health

#### **Deaths of Despair**

Untreated mental health conditions, substance abuse, and stress have caused an epidemic of "deaths of despair" across the United States. Research shows that deaths due to suicide, alcohol-related disease, and drug overdose have caused the first decreases in U.S. life expectancy in the 21st century. Within the report area there were an estimated 238 deaths of despair, or 59.16 deaths per 100,000 population between 2011 and 2017. This rate is higher than the state rate of 52.01 per 100,000, and represents an increase of 20.44% since the 2001-2007 report period.

#### Mortality Rate, 2014-2020

59.16

Missouri

52.01 @

Lincoln



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 2018, 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 2014, when adults in the report area averaged 4.2 mentally unhealthy days per month.

Average Poor Mental Health Days per Month, 2018

5.1

Missouri

4.9 😥

Lincoln



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

### **Grand Challenges**



### CHALLENGE 4: Agricultural Growth & Stewardship: Agricultural Economy

#### Jobs Derived

Missouri has a diverse agriculture industry, strong in crops and livestock, as well as food and forestry processing industries. These industries remain a significant part of Missouri's economy, supporting more than 1 in every 10 jobs, on average. In 2021, agriculture, forestry, and related industries in Missouri were estimated to contribute: 456,618 jobs, \$93.7 billion in output and \$31.8 billion in household income. Learn more about Missouri Agriculture's Economic Impact.

#### Percent of Jobs Derived from Agriculture

21.5%

Missouri

23.55%

Lincoln

Data Source: Missouri Department of Agriculture, Missouri Agricultural and Small Business Development Authority, 2021.

#### Value Added

Value-added agriculture refers to production, manufacturing, marketing or other 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

14.5%

Missouri

21.98%

Lincoln

Data Source: Missouri Department of Agriculture, Missouri Agricultural and Small Business Development Authority. 2021.



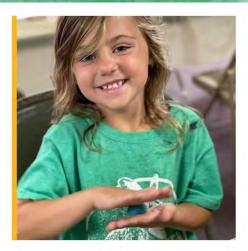
### MU EXTENSION Serves MISSOURI and Delivers MIZZOU

### 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 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.

### Legend











Missouri 4-H

### **Local Impact**

Missouri 4-H is an active, dynamic organization of young people who are learning, growing, and preparing to be the leaders of today and tomorrow – making a real difference in their community, country, and world. 4-H gives youth opportunities to gain leadership, citizenship, and life-skills through fun and innovative hands-on activities. During the 2023 4-H program year, Lincoln County had 527 members enrolled in 10 4-H clubs making it the second highest 4-H enrollment in the state.

### 4-H Camp

For the first time since 2019, we were able to hold overnight camp at Cuivre River State Park in Troy.

Twenty-seven Lincoln County members enjoyed programs provided by state park personnel which included archery and pollinator power. Highlights of camp were the campfire, dance, and skits.



Missouri 4-H

### **Local Impact**

### 4-H Day with the Cardinals

2023 marked the 20<sup>th</sup> anniversary of 4-H Day with the Cardinals. This annual event brings 4-H members, parents, and friends from Missouri, Illinois, Kentucky, and Iowa together to enjoy a great day at the ballpark. Events include a parade around the field and opening ceremony with an honorary first pitch. To date, this event has had 46,168 participants and raised \$87,422 through a raffle to support 4-H programing and provide college scholarships.



### **Family Fun Night**

A new event held this year was
the Family Fun Night.
Ninety-four participants enjoyed
games such as stand a bottle,
hillbilly golf, and corn hole. The
Lincoln County 4-H Council
provided snacks as well as
attendance prizes including
Amazon gift cards, Wal-Mart gift
cards, and other various
donations.

### Missouri 4-H

### **Local Profiles and Stories**



### 2023 Friend of 4-H

Josh Harris was recognized as the 2023 Friend of 4-H. He has been the swine barn superintendent for many years at the Lincoln County Fair.



### **Outstanding 4-H'ers**

4-H members were recognized for outstanding efforts during the program year in the areas of club participation, leadership, and community service.



### **Outstanding 4-H Club**

The Moscow Mills Willing Workers 4-H club was named outstanding club for 2023. First-runner up was Spring Branch Helping Hands, and second-runner up, was Winfield-Foley Fireflies.



### **Proclamation Signing**

4-Her's gathered at the court house for the proclamation signing with the county commissioners to declare National 4-H Week.



### 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.

"A lot of veterans come right out of the service and may feel disconnected and may be struggling with finding job opportunities. The Heroes to Hives program offers a diversion as well as opportunities."

**Eric Work, Heroes to Hives participant** 









Two programs provide resources to socially disadvantaged farmers and ranchers in Missouri.

#### The Missouri AgrAbility

**Project** supports the independence of farmers and ranchers with disabilities.

#### **Heroes to Hives**

offers free professional training in beekeeping to veterans, promoting financial and personal wellness through community development.



#### The Missouri Agriculture, Food and Forestry

Innovation Center (MAFFIC) helps Missouri farmers pursue value-added agricultural production and marketing. Partners in this statewide initiative include the Show-Me-State Food, Beverage and Forest Products Manufacturing Initiative, Missouri Agricultural and Small Business Development Authority and the University of Missouri.

### Legend











### Agriculture and Environment

### **Local Profiles and Stories**





### **Missouri Strip Trial Program**

The Missouri Strip Trial program began in 2016 with a limited number of producers around the state participating. Since then, the program has continued to grow with additional producers and expanded trials being applied to cooperator fields. East Central Missouri producers are prominent in this program with many trials being conducted in East Central Missouri in 2023. In 2023 16 trials were conducted in East Central Missouri in six different counties. The strip trial program uses producer fields, equipment, and management to compare different crop management practices. For 2023 these trials included:

- Nitrogen management in corn production. (3)
- Fungicide application in soybeans. (6)
- Comparing cereal rye, winter wheat and no cover crop in a corn/soybean rotation. (2)
- Crop response to sulfur applications. (3)
- The two-year effect of planting soybeans into growing winter cereal rye and the following years corn yield. (2)

Data collection during the growing season included:

- Crop stand establishment.
- Weed control.
- Crop response to treatments using drone flights during the growing season.
- Yield monitor data and mapping during harvest to measure treatment affects.
- Targeted soil sampling after crop harvest for nutrient levels and soybean cyst nematode levels.
- Drone imagery to monitor plant growth, residue levels and pest pressure.

After results are compiled, meetings are arranged with the participating producers to evaluate the results and get feedback on the program from participating producers. Results from East Central Missouri producers are combined with other producers around the state and summarized on the strip trial web site https://extension.missouri.edu/programs/strip-trial-program.

Agriculture and Environment

### **Local Impact**

MU Extension's **Show-Me-Select Replacement Heifer Program** teaches beef cattle producers to successfully adopt research-proven reproductive and genetic technologies developed at the University of Missouri which add value to heifers in beef herds across the state. This leads to improved profitability and sustainability of family-owned operations, positively benefiting Missouri's economy by over \$150 million since its inception in 1997. **This year two Lincoln County** producers sent 130 of the 507 heifers sold in the Palmyra sale.



### Agriculture and Environment

### **Local Impact**

#### **Extension Tax Schools**

University of Missouri Extension ag economics department and ag business specialists worked together to coordinate one summer and three fall tax schools. The summer school was in person and live online. Fall schools were in Columbia and Springfield and in addition 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.

The 2023 school attendance totaled three hundred twenty-seven people. The participants were from throughout Missouri.



### Agriculture and Environment

### **Local Impact**

### **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 crisis
- · 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.

#### 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.

One of the most discreet learning topics in the workshop was centered on using the Short-Term Operating Plan to begin a conversation around farm succession planning. Knowledge of this tool increased the most. 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.

### Agriculture and Environment

### **Local Profiles and Stories**





### **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.



### Agriculture and Environment

### **Local Profiles and Stories**





## Farmers' Markets Provide Price Data to Support New And Existing Producers Darla Campbell

The Missouri Department of Agriculture partnered with University of Missouri Extension to collect farmers' market price data on crops present at Missouri farmers' markets June-October of 2023. Six MU Extension Specialists collected data while providing production, marketing, and financial resources to producers around the state. There was a total of 63 different markets visited in 2023 with 2246 prices collected.

### Agriculture and Environment

### **Local Profiles and Stories**





**Direct Marketing Beef School**Eleven (11) beef producers participated in the two-day school held August 17<sup>th</sup> and 18<sup>th</sup> in Union, MO.

Producers learned how to add value to their cattle by finishing animals and marketing beef direct to consumers. They also toured a confinement beef feeding operation and learned from local processors.

"Very
Informative
class, I
learned lots
of great
information!"



### Agriculture and Environment

### **Local Impact**

### **Private Pesticide Applicator Training**

### **Number of Lincoln County Learners**

Thirty Lincoln County citizens participated in the Private Pesticide Applicator training facilitated by Rusty Lee, Field Specialist in Agronomy. This 2.5 hour program gave a collective learning total of 75 education hours.

### What Did They Learn?

Upon completion of the training, participants were able to:

- 1. Recognize the need to correctly identify pest organism prior to choosing a pest management strategy.
- 2. Understand the concept of economic thresholds and economic injury levels when making pest management decisions.
- 3. Possess a basic understanding of biological control and other non-chemical methods of pest management.
- 4. Better understand the format and information provided on each pesticide label.
- 5. Recognize the importance of using label information in all phases of application.
- 6. Understand the importance of having a Material Safety Data Sheet, and other materials available when applying pesticides.
- 7. Understand the need for proper selection and use of protective clothing and safety equipment.
- 8. Understand the importance of the "Restricted Use Pesticide (RUP) designation for certain pesticides
- 9. Consider environmental impacts when selecting a pesticide for use.
- 10. Consider impact of pesticides on water sources when applying a pesticide.
- 11. Understand the need and procedure to develop an emergency plan (fire, storm, flood, other) with local emergency officials.

### **How Does This Work Make Lincoln County and Missouri Better?**

Enables farmers to meet the legal requirements mandated by the Environmental Protection Agency and the Missouri Department of Agriculture's Bureau for Pesticide Control on the safe and proper use of agricultural pesticides on their farmlands, including restricted-use pesticides (RUPs).

This enables farmers to meet society's demands for lessening agriculture's environmental impact.

### Agriculture and Environment

### **Local Profiles and Stories**

#### **Lincoln County Forage Loss Assessment 2023**

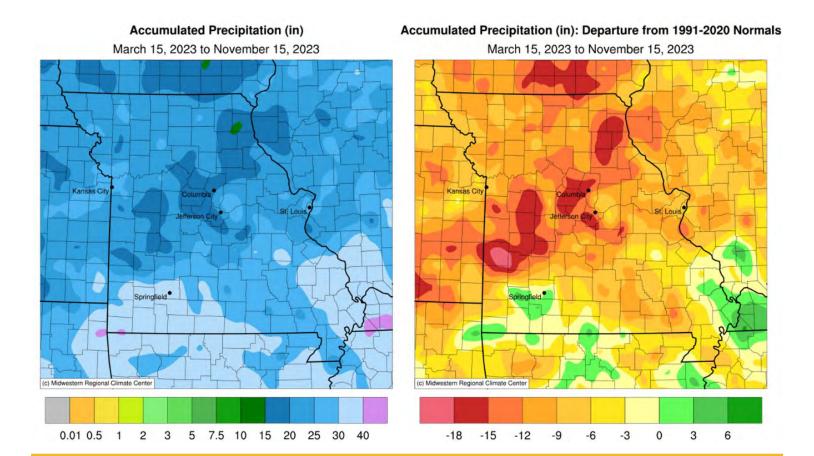
Rusty Lee, Field Specialist in Agronomy, was approached by the USDA Farm Service Agency to develop forage loss assessments for over 20 counties that impact farmer eligibility for Federal Drought Assistance Programs.

What follows is an excerpt from his state-wide overview and then Lincoln County specific information.

The 2023 forage production season featured a prominent drought event that continues to impact the State. Drought conditions first emerged in April when the state recorded its 4<sup>th</sup> driest April (- 2.17") dating back to 1895.

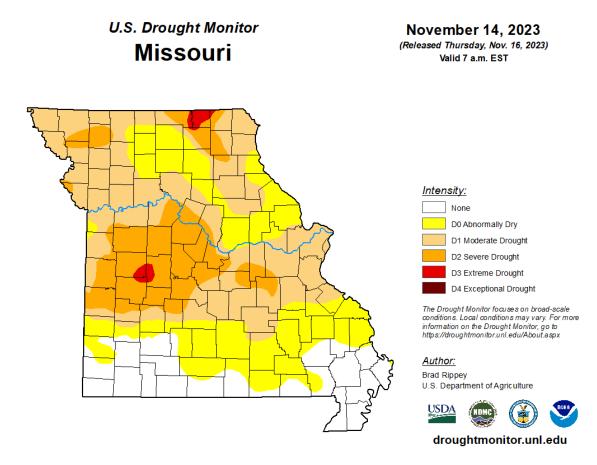
This year's drought occurred during the growing season, resulting in widespread negative impacts to the agricultural sector. Depleted soil moisture has led to poor pasture and crop conditions along with mature tree stress. Timely rainfall in July and August provided some relief to crops, but the return of hot and dry conditions in September and October limited fall pasture growth.

This has resulted in a continuation of drought impacts including agricultural concerns, enhanced fire risk and low water levels on streams, rivers and ponds. As of November 14, approximately 55% of the state remains in drought with 19% of the state being characterized as either severe or extreme drought



### Agriculture and Environment

### **Local Profiles and Stories**



#### **County Specific Data - Lincoln**

Cool-season grasses are the predominate forage species in Lincoln County. Much of its annual forage production occurs prior to the summer "slump" period of July and August. That makes April, May and June the quarter of the calendar to make or break a year's forage production.

Assuming soil fertility is adequate, soil moisture is the largest determining factor of forage production. This direct plant response makes tracking rainfall, and its contribution to soil moisture, an excellent barometer of forage production. During the April - June period, rainfall for Lincoln County was 4.88 inches below the 1901-2000 average amounts. This represents a 41 % decline in precipitation during this critical period of forage production. My observations of pastures and hayfields in the county, including conversations with area producers, provided a verification of this expected reduced forage productivity claim.

While there was some short-term relief from a few July and August rains, our cool-season grasses saw April - June temperatures for the county being 2 % above the 100-year average, and more importantly, a lower-than-normal soil moisture level to start the growing season due to our drought actually beginning in the fall of the previous year.

These measurements, observations and conversations shape my opinion to be that Lincoln County experienced a 41 % reduction in forage growth for the 2023 growing/grazing season.

### Agriculture and Environment

### **Local Impact**

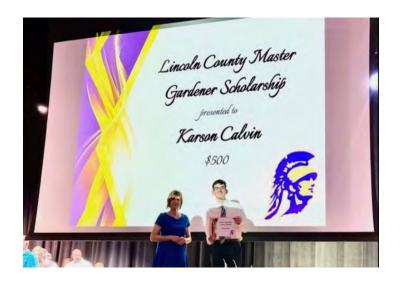
- 18 Lincoln County adults attended a class on Raised Bed and Container Gardening at the Lincoln County Extension Center. Students learned about what containers to use, how to build raised beds, what soil to fill them with, and how to manage pests and irrigation with vegetable crops. Attendee feedback included: "I enjoyed this presentation, I learned a lot and am excited to start gardening" and "Great presentation, engaging, gladly answers questions."
- 30 youth at Cuivre Park Elementary attended an after-school program coordinated by the Lincoln County Master Gardener Chapter. Justin taught a class on "Soil Critter for Kits", where students learned all about soil biology.
- 15 youth at Camp Avery attended a class about careers in horticulture, where they learned about training and required skills to explore a variety of job opportunities in the horticulture industry.
- 42 Lincoln County homeowners and fruit/vegetable farmers received 1 on 1 support to help them solve problems in their crops and landscape such as; how to take a soil sample and how to fertilize a vegetable garden, how to deal with pests on flowers and vegetables, weed control in lawns, pricing at the farmers market, how to increase vegetable yields, how to connect with USDA farm programs, herbicide drift diagnosis, and use of cover crops. Students and residents received research-based information from MU Extension to help their gardens, landscapes and lawns thrive, while protecting pollinators by reducing insecticide use and protecting the environment from nutrient pollution caused by fertilizer runoff.

- 1 Lincoln County produce grower attended a Produce Safety Farm Tour, highlighting produce safety risks and best practices for produce safety management on the farm.
- 1 Lincoln County landowner received business support services to help start a farm business entity and develop a business plan to grow produce, flowers, and eggs for sale at market.
- 32 Lincoln County residents subscribed to MU
  Horticulture Newsletters (Garden Spade
  Newsletter, Missouri Produce Growers Bulletin,
  and the MU Commercial Horticulture Video
  Newsletter) or attended the Live Garden Hour
  weekly town hall. Subscribers receive researchbased information to help their gardens thrive,
  while protecting the environment.
- 56 Lincoln County gardeners and produce growers had their soil tested and received detailed fertility recommendations, guidance, and support to help their gardens thrive, while protecting our state's waterways from nutrient pollution.



### Agriculture and Environment

### **Local Profiles and Stories**





The Lincoln County Master Gardeners started in January sending out our information to all the high schools in the area with news of our scholarships, which we presented to 2 students for \$500 each toward their colleges. We then got working on our plant sale that we held in April. It was a huge success and how we are able to offer the scholarships. We had volunteers who provided gardening activities to kids at a local school while their parents were in class themselves.

In the summer we worked at the Health Department where we planted and maintained our demonstration garden. When fall came around, we cleaned it up for the winter and also cleaned up the extension center grounds. A few volunteers also had a table at the Farmers Market answering questions and handing out information about Master Gardeners.





### MU EXTENSION Serves MISSOURI and Delivers MIZZOU

through credible statewide programs

### **Business and Community**

Missouri Small Business Development Centers (SBDC) provide professional training and customized one-on-one counseling to small businesses across the state.

Working with the Missouri SBDC helps business owners make confident decisions. In Lincoln County this to the form of nine small business clients counseled and 20 training event attendees in 2023.



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.



**Strategic Doing** is a one-day workshop that guides community stakeholders through an inclusive, problem-solving approach to developing high-impact projects to address local development issues.

The city of Risco, Mo., lacked retail options for food. Risco's Strategic Doing workshop and follow-up activities resulted in a **GROCERY STORE OPENING** in the community.

### Legend









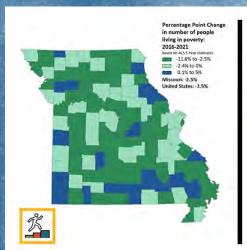




### MU EXTENSION Serves MISSOURI and Delivers MIZZOU

through credible statewide programs

### **Business and Community**



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.

"TAAF funds enhanced our ability to rival our competitors. Now we are proficiently showcasing our American products and feeling stronger in the marketplace."

Nancy Montgomery, Tacony Manufacturing St. James, MO



The Mid-America Trade Adjustment Assistance Center (TAAC) administers TAAF, a program funded of the U.S. Department of Commerce's Economic Development Administration. TAAF's mission is to boost American manufacturers' ability to compete in a global market, strengthen operations and improve profitability, thereby increasing U.S. jobs. Mid-America TAAC assists manufacturing firms in Iowa, Kansas, Missouri and Nebraska.

Mid-America TAAC reported that client sales revenues were more than \$2 BILLION IN 2022.



The Neighborhood Leadership Academy

provides in-depth leadership training that emphasizes community-building principles, project planning, organizational leadership and personal leadership skills.

"The overall knowledge that I have gained through this course has been amazing. From how to engage stakeholders in the community, to planning events and hosting meetings, these are all tools that I will fully utilize going forward."

2022 NLA graduate

### Legend







Economic Opportunity









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

### **Community and Professional Health Education**



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.

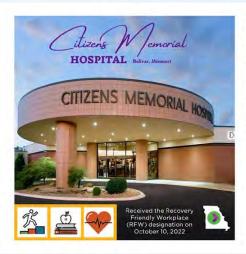
100% of participants indicate that the skills and techniques they learned will help them become MORE RESILIENT.



### Strengthening Families Program: for Parents and

**Youth 10-14,** is a seven-session series for parents or caregivers and their young teens to attend together to improve family communication, resolve conflict and improve parental skills.

A research study conducted by the Partnerships in Prevention Science Institute found a RETURN OF \$9.60 for every dollar spent implementing the Strengthening Families Program.



Recovery Friendly Workplaces (RFWs) foster a workplace culture that promotes employee safety, health and well-being through strategies that support managers and employees, including reducing stigma and providing recovery resources related to the challenges surrounding substance use disorders. The framework was developed in partnership with MU Extension's Labor and Workforce Development Program.

As of 2023, 25 Missouri businesses have been designated recovery friendly workplaces, and 2,248 EMPLOYEES have been trained on addiction, stigma and naloxone distribution.

### Legend















### MU EXTENSION Serves MISSOURI and Delivers MIZZOU

### through credible statewide programs

### First Responder Education



### The Missouri Extension Disaster Education

Network provides education and technical assistance to individuals and families, local governments, schools and organizations so they can prepare for and respond to natural and manmade disasters. Because of the unique relationship it maintains with each community, MU Extension is a key resource for the public, emergency services and public officials.



The Law Enforcement Training Institute (LETI) has provided basic and advanced training for law enforcement since 1948. LETI's **Basic Peace Officer**Academy exceeds the 600 hours of training required for licensure in Missouri. From 2019 through 2023, the basic academy has licensed almost 300 peace officers, more than any other academy in the state. During that time, all but one graduate became employed by a law enforcement agency. LETI graduates come from around the state and return to their communities to serve and protect.



Training Institute (FRTI) is available to all qualified fire and emergency first responders. Seventy percent of courses are held at the local departments or agencies. With most of the state's fire service personnel considered volunteer or part-time, this local access and flexibility assures training opportunities for all firefighters and emergency responders.

### Legend







**Economic** 

Opportunity







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

### **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.



Preschool through junior high youths learn how to maintain healthy lifestyles through information about nutrition, food safety and physical activity. **Show-Me Nutrition** classes support Missouri's Show-Me education standards for health and physical education and the state's School Wellness Policy.

"We have struggled with our daughter's picky eating for years and have tried so many techniques to try and get her to eat new foods. Your influence on her has worked magic this year. She has come home so excited about trying new foods and has now become not only willing but excited to try new things."

Parent of a Show-Me Nutrition participant

"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.

Legend











### Health and Human Sciences

### **Local Impact**

### **Cooking Matters**

As part of the No Kid Hungry campaign to end childhood hunger in America, Share Our Strength's Cooking Matters teaches participants to shop smarter, use nutrition information to make healthier choices, and cook delicious, affordable meals. The participants in the six-week Cooking Matters courses are adults, teens, and children who want to make healthy meals on a budget.

During the 2023 program year, 12 Cooking Matters sessions were delivered to 192 contacts in Lincoln County through the Lincoln County Council on Aging.

"I just got out of an appointment with my doctor's office. He just took me off my last medication... blood pressure medication that I have been on for years and now I just suddenly don't need it! I told him I credit this class. I'm walking more, I am eating healthy. Thank you both so much." — Cooking Matters participant.

After attending a Cooking Matters six-week course, participants reported improved knowledge, skills, and understanding of maintaining a healthier dietary intake, using skills and recipes learned to improve their families' diet, and using skills and knowledge to shop healthier and reduce food costs. Participants were able to discover and learn about healthier food options that they could cook for themselves, their children, and grandchildren as well as to better manage their chronic conditions such as diabetes and heart disease.



### Health and Human Sciences

### **Local Profiles and Stories**

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.

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.

A total of 40 Direct Education participants were from Lincoln County.

Our Nutrition Program Associates (NPAs) are also continuing to provide information about the SNAP benefits program and offer assistance with SNAP benefits applications.

In addition to the numbers, Jolynn Hambach shared this success story demonstrating local impact:

Our gardening class at Lincoln Co. Council on Aging is always a win-win. Gardeners get to choose fresh produce straight from the gardens, and those who come to the center for lunch, or another activity can choose fresh vegetables from the 'extras' table. There is always plenty for everyone!

We have a new couple gardening with us at Lincoln Co. Council on Aging in Troy, MO. They have been very involved with the senior center and took an Eating Smart Being Active class when they heard us talking about gardening. Both of them got SO excited at the prospect of gardening! They explained that they would be at the first class and have tried to garden many times at home. Every time they get a garden planted the deer eat all of their plants!

We look forward to more programming opportunities in Lincoln County and continued progress in helping to improve the lives of Missouri families.

Thank you,

The East Central Family Nutrition Education Program

Nancy Keim, Associate Director Deborah Raaf, Program Manager Becky Fuchs, Office Support

# **HDFS** | 2023

Programming in Crawford, Gasconade, Franklin, Lincoln, Montgomery, St. Francois, Ste. Genevieve, Washington, & Warren Counties; and statewide virtual efforts

IMPACT SUMMARY

\$3.3-\$3.5 million

105

6,367

ESTIMATED ECONOMIC IMPACT COMMUNITY EDUCATION EVENTS HOURS OF EDUCATION PROVIDED

A MATTER OF BALANCE

1 series 46 contacts

\$6,566 in estimated medical cost savings from fall prevention efforts.

BUILIDING STRONG FAMILIES

5 series 373 contacts \$1.3 million in cost savings to Missouri's foster care system from parenting education for at-risk parents to maintain or regain custody.

CHILDCARE PROVIDER TRAININGS

8 events 93 contacts \$2.0 million in estimated costs savings from increased quality childcare, minimizing risk of negative outcomes like poor academic performance and incarceration.

CHRONIC DISEASE SELF-MANAGEMENT

2 series 105 contacts \$17,136 estimated cost savings from reduced ER visits and hospital utilization.

EMERGING FAMILY & HOME EDUCATION

12 events 603 contacts In-demand topics including relationship education, family finance, and career opportunities in Extension.

FOCUS ON KIDS

70 events 497 contacts \$67k-\$258k in savings due to reduced interaction with the court system and improved co-parenting practices.

MENTAL HEALTH FIRST AID

7 events 101 contacts \$17,170 certification value provided to community members at no out-of-pocket cost.

### Health and Human Sciences

### **Local Impact**



**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

The national age-adjusted rate of deaths of despair (i.e., deaths due to intentional self-harm/suicide, alcohol-related disease, and drug overdose) per 100,000 people was 47.0 for 2016-2020 and the Missouri rate was 54.1 deaths. *Lincoln County exceeds both of these, at a rate of 61.4 deaths per 100,000 inhabitants*. Additionally, Lincoln County exceeds the state average for teen deaths, with a rate of 41.2 deaths per 100,000 inhabitants, compared to 35.4 deaths. Although this number also encompasses accidental deaths, the impact of traumatic loss of a young life on a community may have additional mental health implications.

Supporting mental health needs in the community is a crucial to reversing these trends. In 2023, 22 youth in the 4-H SPIN Garden Club at Cuivre Park Elementary School practiced stress management techniques they can use in the garden with MU Extension Human Development Specialist, Brianna. Additionally, two Lincoln County residents participated in virtual Mental Health First Aid training.



"Using Your Senses in the Garden" Brainstorm



Divorcing or separating parents encounter distinct challenges when living apart. **Focus on Kids** guides parents in fostering effective co-parenting strategies to support their children through this process.

"Understanding that divorce doesn't ruin children, but parents can significantly influence positive outcomes through good communication, was invaluable."

Note: Unless indicated, all data were obtained from the All Things Missouri Youth and Family Indicators or Health and Safety report

### Health and Human Sciences

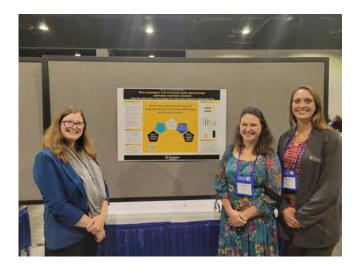
### **Profiles and Stories**

#### **Focus on Kids**

According to the CDC, the 2021 **Missouri divorce rate was 2.9 per 1,000 inhabitants**, which **exceeds the national average** of 2.5 per 1,000. In Missouri, divorcing or separating parents of minor-aged children are required to participate in a parent education program. In 2023, the local statute in the 45<sup>th</sup> Circuit (Pike and Lincoln) stipulated participation in MU Extension's Focus on Kids program.

MU Extension Specialist in Human Development and Family Science Brianna Anderson facilitated 24 Focus on Kids programs, serving a total of 203 participants. 152 of these participants were residents of Lincoln County. Fourteen Lincoln County residents completed Focus on Kids in other counties and completed the program online.

Additionally, Brianna secured funding from a private donor to provide up to ten participants a year (\$500 value) with demonstrated financial need a scholarship to participate in the in-person Focus on Kids in Lincoln County, increasing access to MU programming where registration fees may be a barrier to participation.



### Other Major Accomplishments

- Co-authored six research-based posters on HDFS topics at state and national conferences
- Recognized with regional and national team awards from the National Extension Association of Family and Consumer Sciences:
  - 1st place: Excellence in Diversity Programming (National)
  - 2nd place: Excellence in Human Development Programming (Central Region)
  - ➤ 3rd place: Excellence in Human Development Programming (National)
- Appointed to a 3-year term on the University of Missouri Family Friendly Campus Committee
- Reviewed seven curricula for National 4-H, proposals for three national conferences, and award nominations for two national conferences
- Delivered a guest lecture to upper-level undergraduates at Central Michigan University, promoting Extension careers
- Revised program material and developed supplemental content including:
  - Communication strategies for different developmental stages and parenting from afar in the Building Strong Families series
  - > Supporting grieving children in an approved Child Care Provider training
- Selected for the 2023-2024 National Extension Association of Family & Consumer Sciences Leadership Experience for new professionals