

Molly and her Grand Champion Rabbits at the 2023 Missouri State Fair.

UNIVERSITY OF MISSOURI EXTENSION

## Benton County



2023 Annual Report



an equal opportunity/ADA institution



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

108 Whitten Hall Columbia, MO 65211 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

Interim Vice Chancellor, MU Extension and Engagement

Chief Engagement Officer, UM System

## Who we are

## **Faculty and staff**

### **Benton County Faculty and Staff**

#### **Amie Breshears**

Field Specialist in Agriculture Business 660-438-5012

### Tammy Culpepper

Nutrition Program Associate 660-438-5012

### **Angie Shepard**

Office Support 660-438-5012

## **Staff serving Benton County**

### **Wayne Prewitt**

West Central Missouri Regional Director 660-383-1633

#### Michelle Larson

FNEP Associate Director 660-383-1633

#### **Travis Harper**

Agronomy Specialist 660-885-5556

#### Gene Schmitz

Livestock Specialist 660-827-0591

#### Kent Shannon

Natural Resource Engineering Specialist 573-445-9792

#### **Allison Gunter**

Extension Engagement Specialist 417-745-6767

## **Council members**

Caitlin Dill Chairman

Josh Sater Vice-Chairman

Kim Flippin Secretary

Leslie Dickerson Treasurer

Rod Brethower
Leland Burnett
Bill Elder
Brian Harms
Rodney Johnson
Carter Kinkead
Noah Long
Scott Harms

## University of Missouri Extension Benton County

100 West Washington Street PO Box 969 Warsaw, MO 65355 660-438-5012

Email: bentonco@Missouri.edu

Website: http://extension.Missouri.edu/Benton

Office Hours: 9:00am-12:30pm

1:00pm-4:00pm Monday-Friday

## **County commissioners**

Steve Daleske Presiding Commissioner

Scott Harms North Side Commissioner

Larry Berry South Side Commissioner



## **Members of Benton County Extension Council:**

L to R

Leland Burnett, Amie Breshears, Josh Sater, Brittany Beeman, Noah Long, Leslie Dickerson, Kim Flippin, Caitlin Dill

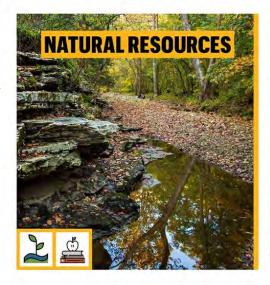
Back row-Rod Brethower and Brian Harms Not pictured:

Scott Harms, Bill Elder, Carter Kinkead

### **Local Support**

Did you know you can donate directly to Benton 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.

## Who we are



The Missouri Master Naturalist program is a community-based initiative for adults, supported by the Missouri Department of Conservation and MU Extension. It aims to create a group of knowledgeable volunteers who can offer education, outreach and service for the responsible management of natural resources in Missouri communities.

Additionally, the **Missouri Woodland Steward program** offers a short course that equips private landowners with knowledge of woodland management, helping them identify wildlife habitats, develop plans and connect with local natural resource experts.



### **MU Extension specialists**

play an important role in addressing emergencies and disasters. MU Extension specialists swiftly distribute information so farmers and ranchers can make timely decisions that safeguard their enterprises.



### 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 Missouri Master communities and educate others about gardening.

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

**University of Missouri Extension** 



## **URBAN AGRICULTURE**

In collaboration with the University of Missouri-Kansas City, MU Extension provides crucial support for the Missouri Center for Urban Horticulture Engineering. This center specializes in pioneering technologies and practices customized for urban farming.

"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.

## Who we are



Management-intensive grazing involves dividing large fields into smaller paddocks and systematically rotating livestock among them. Producers who attend grazing schools learn how to reduce costs through improved livestock, grazing and pasture management while getting insights into fencing, watering systems and grazing system design.

The annual impact of managementintensive grazing is estimated to be \$125 MILLION per year in Missouri.



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.

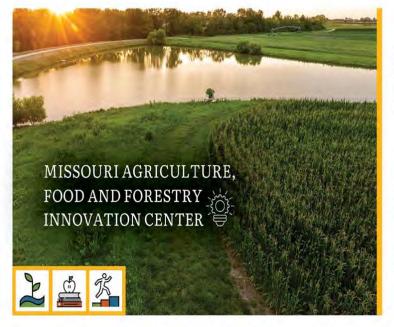


Women make up a growing portion of private forest landowners, and their knowledge and confidence in managing their land is invaluable.

The Women

Owning Woodlands program empowers women landowners to take action to secure the future of their land.

## Who we are



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.

## Budget and more

## **Appropriations budget**

Income County Appropriations Total Income	41,415 <b>41,415</b>
Expenses	
Salaries/Benefits	34,049
Travel	2,530
Telephone	323
Office Supplies/Service	1,745
Advertising	70
Insurance	1,461
Capital Repairs	124
Total Expenses	40,302

## **Benton County partners**

- BENTON COUNTY TOURISM
- BENTON COUNTY ECONOMIC DEVELOPMENT
- BENTON COUNTY ARTS
- BENTON COUNTY CATTLEMEN
- WARSAW CHAMBER OF COMMERCE
- LINCOLN CHAMBER OF COMMERCE
- COLE CAMP CHAMBER OF COMMERCE
- EQUITY BANK
- HAWTHORN BANK
- WARSAW-LINCOLN AMBULANCE BUILDING
- COLE CAMP JAYCEES BUILDING
- LINCOLN CITY HALL BUILDING
- BENTON COUNTY COURTHOUSE
- BENTON COUNTY HEALTH DEPARTMENT
- WALMART
- G AND W MARKET
- TRUMAN VISITOR CENTER
- and more!

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



## **UM System County Impacts**

2024 UM Systemwide Impact Data Sheets

## **Benton County**



### UM System Footprint in the county in 2023



#### FY23 county students

#### 56 students

- · 49 Undergraduates
- 7 Graduate and professional students
- · 48 Full-time students
- 8 Part-time students
- 18 Pell grant recipients (aid year 2023)



#### County employees and retirees

#### 13 people employed by UM

- 11 Campuses
- · 2 MU Health Care

10 UM retirees and beneficiaries UM salary and retirement income: \$708,970

UM state tax revenue: \$17,005 UM federal tax revenue: \$85,192



### County alumni

#### Selected school alumni

- · 4 Medicine
- 11 Nursing
- 15 Health Professions
- 5 Dentistry
- · 9 Pharmacy
- 9 Veterinary Medicine
- 49 Agriculture
- 27 Engineering
- 11 Law

#### Alumni teaching K-12

- 14 teachers
- 6.9% of all district teachers
- 1 principal or administrator
- 8.3% of all district principals and administrators



#### County breakdown

#### MU

- 39 students
- · 211 alumni
- · 11 employees

#### UMKC

- 6 students
- · 61 alumni
- 0 employees

#### Missouri S&T

- 11 students
- 16 alumni
- · 0 employees

#### UMSL

- 0 students
- 9 alumni
- 0 employees



#### County properties and offices

MU Extension in: Benton County



County population: 19,351



#### County services provided

#### Health care (FY23)

- 1,463 in-state patients seen at MU Health Care, with \$716,992 of uncompensated care
- 19 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 444 visits to 259 patients having ZIP codes associated with the county

#### Extension (2022)

- 3,088 Total educational contacts from MU Extension to residents of the county, including:
- 620 contacts related to productive farming, better gardening, and managing natural resources
- 2,468 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development

## **UM System County Impacts**

2024 UM Systemwide Impact Data Sheets

## **Benton 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**



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



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



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

## **Education Highlights**

#### FY23 Financial Aid Awards

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

**UMKC** 

27,256

\$536.0M

11,859

\$217.3M

students receiving financial aid awarded financial aid

financial aid

students receiving financial aid awarded

Missouri S&T

UMSL

6,748 students receiving financial aid awarded financial aid

\$117.7M

8,489

\$102.8M

students receiving financial aid awarded financial aid



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.

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**

BENTON 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



**S\_ CHALLENGE 1: Economic Opportunity:** Labor Market

#### Average Earnings per Job

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

2022 Average Earnings (\$)

\$39,252

Missouri

\$62,528



The labor force participation rate is a measure of an economy's active workforce and includes people who are employed and those seeking employment. According to the 2015 - 2019 American Community Survey, of the 16,379 persons of working age in the report area, 45.33% are included in the labor force. This rate falls short of the Missouri labor force participation rate of 62.82%.

**Labor Force Participation Rate** 

45.33%

Labor Force Participation

Missouri

62.82%

Benton

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

Benton



Data Source: US Department of Commerce, US Bureau of Economic Analysis





## CHALLENGE 2: Educational Access and Excellence: Educational Attainment

#### **Adult Educational Attainment**

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

No High School Diploma

13.05%

Missouri

9.02%

Benton

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

Bachelors Degree: 7% Graduate or

Professional

Degree: 7%

**Associates** Degree: 9%

Some College: 23%

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



#### 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 84 deaths of despair, or 62.81 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 2.66% since the 2001-2007 report period.

Mortality Rate, 2014-2020

62.81

Missouri

52.01



Benton



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

#### **Poor Mental Health Days**

In the report area, 22.8% of adults have at least some college education and 16.7% of adults have an associate's level degree or higher. However, 40.5% stopped their formal educational

attainment after completing high school, and 13.1% of adults did not complete high school.

Self-reported mental health status is a widely used measure of health-related quality of life. In 2018, adults in the report area averaged of 5.0 mentally unhealthy days per month, which is higher than the state average of 4.9. This measure of mental health status has worsened since 2014, when adults in the report area averaged 4.7 mentally unhealthy days per month.

No High School

High School Only: 41%

Diploma: 13%

Average Poor Mental Health Days per Month, 2018

Missouri

4.9 😥

Benton



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



## CHALLENGE 4: Agricultural Growth & Stewardship: Food Security & Access

The ability to access healthy and affordable food can be a challenge in Missouri's rural and urban communities alike — with negative impacts on people's health and food security status. Food insecurity is the lack of access, at times, to enough food for an active, healthy life. It is associated with many adverse social and health outcomes. Missouri's overall food insecurity rate is 11.8% — and 12.8% for children under age 18. More than half of Missouri's 114 counties and the City of St. Louis report food insecure populations of 12.6% or higher. Multiple interventions that address the root causes of food insecurity can impact this critical public health issue. Learn more at the Food Security Story Map.

### Population Living in a Food Desert

30.52%

Missouri

17.69%

Benton

Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2019.



## MU EXTENSION Serves MISSOURI and Delivers MIZZOU

through credible statewide programs

## **Business and Community**



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.

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



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.



## **CLIENT HIGHLIGHT**





The 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.

> FY2020-2022, Missouri SBDC **ASSISTED 878 STARTUPS and** helped Missouri small businesses earn more than \$440 MILLION.

## Legend



Agricultural Growth & Stewardship



**Economic** Opportunity



Educational Access & Excellence



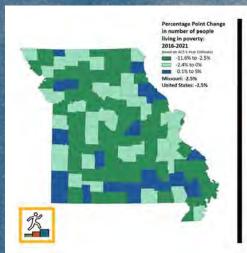
Health & Well-Being



## 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.



## DEMOGRAPHIC, ECONOMIC AND WORKFORCE DATA TRAINING

**MU Exceed** offers customized data training. Participants learn how to use public data through hands-on exercises and demonstrations.

## In 2022, Exceed provided data training to MORE THAN 200 MISSOURIANS.

95% of the attendees said that the information they learned was useful to their work.



The APEX Accelerators (formerly known as Procurement Technical Assistance Centers) were created in 1984 by the Department of Defense to help businesses navigate the government marketplace. Since 1989, MU Extension has hosted the Missouri APEX Accelerator as a business development partner program. The mission of the program helps businesses learn how to expand their market by selling goods and services to local, state and federal government entities.

From Aug. 1, 2022, to July 31, 2023, the Missouri APEX
Accelerators reported over 900 NEW CLIENTS,
4,700 COUNSELING HOURS and OVER 10,000 CONTRACTS AWARDED.

## Legend















## MU EXTENSION Serves MISSOURI and Delivers MIZZOU

## through credible statewide programs

## Business and Community

### **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. Two fall schools were in person and the third was online via Zoom. 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, current partnership tax issues, individual income tax issues, rulings and cases. 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 2,936 hours.

The teaching teams included a CPA and former IRS employee, 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 2023. 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, 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 eleven people. The participants were from all over

Missouri.



Legend





& Stewardship









## **Business and Community**

**Local Impact** 

Amie Breshears, MU Extension Ag Business Specialist



## 2023 Warsaw Chamber of Commerce 'Community Partnership' Award Recipient

For my dedicated service to the Warsaw Chamber and community, I was honored as the '2023 Warsaw Chamber of Commerce 'Community Partnership' Award' recipient at the annual Chamber of Commerce Banquet. It was a total surprise and a great honor! Also pictured is Warsaw Chamber of Commerce Executive Director, Kimberly Pearcy.

## **ECONOMIC & COMMUNITY DEVELOPMENT**

**Benton County Economic Development Committee** – continued facilitation of the Benton County Building Local Prosperity (BLP) work through the Benton County Economic Development Committee and the surrounding local leadership team of county leaders and stakeholders. This includes monthly meetings and communication to the entire committee and team.

## **Business and Community**

**Local Impact** 

Amie Breshears, MU Extension Ag Business Specialist

## **Connecting Entrepreneurial Communities (CEC) Conference 2023**

Benton County hosted the 3<sup>rd</sup> MU Extension CEC Conference Sept. 19-21. Two years of planning and hard work culminated in a 3-day whirlwind of presentations, networking, new experiences, and more! I presented as part of the 'ABC's of a Thriving Community 2.0 – DIY Edition' team along with Jo Ann Lane (Benton Co. Economic Developer) and Lynette Stokes (Benton Co. Tourism Executive Director). I also moderated a panel discussion, 'All Together Different: Q&A with Benton County Elected Officials' with Presiding Commissioner, Steve Daleske; Lincoln Mayor, Glen Nelson; Cole Camp Mayor, Bob Meuschke; and Warsaw Mayor, Eddie Simons.

I can't say enough great things about how hard folks worked to put on the best CEC Conference ever – a special 'shout out' to Benton Co. Economic Developer, Jo Ann Lane, for her excellent leadership and attention to detail!

#### By the numbers:

- 105 registrants
- 46 presenters
- 39 counties
- 28 sponsors
- 25 breakout sessions
- 18 members of the Benton County local teams county-wide and in Lincoln, Cole Camp, and Warsaw
- 13 facilitators and volunteers plus 2 organizations of folks!
- 12 state team members
- 12 West Central Region counties represented Bates, Benton, Camden, Dallas, Henry, Hickory, Johnson,
   Moniteau, Pettis, Polk, St. Clair, Vernon
- 10 breakout location in Cole Camp and Warsaw
- 4 states Missouri, Nebraska, Kansas, Illinois
- 3 towns Lincoln, Cole Camp, Warsaw
- 2 networking locations in Lincoln and Warsaw



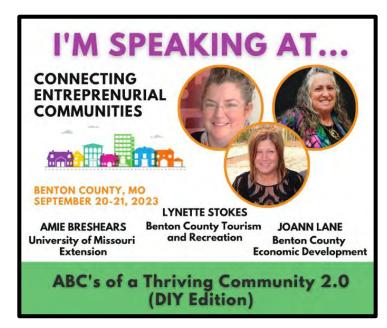
## **Business and Community**

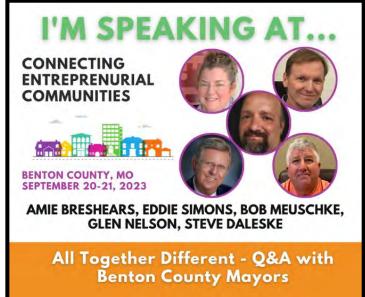
**Local Impact** 

Amie Breshears, MU Extension Ag Business Specialist



Jo Ann Lane (Benton Co. Economic Developer), Amie Breshears, and Lynette Stokes (Benton Co. Tourism) having some fun before their presentation 'ABC's of a Thriving Community 2.0 – DIY Edition' at The German Table in Cole Camp on Wed. afternoon of the CEC 2023 Conference in Benton County.





## **Business and Community**

**Local Impact** 

Amie Breshears, MU Extension Ag Business Specialist

CEC would not have been possible without the many businesses that sponsored the event!



## **Business and Community**

## **Local Profiles and Stories**

## **SBDC**

- 1. Capitalization dollar amount of loans, grants, equity, etc. going into businesses over the past year due to the work of SBDC, Apex and TAAC counselors;
- 2. Sales increase reported amount sales increases in client businesses over the past year due to counseling and other work done by the team;
- 3. New businesses started number of new businesses started over the past year by SBDC clients;
- Dollar of Awards dollar amount of government contracts received as reported by clients over the past year;
- 5. Number of Awards number of government contracts received as reported by clients over the past year;
- 6. Job created number of jobs created, as reported by clients, over the past year;
- 7. Jobs retained number of jobs retained, as reported by clients, over the past year;
- 8. Number of clients counseled number of unique clients from the county who received counseling services from the SBDC, Apex, and TAAC programs;
- 9. Number of training event attendees number of attendees from each county at training events over the past year.

Capitalization	\$1,187,500.00
Sales Increase	\$38,002.00
New Businesses Started	3
Dollar of Awards	\$327,454.00
Number of Awards	12
Jobs Created	9
Jobs Retained	99
Number of Clients Counseled	82
Number of Training Event Attendees	113

**Ag Business** 

## **Local Impact**

Amie Breshears, MU Extension Ag Business Specialist

### Ag Leasing online and on-demand

I presented the <u>Types and Components of Leases</u> Session for the Ag Business and Policy Extension program's 10-week <u>Ag Leasing</u> series. I traveled to campus because the format was designed as a live in-person interview/conversation with a host/interviewer and the setup was a sort of 'mini tv-studio' with bright lights, microphones, etc. I was nervous to do it, but the experience was great and I'm so glad I did it. My hope is that all of our viewers will be better negotiators and better landlords and/or tenants because they attended my session.

Ag Leasing Series Topics:

- -Cash lease calculating the rent
- -Crop share leases
- -Flexible leases
- -Land leasing to energy companies
- -Livestock lease
- -Hunting lease
- -Leasing business impacts

## Farm Succession Planning meeting – West Central Region in Nevada, MO.

We had a good crowd, a great meal, and lots of good discussion at the Farm Success Planning meeting. It's been said that there are two certainties in life – death and taxes. We know that, sooner or later, we will be the former 'operator' of our farm and that the 'operator' role will pass on to someone else. Wouldn't it be great if we planned ahead to make that transition as successful as possible so our farms could live on long after we're gone?

## Moniteau County Grazing School – Moniteau County

I was honored to be a presenter at the Moniteau County Grazing School in California May 22<sup>nd</sup> to 23 producers. My specific areas of focus were 1) Resource Planning and 2) Economics. In a nutshell, my goal was to help producers by providing tools to evaluate the business/financial impact of utilizing a managed grazing system in their operation.

The Moniteau Co. Soil & Water District (and others around the state) has cost-share funds available for managed grazing systems; one of the requirements to be eligible for cost-share is that producers attend a Grazing School to learn about managed grazing systems before they create one on their own operation. It was great to meet Moniteau County producers as well as folks from surrounding counties. They had lots of good questions and there was plenty of interesting discussion. Gene Schmitz, Todd Lorenz, John Turner, Megan Rudroff, Jon Roberts, and Colby Bestgen also presented. The Moniteau Co. Soil & Water Office staff did a great job planning and managing the logistics and details – from the location to materials to food and more!

**Ag Business** 

**Local Impact** 

Amie Breshears, MU Extension Ag Business Specialist

### **Benton County Grazing School – Benton County**

I was honored to be a presenter at the Benton County Grazing School in Lincoln Aug. 22-24. My specific areas of focus were 1) Resource Planning and 2) Economics. In a nutshell, my goal was to help producers by providing tools to evaluate the business/financial impact of utilizing a managed grazing system in their operation. The Benton Co. Soil & Water District (and others around the state) has cost-share funds available for managed grazing systems; one of the requirements to be eligible for cost-share is that producers attend a Grazing School to learn about managed grazing systems before they create one on their own operation. It was great to meet Benton County producers as well as folks from surrounding counties. They had lots of good questions and there was plenty of interesting discussion. Gene Schmitz, Travis Harper, and Mark Kennedy also presented. Dwane Kreisler generously allowed the School to visit his farm operation and see a 'real world' managed grazing system. Tina Dulaban, Jamie Henderson, and the Benton Co. Soil & Water Office staff always do a great job planning and managing the logistics and details – from the location to materials to food and more!

## **Drought Management Update Meeting – Cooper County**

I was honored to be a presenter at the *Drought Management Update Meeting* in Cooper County (Boonville) on July 24<sup>th</sup> to 22 producers, along with Gene Schmitz (Livestock), Todd Lorenz (Agronomy), Joe Aull (State USDA Director), Randon Leathers (USDA CD in Cooper County) and David Glaskey (Cooper County SWCD Office, District Manager). My specific area of focus was Economics, the same as Benton County, and I also shared about the IRS rules, etc. and the MO AgriStress Helpline. As in Benton County, we had a very engaged audience and got good feedback about the meeting in Cooper County!

## <u>Peterson Farm Brothers – Cole Camp</u>

For the second time in 2 years, St. Paul's Lutheran Church in Cole Camp hosted the Peterson Farm Brothers, a trio of brothers who write and perform parodies of popular country songs while sharing their story of farming, family, and faith. Once again, the church invited Benton County Extension to partner with them and share mental health resources at the concert. In addition to Benton County Extension folks, we had Della Miller and Tina Edholm and Joni Harper from the MU Extension Farm and Ag Stress Team. These fabulous ladies also serve as Benton County specialists in Human Development (Della and Tina) and Natural Resources (Joni). Tina's husband, James, came as well and Joni's son and daughter helped also. We worked together to share free printed resources and giveaways like water bottles and multi-tools. Those were a big hit! We appreciate St. Paul's inviting us to join them in this event!

## **Ag Business**

## **Local Impact**

## Amie Breshears, MU Extension Ag Business Specialist





### **Progressive Ag Safety Day at Cole Camp School District**

I coordinated the first Progressive Ag Safety Day at the Cole Camp School District – held in conjunction with CCHS FFA Barnyard Day on May 2<sup>nd</sup>.

Going into the day, my goals were simple: 1) Everyone learn. 2) Everyone enjoy the day. 3) Everyone make a new friend. 4) Everyone stay safe!

\*\*If even one child learned something at Progressive Ag Safety Day that later prevented injury or even saved their life, all the work and effort is worth it! \*\*

#### **TOTAL PARTICIPANTS: 505**

#### Pre-K 26 Κ 63 1<sup>ST</sup> GR: 65 2<sup>ND</sup> GR: 52 3RD GR: 62 4<sup>TH</sup> GR: 68 5<sup>TH</sup> GR: 63 6th GR: 63 8-12<sup>TH</sup> GR: 43 **VOLUNTEERS:** 15

#### **Our sessions:**

- -ATV/UTV safety (Todd Lorenz),
- -electrical safety (Keith Mueller, Central Electric Power Co.)
- -bicycle/helmet safety (Bonnie Etter, Ethel Keyte, Barry

Pabst - Benton Co. Health Dept)

- -hearing safety (Joni Harper),
- -sun safety (Beth Crouch)
- -drone safety (Gene Schmitz)

Picture Taker / 'Roam'er – Allison Gunter (also Asst.

Coordinator)

Amie Breshears - Coordinator

FFA session topics: horses, beef cattle, fishing, goats, rabbits, hunting, trapping/taxidermy, FFA history, plants, rabbits, and more!

Benton County Extension Council donated \$200 to pay for lunch for the volunteers

**Ag Business** 

**Local Impact** 

Amie Breshears, MU Extension Ag Business Specialist

### Feedlot School – Selling Direct to Consumer – Union, MO

For the first time, the MU Extension Value-Added Meats Team was invited to present at the MU Extension Feedlot School in Union, MO. Topics included meat cuts, rules/regulations, working with the processor/customer, pricing, and marketing. I presented on marketing, including identifying your customer and market channel(s), creating and sharing your advertising 'messages', and social media/websites. We appreciate the Feedlot School crew inviting us to join them in this event and are already planning future events!

## Pettis County Farm Bureau Annual Meeting - Farm & Ranch Stress Grant

I was honored to support Joni Harper as part of the Farm & Ranch Stress Grant presentation at the Pettis County Farm Bureau Annual Meeting on September 13<sup>th</sup> at Smith Cotton High School. This was my first time to attend a Farm & Ranch Stress Grant presentation as a Farm & Ranch Stress Grant team member, so I used every opportunity to learn from Joni. She did an excellent job covering what stress is, recognizing signs of stress in ourselves and others, tools/tips for handling stress, how to get help for ourselves and others, and much more! Multiple people came up to us after the presentation to thank Joni and compliment her on an excellent presentation. I appreciate the opportunity to learn from her and look forward to more opportunities to help farmers and ranchers better manage stress and live healthier and happier lives.

## Ag Lenders meeting in Warrensburg, Dec. 1st

The 2023 West-Central Region Ag Lenders Seminar was held at the ABC Building in Warrensburg on Dec. 1st. There were 34 attendees from 10 counties, 4 MU Extension professionals, 2 MU presenters, 1 Farm Service Agency presenter, and Marla Young from MASBDA. Katie Neuner coordinated the seminar, and I assisted her. Registration was \$85 and includes materials, snacks, and lunch catered.

In addition to the 1-day in-person seminar, *registrants also received exclusive access* to five <u>webinars on macroeconomic</u>, <u>policy</u>, <u>markets</u>, <u>farm income</u>, <u>and 2024 production budgets</u> to share with their agricultural clientele as a value add.

#### Topics included:

- -crop market outlook
- -livestock market outlook
- · -input costs and enterprise budgets
- -policy updates from FSA and MASBDA
- -land values and cash rental rates



AgBusiness

**Local Impact** 

Amie Breshears, MU Extension Ag Business Specialist

## Ag/Farm Safety Booth - Missouri State Fair

I was honored to be chosen to work at the 'Ag/Farm Safety Booth' at the Missouri State Fair. I was blessed to have several different Extension colleagues and folks from the Missouri Department of Labor to work with as the booth was very busy!

- In a nutshell, our job was to help fair-goers by providing information regarding safety information for ag producers as well as everyday-people. Check out the new website 'Show Me Farm Safety'!
- We also shared information about the new 988 Missouri Crisis Line and the MO AgriStress Helpline (a confidential farmer-to-farmer resource available 24 hours a day, 7 days a week. Call or text 833-897-2474. It's OK to need help. It's OK to offer help. It's OK to ask for help.)
- We met and shared information with literally thousands of people it's always good to see old friends and to make new ones!
- Kids especially love the 'grain bin' simulator where you see how many pounds of weight you can pull in the event someone needs a rescue. Moms and dads and even grandpas and grandmas get in on it too! We had an 88-year young lady give it a try and we had a dad who pulled 342 pounds, which is the most I've ever seen pulled!!
- Full disclosure except for that guy, your best pull is never enough! It takes 325 pounds of 'pull' to rescue a 160 lb. person buried to their waist. Our message is 1) stay out of grain bins, 2) if you must get in a grain bin, wear a harness and tie it off, and 3) always have a spotter outside the bin.



Extension Colleague, David Middleton, and me at the fair in the Ag/Farm Safety booth

**AgBusiness** 

**Local Impact** 

Amie Breshears, MU Extension Ag Business Specialist



## MU Value-Added Meats Team - Small Ruminant Fall Field Day

I'm part of the MU Extension Value-Added Meats Team, led by Kyle Whittaker and Jennifer Lutes. We performed a Meat Cutting Demonstration at the Lincoln University Cooperative Extension Small Ruminant Fall Field Day Meat Processing Workshop at Carver Farm on October 5, 2023. Workshop participants learned to identify lamb carcass primals and retail meat cuts; use tools such as meat saws, grinders, and knives to process meat; and pros and cons of marketing livestock through auction vs. selling meat direct to consumers. The lamb was processed and grilled for lunch (see me in photo above). Team members Jake Hefley also assisted with the workshop. The Value-Added Meats Team provides producer-focused education to help Missouri farmers and ranchers capture and retain more of the value in what they produce.

## Farm Tax Workshops

I hosted a Farm Tax Workshop in Sedalia (Pettis County) on Dec. 12<sup>th</sup>, from 6:15-8:45pm @ the Pettis County Extension Center. Registration was free and we had 7 registrants and 5 in-person attendees. We had 2 Pettis County attendees in the on-line session as well as 1 attendee from Morgan County and 1 from St. Clair County.

I hosted the Warsaw (Benton County) Farm Tax Workshop on Dec. 13<sup>th</sup> from 1-3:30pm @ First United Methodist Church in Warsaw. Registration was free and we had 8 registrants and 8 in-person attendees. We had online attendees from Henry, Johnson, Polk, and St. Clair Counties.

## **Community Work and Other Programming Activities**

- Benton County Arts Fest: 4th Annual art show featuring only Benton County artists put on by a partnership with Benton County Tourism, Benton County Arts group, and Benton County MU Extension. The 2023 Benton County Arts Fest was the best yet!
- Media efforts included social media posts in my coverage areas as well as a newspaper column on 'Year-end Record Keeping'. I continue to share information via email with my 'subscribers' for various Ag
  Business topics I get very positive feedback from this form of outreach.

## **Business and Community**

**Local Impact** 

Farm Family of the Year 2023



MU Extension in Benton County would like to introduce the **2023 Missouri State**Fair Farm Family of Benton County, Mitch and Leslie Grace.

The Grace family operates a cattle ranch in southern Benton County. The 825-acre home place is in Edwards, Missouri and they rent an additional 2000+ acres in the surrounding area. They run 300+ cow/calf pairs, along with sending yearlings to graze in the KS Flint Hills.

Daughter, Justine Howell, her husband Dustin and grandsons, Jayce Depriest, Carter and Lane Howell help work the ranch. Mitch and Leslie have three more children. Son, Taylor Grace, wife Amy, and two grandsons in Florida. Son, Landon Grace, wife Sara, and two grandchildren live in North Carolina. Daughter Monica Belcke and her husband, Stuart live in Saint Louis, MO.

Leslie is also a published author. She is the author of the novel "Flight Through the Darkness" and also writes a ranch-life blog titled 'The Adventures of Gate Girl'.

## **Business and Community**

## **Local Impact**

## Scholarship

Benton County Extension Council members have set up a fund to distribute scholarships in the three Benton County High Schools. Congratulations to Emma Slate from Lincoln High School, the winner of the first scholarship given by Benton County Extension Council.

## **Extension Council of the Year Award**

Benton County Extension Council won the Regional Council of the Year for the West Central Region of Extension. Council members were invited to attend Extension and Engagement Week October 23-26 as the statewide winner was announced. A five- minute video presentation was completed by winners of the 8 regions in Missouri. The presentation was a compilation of all the projects and events the council had completed for the year.

While Benton County Extension Council did not win the overall award, we are proud to have all the members representing Benton County.



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

## **Community and Professional Health Education**



Chronic Disease Self-Management programs offer evidence-based information for individuals and their caregivers to boost self-confidence in managing symptoms, enhancing quality of life and even reducing health care expenses.

These programs have undergone rigorous evaluation and are proven to be effective tools for individuals dealing with chronic conditions like arthritis, fibromyalgia, depression and diabetes.



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.



Policy, systems, and environmental (PSE) changes encourage residents to improve community health by making healthy choices easier and more accessible. Residents design strategies around local needs, assets, and interests.

**HELPING HANDS FOOD PANTRY** leaders decided pantry clients needed access to healthier foods. Review of food procurement and display practices led to a new policy allocating \$1,000 of pantry discretionary spending for LOW-FAT DAIRY OR FRESH PRODUCE.

## Legend





**Economic** 

Opportunity







## Health and Human Sciences

## **Local Profiles and Stories**



The **Diabetes Prevention Program** is a CDC-recognized program provided by licensed lifestyle coaches to prevent type 2 diabetes. Through lifestyle coaching participants can achieve sustainable weight loss, increase in physical activity and learn coping skills to manage stress.

# More than 1 IN 3 PARTICIPANTS have reached the 5 - 7% WEIGHT LOSS GOAL.



**PROSPER** is a research-supported approach that promotes positive youth development and strong families through lifeskills education that increase protective factors and reduces risky behaviors among teens. Through a campus-community partnership, PROSPER Teams are created to support the implementation of two evidence-based programs with middle school students and their families.

"They have the old saying it takes a village to raise a child, the more the community comes together the better off the children are going to be in that community."

Peggy Saphian PROSPER Model Participant in Fredericktown, MO



Rural Immersion Program is an opportunity for medical students interested in rural practice to gain experience in the rewards and challenges of working and living in a rural community, examining rural health disparities and quality of life concerns within a specific region. Group activities and meetings with community leaders in business, government, education, health care and natural resources give students a preview of life in a rural area.

All of the 2023 participants agreed that the Rural Immersion Program significantly contributed to them **FORMING INSIGHTS** on the suitability of living and working in a rural community, both personally and professionally.

## Health and Human Sciences

## **Local Profiles and Stories**



**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



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** 



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."

## Health and Human Sciences

## **Local Profiles and Stories**



**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.



**Cooking Matters** teaches shopping strategies, using nutrition information to make healthier choices and to learn how to cook delicious, affordable meals at home.

"We prepared barley jambalaya in class and one participant mentioned she had never tried barley before. She tried the jambalaya and really enjoyed it. A few days later she excitedly said she made the recipe at home and her whole family enjoyed it!"

**Cooking Matters facilitator about a class participant** 



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

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

## Health and Human Sciences

**Local Profiles and Stories** *Tammy Culpepper, MU Extension Nutrition Program Associate* 

#### **SNAP-Ed Public Value Statement 2023**

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.

A total of 2395 direct participants were from Benton County.

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

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

During 2023, youth and adults were served through direct teaching at schools, community groups and agencies. The following is an example of some of the locations where participants were served in Benton County:

Schools	Agencies
Lincoln Elementary	Benton County Food Pantry
Warsaw South Elementary	Benton County Senior Center
Warsaw North Elementary	Swinging Bridge
Cole Camp Elementary	Library

## Health and Human Sciences

Local Profiles and Stories Tammy Culpepper, MU Extension Nutrition Program Associate









### Health and Human Sciences

**Local Profiles and Stories** 

Tammy Culpepper , MU Extension Nutrition Program Associate



In addition to the numbers, Nutrition Program Associate, Tammy Culpepper shared this success story demonstrating local impact:

#### **July 2023**

With the help of the garden grant this past year, we were able to put in 6 raised gardens behind the Senior Center. The gardens would not be a success without the help of many volunteers and the two individuals who ensure the gardens are maintained for everyone to enjoy. Community members have been able to pick lettuce, radishes, zucchini. Tomatoes, peppers, cabbage, and other items are growing in abundance and almost ready to be picked. With the drought in the area, volunteers have had to water every other day all summer. The talk at the Senior Center is how much they appreciate being able to get fresh produce. We hope to build on this success and add more raised gardens in the near future.

#### **Favorite Quote:**

"What a great idea, I can't have a garden at my senior apartment and this allows me to still work in a garden"

"Fresh zucchini and lettuce and their free, I'm just going to have to start eating more vegetables."

#### Warsaw Senior Center









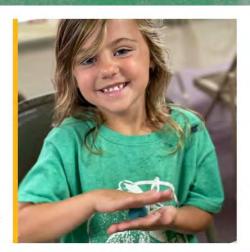
## MU EXTENSION Serves MISSOURI and Delivers MIZZOU

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.





#### Missouri 4-H Agriculture and STEM programs

employ hands-on activities that foster problemsolving, 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.





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.

**Economic** 

Opportunity



Legend













## MU EXTENSION Serves MISSOURI and Delivers MIZZOU

through credible statewide programs

### Missouri 4-H for ages 8 - 18











#### MISSOURI 4-H STATEWIDE EVALUATION





4-H members ages 8-18, participated in our Missouri annual evaluation. The evaluation used the National 4-H Common Measures. N = 432

- 92.1% Keep trying to reach their goals.
- 97.5% Willing to work hard on something difficult.
- 94.2% Help others reach their goals.
- 93.5% Stop to think about their choices, when making a decision.
- 99.1% Learn from their mistakes.
- 87.5% Set personal goals.
- 98.6% Like to learn new things.
- 99.3% Treat others the way they want to be treated.

- 99.8% Show respect for other's ideas.
- 95.8% Think about other people's feelings, before saying something
- 65.3% Comfortable speaking up in a group.
- 88.9% Can work with someone, who made them upset.
- 76.7% Comfortable being a leader.
- 97.2% Looks for ways to involve all members of a group.
- 95.8% Like to learn about people who are different from them.
- 92.3% Willing to try something they might get wrong.

GROWING TRUE LEADERS OF TODAY AND TOMMOROW

Legend











Educational Access & Excellence



Health & Well-Being

Missouri 4-H

#### **Local Impact**

Benton County 4-H clubs offer long-term educational experiences in which members learn life skills such as decision making, project mastery, public speaking and working with others. Members learn by doing under the guidance of adult volunteers, who teach projects ranging from computers science, and arts and crafts to animal science and healthy living. Clubs also involve youth in community service, camping and educational trips.

#### 4-H'ers are...







#### **4-H Participants**

Benton County had 4 Clubs with 84 youth

- Lake Creek Lamplighters
- Lincoln Cardinals
- All Arounders
- Turkey Creek Homesteaders

3 Clubs received Community Service Club Awards Se

**PURPLE SEAL--** All Arounders

**BLUE SEAL**— Lake Creek Lamplighters

WHITE SEAL— Turkey Creek Homesteaders



#### **Volunteers**

Volunteers assist in helping 4-H youth become successful leaders of tomorrow and are the core of the 4-H Program. They help to create, support and deliver educational programs and experiences. Benton County had 73 Adult Volunteers serving as role models and mentors for youth. Missouri 4-H volunteers report contributing on average 100 hours per year to the program. Valuing their time at \$31.80 per hour, the contribution of Benton County 4-H volunteers was worth more than \$232,140.00 in 2023.

Missouri 4-H

### Local Impact











Missouri 4-H

### **Local Impact**







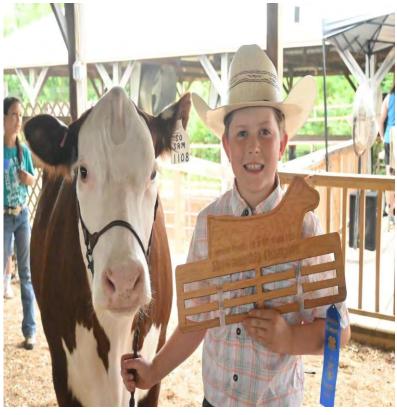




Missouri 4-H

### **Local Impact**







Missouri 4-H

#### **Local Profiles and Stories**

#### **Embryology (Hatching Chicks in the Classroom)**

The 4-H embryology program is a popular classroom supplement designed to provide youth with a hands-on science learning experience by observing pre-incubated eggs that hatch over the course of a few days under their care.

256 students from 3 schools, participated in Embryology resulting in 145 hours of learning. Students learn about where their food comes from, while gaining knowledge of life cycles of embryo and reproductive development.

By using experimental learning and hands on activities in the classroom, Teachers are able to build classrooms geared towards developing student's scientific and observational learning skills. Participants developed the social skills necessary to care for and nurture a living being by helping turn and care for the chicks both before and after they hatch alongside their teacher.

#### Youth Ag Tour with Cole Camp Antique Tractor Club and Central MO Ag Club

The Central Missouri Agriculture Club, University of Missouri Extension Pettis County 4-H, Cole Camp, Antique Tractor Association, and surrounding schools partnered together to introduce a bit of agriculture and its' history to some of the youth in the Sedalia area.

On September 28 and 29, 2023, 854 youth and adults had the opportunity to travel to Cole Camp, Missouri and observe old farm machinery at work. The show featured antique tractors, farm equipment and assorted livestock.

The schools attending included: Skyline Elementary, Hurricane Deck, Green Ridge, Smithton, Cole Camp, Northwest, Bunceton, La Monte, Stover, and an area Homeschool Coop.

Missouri 4-H

#### **Local Profiles and Stories**

#### 4-H Camp Bobwhite

Our Camp council includes 5 counties, Carroll, Chariton, Benton, Saline, and Pettis. Due to Specialist Staffing, we partnered with and held camp at Camp Bobwhite, in Knob Noster this year. Our camp theme was, "4-H Camp: A universe of possibilities!". Youth participated in several activities throughout each day including, flag raising/lowering, dancing, arts and crafts, singing, swimming, astronomy, team-building, campfires, and games. Camp ran from June 5th-7th.

9 youth attended from Benton County

#### Benton County 4-H/FFA FAIR and Missouri State Fair

The Benton County event was held June 28-July 1. Over 15 towns were represented by 95 youth. 441 Exhibits, including Beef Cattle, Sheep, Swine, Dog, Poultry, Rabbits, Goats, Cured Meats, Arts and Crafts, Cake Decorating, Graphic Design, Foods, Floriculture, Photography, STEM, Welding and Woodworking.

Lots of youth earned Blue Ribbons to attend the Mo. State Fair.



Sierra K. won Best of Show for Painting

Molly S. won Grand Champion for Rabbits at Missouri State Fair. She is also featured on our cover photo.



#### **Benton County Shooting Sports**

4-H Shooting Sports is a youth development educational program. It uses the skills and disciplines of shooting to assist young people and their leaders in obtaining knowledge and developing skills. Development of skills within the discipline of shooting and "life skills" is implicit in the program curriculum and explicitly stated for volunteers. It appeals to young people and volunteers from a wide range of urban and rural backgrounds. 4-H Shooting Sports promotes positive youth-adult interaction, safety, and peer leadership.

Benton County SS is in the early stage of getting the club established. Instructors have been trained and projects will start in February. 12 youth are currently involved in Shooting Sports.

### Agriculture and Environment

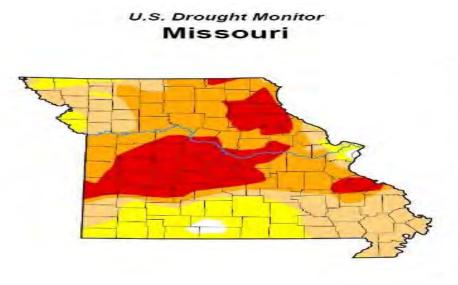
### **Local Impact**

Gene Schmitz, MU Extension Field Specialist in Livestock

Assigned Counties: Benton, Cooper, Hickory, Miller, Moniteau, Morgan, and Pettis

Additional counties served via direct contacts or through various programs: Bates, Boone, Polk, Greene, Johnson, Cedar, Osage, Henry, Howard, Wright, Livingston, Cole, Holt, Vernon, St. Clair, Saline, and St. Genevieve.

A major drought continued during 2023, resulting in limited forage availability for many livestock producers. Concerns about nitrate levels in forages, prussic acid levels in forages, alternative forages, and winter feeding options were topics that were addressed to help producers cope with drought conditions and limited hay supplies. Over 400 individual contacts were made in the areas of beef production, forage production, and drought related issues during 2023. Six producer meetings were held in July and August with the cooperation of Dr. Todd Lorenz, Travis Harper, David Hoffman, Dr. Eric Bailey, and Dr. Tim Evans. Meetings were held in Warsaw, Sedalia, Versailles, Boonville, Windsor, and Tuscumbia with total attendance numbering 115 producers. Follow-up winter feeding meetings were held during November and December in Warsaw, Sedalia, Boonville, Versailles, California, and Tuscumbia. A total of 37 producers attended these events. Additionally, ten USDA Farm Service Agency county offices requested an independent assessment of pasture losses during the grazing season. Reports were prepared for these counties based on rainfall records, USDA drought monitor information, individual contacts, and visual observations.





## Agriculture and Environment

#### **Local Impact**

Gene Schmitz, MU Extension Field Specialist in Livestock

A second field of native warm season grass was established at the University of Central Missouri in 2023. This is in addition to the replicated plots established in 2022. These replicated plots are available for future use by UCM teaching and research faculty as well as use by MU Extension specialists for programming efforts in this area.

Native warm season grass plots at State Fair Community College are now well enough established that an ultrasound measurement / phone app interface is being tested to record forage height and estimate forage yield. Yield estimate equations have been developed for cool-season forages, but not native warm season grass species. This was the third year of measuring and harvesting these plots to develop accurate equations to estimate forage yield. We will continue efforts to improve the capability of this technology to estimate forage yield in native warm season grass pastures and hay fields. This is funded through a grant from the Missouri Department of Conservation.

The Alliance for Grassland Renewal is an organization comprised of universities, governmental agencies, private companies, and forage producers. The mission of the Alliance for Grassland Renewal is to reduce or eliminate the negative effects of toxic tall fescue on the livestock industry through education and outreach, industry led quality control standards, and incentives, while pursuing new technologies and techniques. I was involved in teaching during the following educational efforts: 1. Face-to-face renovation workshops in Mt. Vernon, MO and Huntsville, AL.; 2. Virtual training for Extension agents and other forage educators with 107 individuals from across the Fescue Belt participating. Following the training, participants received access to a short presentation they can use at local meetings when requested to provide a program; 3. The renovation school was adapted to a special projects class for undergraduate and graduate students in Ukraine. Fifty-two students from 3 universities (Podillia State University, Podillia Institute of Fodder and Agriculture, and Uman National University of Horticulture) enrolled in this special projects class.



### Agriculture and Environment

### **Local Impact**

Gene Schmitz, MU Extension Field Specialist in Livestock

I continued participating in a project to study internal parasite loads and efficacy of dewormers in cattle. Fecal samples from 12 herds on 7 separate farms in Pettis and Benton counties were collected before and after deworming. Results are still being evaluated.

4-H youth showing market animals at local fairs and the state fair are required to attend Show-Me-Quality Assurance training. I provided training for 99 youth from 6 counties during 2023.





### Agriculture and Environment

#### **Local Profiles and Stories**

Congratulations to Gene Schmitz, MU Extension Livestock Field Specialist, for receiving the Distinguished Service Award for Missouri Extension at the National Extension County Agents Conference in Des Moines August 18, 2023.

Gene has worked tirelessly to help producers, youth, and citizens in Benton County and all the other counties he serves. He is also a great colleague and mentor to work with!

We are so glad to have Gene serving Benton County and congratulate him on this well-deserved honor!





### Agriculture and Environment

Local Profiles and Stories Travis Harper, MU Extension Field Specialist in Agronomy

**Private Pesticide Applicator Training**— Private Pesticide Applicator Training teaches producers how to safely store, handle, and use restricted-use pesticides in agricultural production. Proper application of pesticides results in greater safety for both the applicator and their neighbors.

- 22 Benton County residents received a license in 2023.
- Currently 85 active private pesticide applicators in Benton County.

**Soil Testing** – More than 17 soil samples representing more than 680 acres were submitted through the Benton County Extension office for analysis at University of Missouri Extension's soil testing laboratory. Soil sampling provides Benton County's forage and row crop producers with an accurate analysis of exactly what is in their soil and provides them with recommended fertilizer application rates for the crop they are trying to grow. Benton County's agronomist reviews the soil sample results with the producers, fine-tuning the recommendations for their particular situation and needs. Soil sampling and accurate fertilizer application increases crop production, reduces input cost, maximizes profit, and reduces the environmental impact of fertilizer loss from fields through leaching and runoff.

Benton County Master Gardeners – The Benton County Master Gardeners are a group of knowledgeable and experienced gardeners who are in active in "helping others learn to grow". The group meets monthly from March through October and receive advanced education from MU Extension specialists on a variety of gardening topics. The Benton County group added 1 new member in 2023. The highlight is the hosting of the Tri-County Master Gardener Dinner in November. The group also maintains the garden on the south side of the courthouse in Warsaw.

Heroes to Hives – Heroes to Hives is a statewide program offered through Michigan Food and Farming Systems (MIFFS) and University of Missouri Extension that seeks to address financial and personal wellness of veterans through professional training and community development centered around beekeeping. It features online training through MIFFS coupled with hands-on training from University of Missouri Extension at our teaching apiaries in Warrensburg and Mt. Vernon. For 2023, our third year, two veterans from Benton County participated in the Heroes to Hives course and plan to establish new colonies in Benton County in 2023.

### Agriculture and Environment

Local Profiles and Stories Travis Harper, MU Extension Field Specialist in Agronomy

Lincoln Elementary School Outreach – MU Extension agronomist Travis Harper taught a program on insects in the garden for 40 elementary school students in Lincoln. Students learned how to examine plants for insects, how to distinguish between beneficial and damaging insects, and how to control damaging insects while protecting beneficial insects. Instilling appreciation of the outdoors and the environment at a young age often leads to better understanding and management of gardening systems in adult years.

Benton County Grazing School – A management intensive grazing school was held in Benton County in August 2023. The grazing school was designed to teach producers, educators and agency staff the basics of management intensive grazing with a hands-on approach. The 3-day workshop provided opportunities for in-depth discussions, field exercises, and reference materials that cover both livestock and agronomic topics related to grazing. Graduates of the school often produce more pounds of beef per acre with lower environmental impact and cost of production compared to traditional operators. More than 10 producers representing more than 4,000 acres attended the grazing school in 2023.



### Agriculture and Environment

**Local Profiles and Stories** Ramon Arancibia, MU Extension Field Specialist in Horticulture

MU Extension Specialist based in Bates County to service 9 counties in the West Central Region. As the Field Specialist in Horticulture, the priority is to address the concerns of specialty crop growers in the west central region and statewide in collaboration with other regional specialists.

Face to face farm visits was the main contact method with Amish/Mennonite growers since they don't have access to computers or social media. However, face to face visits as well as phone and emails were contact methods with other produce growers and homeowner. Among the main concerns addressed were soil test results and fertilizer recommendations, soil-borne diseases, foliar diseases, and pesticide use. In addition, assisted produce growers with sampling and submission of samples for plant disease identification and management recommendations.

Information generated from two studies funded by the Missouri Department of Agriculture on sweet potato and watermelons and other specific topics were extended to specialty crop growers. Materials include video posts in YouTube MUIPM (https://www.youtube.com/@MUIPM)

Horticulture and Garden Hour (https://ipm.missouri.edu/townHalls/), and through printed articles in the MO Produce Growers Bulletin (https://ipm.missouri.edu/MPG/) and the American Society for Horticultural Science (https://ashs.org/), HortTechnology. Other venues were in person seminars and conferences with growers and garden clubs, and online webinars as well as Q&A sessions (MU Extension Garden Hour). Coordinated three tracks in the 2023 Great Plain Growers Conference (GPGC) (https://www.greatplainsgrowersconference.org/) and became the chair of the 2024 GPGC organizing committee. And as MU Horticulture team member, co-coordinated and presented in two webinars: Organic Agriculture Production and Protected production of specialty crops. In addition, gave 7 seminars in person to county garden and master gardeners clubs in the West Central region, and contributed to the weekly Q&A sessions of the Garden Hour (https://ipm.missouri.edu/townHalls/).

Extending information and assisting produce growers in their farms are expected to increase local production and the sustainability of the industry.

#### Planning and upcoming events

- Engage with growers on a new grant to manage soil-borne diseases in high tunnels.
- Conduct series of workshops on gardening and hydroponics in covered counties.
- Bates Co. Soil and Water Conservation District
- Direct client consultations (farm visits)
- Train farmers on food safety
- Chair of the 2024 GPGC and contribute with presentations.

## Agriculture and Environment

### **Local Profiles and Stories** Ramon Arancibia, MU Extension Field Specialist in Horticulture

MO direct contacts		1858
MO indirect contacts		57,591
Farm visits/consultations		101
Phone consultations		106
Email consultations		233
	Presentations/Se	Contacts
	ssions	
Presentations/workshops/field days		
Great Plains Growers Conference (Veg. Prod. Moderator/spkr)	3	296
Montevallo Produce auction.	1	23
County garden/master gardener club meetings	6	74
Career Exploration Day	1	210
Courses/trainings:		
Food Safety Modernization Act – PSA training	3	118
Master Gardener Core Training Kansas City and surroundings	15	327
Master Gardener Laclede	10	183
Commercial Vegetable Production Webinar (online)		
Production in tunnels	2	61
Organic production	1	26
Website/Social media		
Articles MPG July 2022 (MU Extension website and print)	1	626
Commercial Hort. Video Newsletter (YouTube-MUIPM)	1	418
Garden Hour with MU Extension (Statewide online, YouTube-MUIPM)	32	2429
Development DCVD A moviCovng (Potes)	1	1020
Development RSVP AmeriCorps (Bates)  Soil and Water Conservation District (Pates)	10	1930
Soil and Water Conservation District (Bates)  4H Vegetable Contest Judge (Bates)	10	63
Farmers Market consultations (Henry, Benton, Cass, Polk, Vernon, Cedar,	14	58
Laclede, Dallas)		
Grants/studies		
NC-SARE Fusarium biocontrol		
Development RSVP Americorp		