

SERVE MISSOURI. DELIVER MIZZOU.

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OFFICE OF THE VICE CHANCELLOR FOR EXTENSION AND ENGAGEMENT

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December 2023

Dear county commissioners and friends of MU Extension and Engagement,

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

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

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

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

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

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

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

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

Sincerely,

Chad Higgins, PhD

Chal Hijs

Interim Vice Chancellor, MU Extension and Engagement

Chief Engagement Officer, UM System

Who we are

Faculty and staff

Vernon County

417-448-2560

Hari Koirala, Field Specialist in Community Health Hunter Lovewell, Field Specialist in Agronomy Linda Clinton, Field Specialist in 4-H Youth Dev. Mikayla Neil, Extension and Engagement Specialist Paula Gray, FNEP Program Manager Thabena Bower, 4-H Youth Program Associate Mellissia Butler, Nutrition Program Associate Jo Lynne Crowe, secretary

Bates Co. support for Vernon Co. 660-679-4167

Ramon Arancibia, Horticulture Specialist Sara Bridgewater, Nutrition/Health Ed. Field Spec.

Cass Co. support for Vernon Co. 816-380-8460

Kyleigh Sullivan, Field Specialist in Human Dev.

Cedar Co. support for Vernon Co. 417-276-3313

Patrick Davis, Livestock Specialist

Phelps Co. support for Vernon Co. 573-882-7441

Travin Shelton, Field Specialist in Business Dev.

MSSU support for Vernon Co. 417-625-9557

Lisa Robinson, Director, MSSU SBDC Ken Surbrugg, Business Development

Council members

Mike Buehler, Chairman Kevin Williams, Vice-chairman Sheree Gayman, Secretary Michael Fields, Treasurer

Members At Large Amanda Ast Talitha Bunn Ganga Fernando Tansy Friar Shelby Lightwine Mary Tippie Missy Wehmeyer Hazel Wilson

Area Representation Cindy Thompson, County Commissioner Jim Bell, Farm Bureau

State Legislators

Dane Diehl, Representative Sandy Crawford, Senator

County commissioners

Joe Wilson, Presiding Commissioner Cindy Thompson, Northern Commissioner Everett Wolfe, Southern Commissioner

Budget and more

Appropriations budget

Income	
County Appropriations	\$55,500.00
Total Income	\$55,500.00
Evnanças	
Expenses	
Salaries/Benefits	\$36,739.04
Travel	\$ 4,585.05
Telephone	\$ 291.69
Office Supplies/Service	\$ 3,932.11
Postage	\$ 103.58
Insurance	\$ 1,814.26
Advertising/Publishing/Printing	g \$ 427.00
Furniture/Equipment	\$ 1,022.62
Misc.	\$ 294.18
Total Expenses	\$49,209.53

Return on investment

Capitalization	\$ 4,388.00
Dollar of Awards	\$800,603.00
Number of Awards	37
Jobs Created	2
Jobs Retained	162
Number of Clients Counseled	15

Vernon County partners

Bronaugh Schools

Community Center

Farmer's Markets

MO-KAN Square Dancers

Nevada Schools Benton Middle School

NEVC Schools

Senior Center

Sheldon Schools

United Way of Vernon County

Vernon County Youth Fair

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



Local Support

Did you know you can donate directly to Vernon 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 Footprint in the county in 2023



FY23 county students

36 students

- 26 Undergraduates
- 10 Graduate and professional students
- · 27 Full-time students
- · 9 Part-time students
- 11 Pell grant recipients (aid year 2023)



County employees and retirees

13 people employed by UM

- 12 Campuses
- · 1 MU Health Care

8 UM retirees and beneficiaries UM salary and retirement income: \$722,986

UM state tax revenue: \$18,393 UM federal tax revenue: \$77,825



County alumni

Selected school alumni

- 5 Medicine
- 14 Nursing
- 14 Health Professions
- · 8 Dentistry
- · 11 Pharmacy
- · 4 Optometry
- · 8 Veterinary Medicine
- 69 Agriculture
- 41 Engineering
- 19 Law

Alumni teaching K-12

- · 14 teachers
- · 5.7% of all district teachers
- 1 principal or administrator
- 7.1% of all district principals and administrators



County breakdown

MU

- 18 students
- · 221 alumni
- 12 employees

UMKC

- 11 students
- 85 alumni
- 0 employees

Missouri S&T

- · 3 students
- 34 alumni
- · 0 employees

UMSL

- 4 students
- 13 alumni
- 0 employees

All I

County properties and offices

MU Extension in: Vernon County



County population: 19,831



County services provided

Health care (FY23)

- 61 in-state patients seen at MU Health Care, with \$30,222 of uncompensated care
- 24 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 19 visits to 8 patients having ZIP codes associated with the county

Extension (2022)

- 4,261 Total educational contacts from MU Extension to residents of the county, including:
- 1,462 contacts related to productive farming, better gardening, and managing natural resources
- 2,799 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development



UM System Statewide Footprint

Economic and Community Development Highlights

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



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

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



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

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



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

Education and Training Provided



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



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



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

Education Highlights

FY23 Financial Aid Awards

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

MU

UMKC

27,256

\$536.0M

11,859

\$217.3M

students receiving financial aid

financial aid awarded

students receiving financial aid

financial aid awarded

Missouri S&T

UMSL

6,748

\$117.7M

8,489

\$102.8M

students receiving financial aid awarded financial aid

students receiving

financial aid awarded



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

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

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

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









Missouri Grand Challenges: Local Solutions

VERNON 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

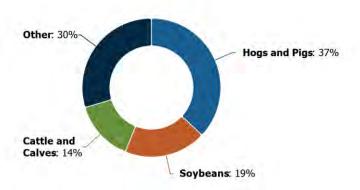
Knowing Local Challenges



S_ CHALLENGE 1: Economic Opportunity: Agricultural Economics

Leading Agricultural Products

Total Commodity Sales: \$215,609,000



Data Source: US Department of Agriculture, National Agricultural Statistics Service, Census of Agriculture. 2017.

Net Farm Income

Net farm income (total sales, government payments, and other farm-related income minus total farm expenses) reflects the strength of the local agricultural community and can be an important measure for lenders and policy makers. The report area had a combined net farm income of \$71,901,000 in 2017, an average of \$56,839 per farm. This compares favorably to the statewide average farm income of \$29,485.

Report Area	Total Farms	Average Farm Income
Vernon	1,265	\$56,839
Missouri	95,320	\$29,485

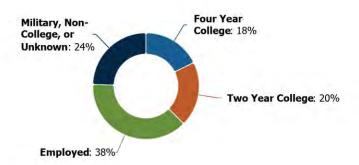
Data Source: US Department of Agriculture, National Agricultural Statistics Service, <u>Census of</u> Agriculture. 2017.



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 192 graduates surveyed in the report area, 34 went to a four-year college, 38 to a two-year college, 73 directly entered the job market. The remaining 47 are reported as in the military, not in college, or unknown.



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



CHALLENGE 3: Healthy Futures: Access to Care

Mental Health Care Providers

Mental health is a critical public health issue worldwide. Access to mental health services is a challenge across Missouri, which ranks 46 out of 51 states in provider access. In the trio there are approximately 32 credentialed professionals providing mental health care to serve the area's 19,707 residents. The patient-provider ratio in the report area is 616 to 1, which means there is 1 provider for every 616 persons. The ratio of persons to providers in the report area is lower than the state average of 855:1, which means there are more providers per person in this area.

Ratio (Population to Providers)

616:1

Missouri

855:1

Vernon

Data Source: Centers for Medicare and Medicaid Services, <u>CMS - National Plan</u> and <u>Provider Enumeration System (NPPES)</u>. December 2023.

Primary Care Providers

Older adults make up a historically large percentage of the U.S. population and meeting the healthcare needs of an aging population can be challenging. In the report area, there are approximately 8 primary care physicians (MDs and DOs) to serve the area's 3,977 residents over the age of 65. The patient-provider ratio in the report area is 497:1, which means there is 1 provider for every 497 older adults. The ratio of adults to providers in the report area is higher than the state average of 242:1, which means there are fewer providers per person in this area.

Ratio (Population to Providers)

497:1

Missouri

242:1

Vernon

Data Source: US Department of Health & Human Services, Health Resources and Services Administration, <u>HRSA - Area Health Resource File</u>. December 2023.





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

73.24%

Missouri

17.69%

Vernon

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

Missouri 4-H for ages 8-18



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





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





4-H's Leadership and Civic

Engagement programs foster understanding, confidence and decision-making skills to empower youths to become informed and active young citizens. 4-H civic engagement initiatives prepare young people to become future leaders by engaging them in programs where they have voice and influence.



Legend





Economic

Opportunity









MU EXTENSION Serves MISSOURI and Delivers MIZZOU

through credible statewide programs

Missouri 4-H for ages 8-18







Vernon County 4-H Officers working on the "Day of Service" backpacks for youth and elderly.



Exploring Spin club

Fishing, Camping and Hiking Day

Exploring Spin Club What is 4-H? Pillars

of Character Day





Maleah Hogan, Mason Forkner and Preslee Bower at National Congress -- MRF Award Recipients







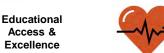


Recognition Night 2022-2023











Missouri 4-H

Local Profiles and Stories

Number of Vernon County residents served

- 364 4-H Members
- 142 Trained Adult Volunteers
- 440 Youth participating in 4-H Short Term Projects
- 108 Youth participating in School Enrichment

Accomplishments

Vernon County 4-H serves youth through 14 organized clubs. The youth of Vernon County have demonstrated learning through the following activities:

County

- 1 West Central Ambassador
- 1 State Shooting Sports Ambassador
- 81 Club Officers
- 13 County Council Officers
- 1506 Projects registered by members.
- 553 Projects registered by leaders.
- 4-Hers also participate in many local events such as county 4-H council meetings, county-wide fundraiser, County
 Lock-In at the YMCA, Clover Kid's Day, Vernon County Youth Fair, 4-H Expo, recognition celebration and community
 service activities.
- 1393 projects (livestock and non-livestock) showed at the Vernon County Youth Fair.
- \$8302.00 was raised during the county-wide fundraiser after expenses.
- 78 project records completed by 53 members.
- 35 Missouri Report Forms were completed and judged at the county level.
- 15 Missouri Report Forms were completed and judged at the regional level.
- 3 members attended National Congress for their Missouri Report Form.
- The county 4-H Expo was attended by 21 returning members and 16 potential new members, signed on 9 new members
- A spin club for Clover Kids to meet monthly is available for the whole county.
- Spin Clubs were held for Exploring and Bikes.
- 1 council member attends the County Extension Council meetings as a Liaison from the 4-H Council.
- 7 clubs participated in the County Window Display during the state 4-H Week in October.
- Several members/clubs rang the bell at Wal-Mart as part of the Salvation Army Red Kettle Campaign.
- The 4-H Council received a "Day of Service" grant and distributed Backpacks of personal items to children and elderly in need.
- Day camp was attended by 3 Camp Counselors and 3 campers.
- The 4-H Council hosted the Chamber Luncheon of 25 members at the Vernon County Youth Fair.
- The 4-H Council hosted the Rotary Luncheon of 26 members at the Vernon County Youth Fair.
- 12 members participated in the Vernon County Livestock Judging event.
- 14 Projects now have County Wide Leaders.
- Several clubs participated in Lights at Spring Street Park. Donations were taken to help various organizations.
- Backroads, Bronaugh and Lone Star helped with the Vietnam Appreciation Day.
- Hustlers 4-H Club helped with Wreaths across America and the Vernon County Prom Dress Event.
- 51 members/friends attended the County Wide Lock-In at the Fairgrounds

Missouri 4-H

Local Profiles and Stories



Vernon County 4-H speaking to the Chamber of Commerce luncheon at the VCYF.



Vernon County 4-H Camp Counselors with Day Camp participants at El Dorado Astronomy Camp.

Regional and State Events

- Several members completed at regional and state shooting sports competition.
- 86 non-livestock projects submitted to Ozark Empire Fair
- 80 non-livestock projects submitted to Missouri State Fair
- 19 members received special recognition at the Ozark Empire Fair
- 1 member received special recognition at the Missouri State Fair Best of Show
- 1 member participated in the State Fashion Review
- 10 members participated in the State Livestock Judging

Vernon County SNAC Program

• A 4-H Student Nutrition Advisory Council (SNAC took place in-school at the Sheldon School District and the Bronaugh School District with 37 youth in the 4th, 6th and 8th grade utilizing Kids in the Kitchen curriculum. The youth were encouraged to become ambassadors of Healthy Living in their communities. The youth chose to make posters to display in school to educate their peers about healthy habits. Prizes were awarded for 1rst, 2nd and 3rd place with every child receiving a 4-H packet of recipes, a frisbee, a 4-H cup and a certificate of completion.



SNAC- 4th Grade in Sheldon, MO



SNAC- 4th Grade in Bronaugh, MO



SNAC- 8th Grade in Bronaugh, MO



MU EXTENSION Serves MISSOURI and Delivers MIZZOU

through credible statewide programs

Agriculture and Environment



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 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.



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.

Legend





Economic

Opportunity







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 a was online. The schools were designed for those who prepare taxes including enrolled agents, tax preparers, CPAs, individuals, and attorneys.

The training included updates on legislation, rulings and cases, individual taxpayer issues, agricultural and natural resources topics, ethics, trusts and estates, agriculture and natural resource tax issues, business tax issues, business entity tax issues, IRS issues, penalties and defenses, form 4797 sales of property, retirement tax issues, like-kind exchange issues. The schools were approved for 8 and 16 hours of continuing education credit by the IRS, Missouri Bar and for CFP continuing education. Total continuing education hours reported to IRS for the schools was 3,336 hours.

The teaching teams included a CPA and former IRS stakeholder liaison, an IRS certified retired ag economics professor, an attorney, Missouri Department of Revenue and extension ag business specialists. The trainings received positive evaluations and planning is underway to offer trainings in 2024. Local county residents benefit when local tax preparers have the opportunity to gain knowledge, which benefits their clients and communities. The tax schools are a program of the ag business and policy program of MU Extension, coordinated by Mary Sobba with help from a team of ag business specialists throughout the state. The resources for the schools included the IRS, the National Income Tax Workbook from the Land Grant University Tax Education Foundation, and materials

The 2023 school attendance totaled three hundred twenty-seven people with five from Vernon County.

written by the instructors.



Agriculture and Environment

Local Impact

Hickory County MU Extension Cattleman's Bus Tour

Contacts: approximately 31

The program planning included Terry Halleran, Gene Schmitz, Patrick Davis, and myself. The others did the planning and scheduling for the trip. I only went along and provided input during the trip. The bus tour included a variety of stops in south central Missouri, southern Indiana, and western Kentucky. Each cattle operation had a unique way of operating and business plan. We learned about how these operations were diversified in other business avenues such as direct marketing beef, growing tobacco, or custom spraying using a drone. We also stopped at a county museum in Indiana that had a great deal of agriculture history in it.

Native Warm Season Grass Pasture Walk

Contacts: 21

This program was a collaboration between MU Extension, MU/MDC Native Grass Group, Natural Resources Conservation Service (NRCS), Missouri Department of Conservation (MDC), and the Vernon County MO Soil and Water Conservation District to have a workshop and pasture walk covering native warm season grasses and the benefits of it for livestock producers. Drexel Atkinson, Soil Health Specialist with NRCS and Harley Naumann, MU Extension Grazing Specialist, provided the workshop presentations. The presentations provided education on the benefits of warm season grasses and the process of converting a percentage of cool season grasses to warm season grasses. Following the presentations, we traveled to Prairie View Stock Farm to see firsthand see part of the process of converting pasture to warm season grasses.

Strategies to Build a Sustainable Forage and Livestock Operation

Contacts: 10

This program included Patrick Davis, Wesley Tucker, David Brown, and myself in Appleton City, MO. A variety of topics were covered to discuss how to navigate a drought year as a livestock producer. Patrick discussed cattle management, Wesley discussed economics, David discussed how small ruminants can be a benefit to livestock operations, and I discussed agronomic management strategies to help mitigate the drought conditions for the future.

Winter Cattle Feeding and Pasture Management Workshop

Contacts: 12

This program consisted of Patrick Davis and myself in Stockton, MO. We discussed a variety of topics of how to manage the cattle herd through the winter during a drought year. Patrick discussed a variety of topics on cattle management including body soundness exams. I discussed frost seeding legumes and the advantages of this practice. I also discussed why soil testing is important to understanding the fertility needs of pasture and hay ground.

Agriculture and Environment

Local Impact

Online Alfalfa 101: Establishing a Stand, Starting Production, Harvesting, Feeding and Economics Workshop

MU Extension provided an online workshop which educated participants on alfalfa production, harvesting, cattle feeding and economics. 21 participants were educated through this workshop.

Show Me Youth Ag Academy

During the spring youth were educated in cow and bull management. This was done as part of the Show Me Youth Ag Academy at the Lamar Career Technical Center which is part of Lamar Schools. Youth were educated during classes on 2 days in the spring discussing cow management and bull management prior to the breeding season. In addition, at one of the classes there was hands on demonstration of bull management where youth worked with the operation's veterinarian to conduct bull breeding soundness exams on the bulls to make sure they were ready for the breeding season. There were 3 Vernon County youth educated during the two classes.

Horticulture

MU Extension Horticulture Specialist Ramón Arancibia based in Bates County serves 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.

County

Agriculture and Environment

Local Impact

MO indirect contacts		
		57,591
Farm visits/consultations		101
Phone consultations		106
Email consultations		233
	Presentations/S	Contacts
	essions	
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 Core Training Ransas City and surroundings Master Gardener Laclede	10	183
Commercial Vegetable Production Webinar (online)	10	103
Production in tunnels	2	61
Organic production		26
Organic production		20
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 RSVP AmeriCorps (Bates)	1	1930
Soil and Water Conservation District (Bates)	10	63
4H Vegetable Contest Judge (Bates)	1	16
Farmers Market consultations (Henry, Benton, Cass, Polk, Vernon,	14	58
Cedar, Laclede, Dallas)		
Grants/studies		
NC-SARE Fusarium biocontrol		
Development RSVP Americorp		

Agriculture and Environment

Local Impact





Forty-nine (49) producers attended November 17th at Mt. Vernon, MO. They learned about production and financial management for sheep and goat farms. Participants also learned how to perform FAMACHA and 5-point checks.



Topics included: Forage & Pasture Management, Integrated Parasite Management Control, Economic Impact of Low Performing Animals, FAMAHCA system & 5-point Check lecture & hands on certification.

"Very relevant, everything directly applied to our goat operation!"



Agriculture and Environment

Local Impact

Missouri Grazing School -Neosho

Nineteen (19) producers participated in the Grazing School held June 6th – 9th in Neosho, MO.

This program teaches management-intensive grazing (MiG), which subdivides large fields into smaller paddocks then rotates livestock across paddocks.

The program covered the following topics: Art and Science of Grazing, Economic Aspects of Grazing, Evaluating Resources, Pasture Allocation & Evaluation, Grazers Arithmetic, Stockpile and Strip Grazing, Matching Livestock to Pasture Resources, Livestock Nutrition, Forage Basics, Evaluation of Soil Resources and Fertility, MultiOspecies Grazing, Water Systems, and System Layout and Design.



Agriculture and Environment

Local Impact



Making Informed Lending
Decisions: What Agricultural
Lenders Need to Know for 2024
Forty-seven (47) agricultural lenders attended
the November 15th at Springfield, MO.



MU Extension specialists presented 2024 outlooks for crops, livestock, and enterprise budgets and farm input costs.

The new Feedstuff Finder Resource was launched.

Presenters from the Farm Service Agency and the Missouri Agricultural and Small Business Development Authority provided agency updates.



Agriculture and Environment

Local Impact

Ramón Arancibia is a MU Extension Horticulture Specialist based in Bates County. He services nine 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.

The mission of the Missouri Master Gardener extension program is "helping others learn to grow."

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.
Publications



Business and Community

Local Impact



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.

The Missouri SBDC at Missouri Southern State University provides support to Vernon County entrepreneurs and small business owners. Over the course of 2023, our office met with clients to discuss a wide range of topics including:

Starting a business Business relocation Purchasing a business

Cash flow management
Financial planning
Technology commercialization

Business loan refinance and expansion Marketing and social media strategy Childcare grant application assistance

International expansion opportunities

Through leveraging regional partnerships, offerings included the following:

Innovate SOMO

Early-Stage Boot Camp

Government contracting assistance

Identification of grant opportunities effecting businesses due to imports

Key outcomes include:

- 15 Business owners received multiple 1:1 consulting sessions regarding their small businesses
- 2 New jobs created
- 162 Jobs retained
- 37 Government contracts awarded to small businesses in Vernon County



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.

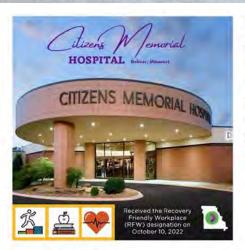
100% of participants indicate that the skills and techniques they learned will help them become MORE RESILIENT.



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



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







Economic

Opportunity







Community and Professional Health Education

Local Impact

Hari Koirala Community Health Field Specialist Counties Served: Vernon, Bates, Cedar, St. Clair and Hickory



Community Health Engagement & Outreach (CHEO)

MU Extension's Community Health Engagement and Outreach (CHEO) program's goal is to achieve optimal health and well-being for every Missourian at every stage of life, with special recognition for the needs of vulnerable populations. The MU Extension's innovative project, funded by HRSA (Health Resources and Services Administration) and led by Dr. Kathleen Quinn, focuses on bridging scientific research and community-based Extension practice in Missouri. Under the MO-RE (Missouri Research Extension) protocol, led by Dr. Julie Kapp, the goal is to create a dissemination and implementation protocol to accelerate knowledge translation to vulnerable communities. Nine Community Health Field Specialist (CHFS) positions were funded in 2022-2023, aiming to educate, create, and connect with communities, promoting health equity and positive health outcomes. I work in one of these 9 positions in the west central region. In 2023-2024, additional HRSA funding supports the transformation of the MO-RE report into a 1-year training program for CHFS positions. This program aims to enhance skills, promote cross-disciplinary collaboration, and unify efforts across regions to address health disparities and improve population health in Missouri. The objective is to synergize academic researchers with MU Extension to make a substantial impact on Missouri's health outcomes.

Through the CHEO we work to promote healthy, safe, and thriving communities where health is a shared value. Through established relationships and presence in communities, we partner, engage, and empower communities to address social challenges where people live, work, learn and play. Visit https://extension.missouri.edu/programs/community-health to learn more.

Missouri Research Extension (MO-RE) Course

Enrolling in the MO-RE course signifies a commitment to ongoing learning and professional growth, resulting in an expanded skill set and a more profound comprehension of pertinent community health topics. This proactive engagement reflects a dedication to staying abreast of current practices and innovations in the field. Participants demonstrate a keen interest in advancing their expertise, contributing to the improvement of community health outcomes. The investment in continuous learning through the MO-RE course positions individuals as valuable assets in the pursuit of addressing health disparities and fostering positive population health impacts. This dedication to professional growth makes a significant contribution to the overall objectives of the community health in the construction phase.

During this period, we are actively engaging in discussions about various aspects of the MO-RE course. Currently, our focus is on extracting population health figures from secondary data and anticipating potential outcomes from the data review. Simultaneously, we are exploring opportunities to identify stakeholders and partners at the local, state, and national levels, strategically incorporating them into our CHEO program. In addition, we are delving into the identification of priority areas, aiming to capture the voices of the community in terms of their health needs and care preferences. My goal is to obtain a comprehensive understanding of these five counties, ensuring that the insights gained will have a lasting impact in the years to come.

Community and Professional Health Education

Local Impact

Community & Wellness ECHOs (Extension for Community Healthcare Outcomes)

Show-Me ECHO (Extension for Community Healthcare Outcomes) utilizes videoconferencing to connect experts with primary care providers, focusing on chronic diseases like Asthma, Cancer, Heart disease, Diabetes and many more topics. This interdisciplinary collaboration in case-based learning enhances skills and best practices, improving patient care, access, quality, and efficiency. The learning sessions offer free continuing education and are cost free for participations. MU extension officials actively collaborate with Show-Me ECHO to raise awareness and boost participation, aiming to reduce health disparities and enhance health outcomes in rural communities.

Community health field specialists promote these programs, sharing outreach efforts and troubleshooting challenges, connect to exports through case-based and contributing to the advancement of health care in Missouri. If you want to learn more, please visit https://showmeecho.org/community-wellness-echos/.



WeCanProsper Resilience Training (WRT)

WRT had registered participants and 5 attendees, fostering lively discussions and a shared insight. The positive response highlights its effectiveness. Promote this successful training in the region, emphasizing its interactive nature and potential future impacts on participants' well-being. It is a valuable resource for personal and collective growth. Visit https://extension.missouri.edu/programs/community-health/prosper to learn more. When the training module is completed, the community health field specialist can begin to work with this module in this area.

Recovery Friendly Workplace

Recovery friendly workplace fosters a workplace culture that promotes employee safety, health, and well-being through strategies that provide support for managers and employees, including reducing stigma and providing recovery resources relating to the challenges surrounding substances use disorders. Visit https://recoveryfriendlymo.com/ to learn more. When the training module is completed, the community health field specialist can begin working in these areas. Currently, we are finding & contacting high employee workplace in serving area.



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

Health and Human Sciences

"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.





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.



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.

Legend





\$

Economic

Opportunity



Educational Access & Excellence



Health and Human Sciences

Local Impact

Program: Reality Day

Number of Youth Involved: 106

Counties Involved: Bates, St. Clair, and Vernon

Sara Bridgewater, Nutrition and Health Field Specialist, worked with the RootEd advisor of the Hume School to coordinate a Reality Day for high school students. The event was in Bates County and schools from Bates County and Vernon County attended. Reality Day is a one-day event that focuses on preparing high school students on the future whether it be they go to college or straight to the work force. Students learned to budget and about financial decisions they will have to make in adulthood.

Sara coordinated volunteers and AmeriCorps volunteers to help with the event along with also coordinating a food drive for this event. Ramon Arancibia, Horticulture Specialist; Melissa Stong, Bates County Youth Program Associate; and Brytni Spencer, Bates County Nutrition Program Associate assisted with the program. 207 lbs of food was donated to a local charity.

Team members that were involved in this program included:

- Sara Bridgewater, Nutrition and Health Field Specialist
- Ramon Arancibia, Horticulture Specialist
- Melissa Stong, Bates County Youth Program Associate
- Brytni Spencer, Bates County Nutrition Program Associate



Health and Human Sciences

Local Impact

Youth Food Preservation Program

Number of Participants: 10

This Youth Food Preservation Program consisted of beginning basics of food preservation: Missouri Mix, dehydrated apples, freezer jelly. Youth learned food safety, learned the importance of measuring and following a recipe, and created a holiday basket filled with the items they made during class. Sara Bridgewater, Nutrition and Health Field Specialist, coordinated the program, planned the activities, prepped before each class, gathered supplies, and led the program. Linda Clinton, Youth Specialist; and Thabena Bower, Youth Program Associate also helped to promote the event and assist with food preservation activities.

Youth in Vernon County are participating in a food preservation program. At the end of the program each student will have a holiday basket full of items they made. This week students learned about dehydration, one of the oldest ways to preserve food.

Before starting the program:

- 89% of students reported they had very little or no knowledge about the dehydration process.
- 89% of students reported they did not know how to dehydrate apple slices.

After starting the program:

- 100% of students reported they had a better understanding about the dehydration process.
- 100% of students reported they did know how to dehydrate apple slices.

The students made dehydrated apple slices and made a big batch of Missouri Mix that was divided into quarts for each student. All the participants picked a recipe of choice that has Missouri Mix in it and wrote out the recipe on a notecard. The notecard will be attached to their Missouri Mix, so whoever their gift basket goes to has a yummy and accurate tested safe recipe associated with it (such an important step!!). Youth learned the process of rehydrating their apple slices, make a freezer jam, and put their safe holiday basket together.



Health and Human Sciences

Local Impact

100 Miles in 100 Days

Number of Vernon County Participants: 47

This year's 100 Miles, 100 Days Extension initiative made a significant impact statewide, attracting over 1,300 participants in Missouri, including 47 in Vernon County. Throughout the 100 days of summer, participants were urged to discover their own enjoyable ways to cover the equivalent of 100 miles. The diverse activities reported ranged from hikes and bike rides to navigating wheelchairs through MO State Parks. Individuals embraced the initiative by strolling through their neighborhoods, fostering active connections with friends and family, and making the most of local parks and pools.

Our weekly motivational emails provided valuable education and fueled a friendly county competition, adding a bit of excitement into the challenge. Whether participants reached the coveted 100 miles or not, the ultimate goal of our initiative was to instill a lasting enjoyment of movement through a blend of encouragement, accountability, and motivation. Our hope is that the impact of this program will extend far beyond the 100 days, inspiring a continued commitment to a healthy and active lifestyle.

This program was offered statewide for the first time in 2023. We marketed to statewide outlets as well as within individual counties with specialists choosing to participate.

Sara Bridgewater, Nutrition and Health Field Specialist, worked with Mercy to donate t-shirts for participants in Bates and Vernon County. All participants in Bates and Vernon County were offered a free t-shirt. Sara created social media posts and arranged group picture opportunities. Some quotes from participants include:

"I have lost 20 and a half lbs. I plan on keeping track till this time next year. Thank you!"

"The Shriver Family (Paul, Kathy, Ian & Reghan) have all completed our 100 miles this summer. (Some have probably done more than double that...but we have all completed 100 miles). We have walked, ran, swam, hiked, Kayaked, biked, wheeled all the way and beyond! I have attached a few pictures from our adventures. Thank you again for heading up a great summer activity!!!!"

"He said he has really enjoyed the program and the reminder emails were greatly appreciated. The program had made him feel better and on track."

Team members that were involved included many Nutrition and Health Specialists around the state.



Health and Human Sciences

Local Impact

Supplemental Nutrition Assistance Program Education (SNAP-Ed)

The Supplemental Nutrition Assistance Program Education (SNAP-Education or SNAP-Ed) brought \$10,874,798 in federal funds to Missouri. During FY2023, Missouri's SNAP-Ed program reached over 78,000 Missourians through direct classroom education. Each person participated in an average of 6 hours of education totaling over 15,000 hours. In addition, an additional 760,135 persons participated in indirect education. Direct and indirect education resulted in over 1.8 million total contacts with Missourians. A total of 1142 participants were from Vernon 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.

The Expanded Food and Nutrition Education Program (EFNEP) brought \$1,626,730 federal funds to Missouri. These funds were used to enroll 526 limited-resource families in nutrition education and meal preparation classes, representing 1,926 family members. Additionally, 1,980 youth were enrolled in EFNEP classes. 36 of these youth and adult participants reside in Vernon County.

Participants in EFNEP learn the importance of making healthier meals and snack choices, eating breakfast more often, trying new foods, increasing their physical activity, and making 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 Vernon County: Nevada Middle School, Nevada Head Start, Sheldon, Benton and Bryan Elementary Schools, Vernon County Health Department, Nevada Preschool, and Northeast Vernon County High School.

Health and Human Sciences

Local Impact

Healthy Living Program

Number of Participants: 45

Sara Bridgewater, Nutrition and Health Field Specialist, received a \$2,500 grant from the American Heart Association to be trained in a program called Healthy Living. Only one recipient per state was chosen, Sara's grant application was picked for the University of Missouri Extension. Sara was then trained in the program and delivered the program virtually. There were 45 participants. The participants that reached specific criteria received a \$50 gift card from a local farmer.

Participants learned about different aspects for healthy living, through short modules. The Healthy for Life Educational Experiences focus on interactive features like healthy cooking demonstrations, shopping skills presentations and nutrition and heart health workshops. The Healthy for Life Community Nutrition Program is now included in the SNAP-Ed Toolkit. Our goal is to help individuals and families learn how healthy food can help them accomplish their goals and reach their potential every day. A few outcomes from the program included:

- When purchasing food, I read the food label and check the nutritional values. 47.4% increase
- I use a list when I go grocery shopping. 52.6% increase
- Before grocery shopping, I plan my meals that I am shopping for. 36.8% increase
- I am confident in my ability to substitute healthier cooking and preparation methods (e.g. bake, grill, sauté) for traditionally fried foods. 78.9% increase
- I am confident in my ability to eat the recommended serving sizes for the foods I eat. 63.2% increase

Human Development, Kyleigh Brown

Human Development and Family Science Specialists collaborated to offer parenting education across the state virtually. In 2023, we offered 5 Building Strong Families classes. The team served 91 parents and a total of 740 hours were earned impacting over 181 Missouri children. Participants were reached in 31% of MO counties, including Vernon.

47% of respondents reported an increase in their knowledge, skills, or understanding. 91% would recommend the program to someone else. As a result of this program 100% have worked to improve my communication skills to be more constructive and positive. 59% are making intentional choices to build and or repair relationships. 50% are making intentional choices that has reduced family stress.