

UNIVERSITY OF MISSOURI EXTENSION

Bates County



2024 Annual Report

1 North Delaware Street
Butler, MO 64730
660-679-4167

**SERVE
MISSOURI.**

**DELIVER
MIZZOU.®**



Extension

University of Missouri

an equal opportunity/ADA institution



December 2024

Dear county commissioners, elected leaders and friends of MU Extension and Engagement,

As we reflect on the past year, I want to express my deep gratitude for your support of MU Extension and for your partnership in enhancing the lives of Missourians.

Your support for MU Extension fuels Missouri's agriculture, strengthens families, prepares our youth and promotes the health, well-being and vitality of our communities. Over the past year, our programs have focused on addressing key needs throughout the state:

- **Expanding access to 4-H:** To make 4-H more accessible, we've introduced more in-school and after-school clubs, reducing barriers and creating opportunities for young Missourians to develop essential skills and leadership abilities.
- **Supporting agriculture and land stewardship:** We're addressing critical issues such as succession planning for family farms, rural mental health, agricultural business management and land stewardship. These initiatives are helping Missouri's farmers plan for the future and preserve the health of our land for future generations.
- **Advancing health initiatives:** Our team of community health field specialists, covering every region of the state, works directly with local leaders to assess health needs and bring UM System resources and expertise to these communities, supporting healthier lives and stronger communities.
- **Promoting economic development:** MU Extension is helping to create economic opportunities by working with individuals, supporting businesses in their growth and collaborating with communities to enhance local vibrancy. Through these efforts, we help bring new jobs, skills and possibilities to Missourians across the state.
- **Providing essential training:** Our continuing education programs prepare Missouri's firefighters and health care workers to meet the demands of their roles with the latest skills and knowledge, ensuring they are well-prepared to serve our communities.

As you read through this annual report, I hope you feel as proud as I do of the accomplishments we've achieved together. The dedication and professionalism of MU Extension's faculty and staff are inspiring, and I am grateful to work alongside them—and each of you—as we make Missouri a stronger, healthier and more vibrant place. Thank you for your continued support and partnership. Together, we are serving Missouri by delivering the University *for* Missouri.

Warm regards,

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

Who we are

Faculty and staff

Mikayla Neil
Extension Engagement Specialist

Sara Bridgewater
Nutrition and Health Education Field
Specialist

Ramon Arancibia, PhD
Horticulture Specialist

Melissa Stong
Youth Program Associate

Connie Pruden
County Office Support Staff

Wayne Prewitt
Regional Director

Council members

Margaret Sears, Chairman
Breanna Yarick, Vice-chairman
Pam Johnston, Secretary
Katrina Bergman, Treasurer
Erica Diehl
Russ Bergman
Kyleigh Trickey
Ken Mooney



County executives

Jim Wheatley, Presiding Commissioner
Ken Mooney, Northern Commissioner
Trent Nelson, Southern Commissioner

Budget and more

Appropriations budget

Income

County Appropriations	68,000
Total Income	68,000

Expenses

Salaries/Benefits	43,000
Travel	5,500
Telephone	1,600
Office Supplies/Service	9,000
Professional Development, Community Engagement, Miscellaneous	6,200
Insurance	2,700
Total Expenses	68,000

Bates County partners

Community Food Pantry in Butler
Butler Senior Center
Lily's House
Rich Hill Memorial Library
Hume R-VIII Elementary
Adrian Headstart
Zion Lutheran School
Hume Ministerial Alliance
Adrian R-III School
Ballard R-II School
Hudson R-IX School
Rich Hill R-IV School
Butler Christian Church
Adrian United Methodist Church

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



Local Support

Did you know you can donate directly to (*name of county*) 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.

Bates County



University of Missouri System

COLUMBIA | KANSAS CITY | ROLLA | ST. LOUIS

UM System Footprint in the county in 2024



FY24 county students

57 students

- 47 Undergraduates
- 10 Graduate and professional students
- 45 Full-time students
- 12 Part-time students
- 17 Pell grant recipients (aid year 2024)



County employees and retirees

5 people employed by UM

- 5 Campuses



County alumni

Selected school alumni

- 3 Medicine
- 20 Nursing
- 10 Health Professions
- 4 Dentistry
- 7 Pharmacy
- 6 Veterinary Medicine
- 78 Agriculture
- 33 Engineering
- 12 Law

Alumni teaching K-12

- 10 teachers
- 4.4% of all district teachers
- 4 principals and administrators
- 25.0% of all district principals and administrators



County breakdown

MU

- 33 students
- 187 alumni
- 2 employees

UMKC

- 18 students
- 98 alumni
- 2 employees

Missouri S&T

- 5 students
- 28 alumni
- 1 employee

UMSL

- 1 student
- 0 alumni
- 0 employees



County properties and offices

MU Extension in: Bates County



County population: 16,121



County services provided

Health care (FY24)

- 36 in-state patients seen at MU Health Care, with \$6,914 of uncompensated care
- 32 in-state patients seen at UMKC School of Dentistry with a statewide average of \$52.57 per patient in uncompensated care
- MU Health Care's Missouri Telehealth Network recorded 17 visits to 12 patients having ZIP codes associated with the county

Extension (2023)

- 4,122 Total educational contacts from MU Extension to residents of the county, including:
 - 178 contacts related to productive farming, better gardening, and managing natural resources
 - 3,326 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development
 - 122 contacts related to starting businesses, developing community leaders, or renewing the local economy

Bates County



University of Missouri System

COLUMBIA | KANSAS CITY | ROLLA | ST. LOUIS

UM System Statewide Footprint

Economic and Community Development Highlights

- In FY23, Business Development Specialists worked with small businesses and entrepreneurs statewide to create or retain 98,527 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 FY18 and FY23, UM System brought Missouri more than \$1.58 billion in federal and private research funds, funded primarily from outside the state, but spent within the state.



In FY24, UM System was issued 29 patents and filed 69 new U.S. patent applications.

- In FY24, the UM System awarded 707 design and construction project contracts throughout Missouri, for a total investment of \$287.3 million in the state.



In FY24, to improve access to medical and health related services, MU Health Care's Missouri Telehealth Network's Show-Me ECHO program provided 16,687 hrs of case-based instruction to 3,113 learners located in 105 of 114 Missouri counties and the city of St. Louis.

Education and Training Provided



40,542 police, fire fighters, and medical professionals attending continuing education (2023)



Agriculture and natural resource programs served 369,077 farmers and related businesses (2023)

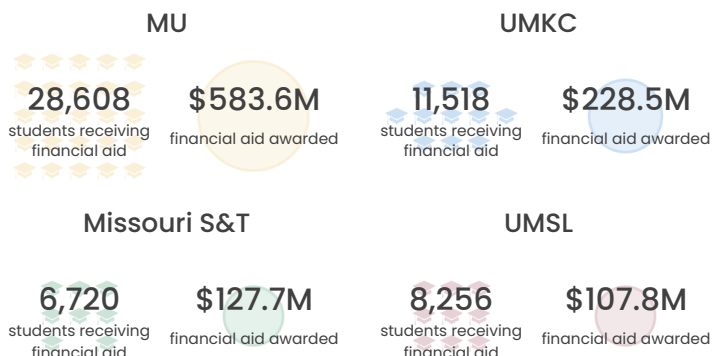


210,577 youth and stakeholder educational contacts in 4-H clubs, schools, camps and other programs (2023)

Education Highlights

FY24 Financial Aid Awards

In FY24, 69.7% of the UM System's 79,014 students received financial aid totaling \$1.048 billion



UM System's MOREnet (Missouri Research and Education Network) provides internet connectivity, access, support and training to 58 higher education institutions (230,000 students), 484 K-12 school districts (830,000 students) and 134 public libraries (serving nearly 3 million Missourians) in 2023.

- UM System awarded 50.5% of the 31,689 Bachelor's or higher degrees awarded by Missouri four-year public institutions in 2023-24.
- UM System awarded 35.0% of the 1,776 research doctorates and 26.8% of the 3,796 professional doctorates awarded by Missouri public and not-for-profit private institutions in 2023-24.
- In FY24, UM System's \$30.7 million in National Science Foundation (NSF) grants represented 96.9% of all NSF grants made to Missouri public colleges and universities.
- In 2024, over 12,400 Missourians accessed mobroadband.org, part of the UM System Broadband Initiative which helped the statewide build-out of high-speed internet infrastructure.

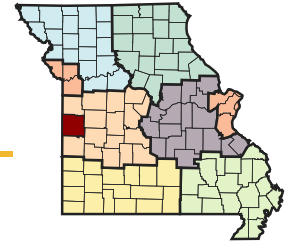
Supporting the University of Missouri is an investment in the future of Missouri.

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 2024, 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



BATES COUNTY

Knowing Missouri's Needs

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

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

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

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



Economic opportunity

Increase MU Extension and Engagement's economic impact to the State of Missouri from \$1 billion to \$1.5 billion overall, and from \$88 billion to \$100 billion in agriculture, the top economic sector



Educational access and excellence

Increase participation in postsecondary education from 66% to 70%



Health and well-being

Improve Missouri's health ranking from 40th to 35th in the nation

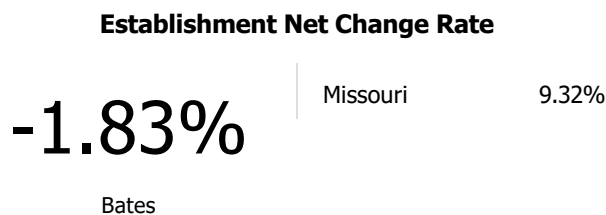
Knowing Local Challenges



CHALLENGE 1: Economic Opportunity: *Business Dynamics*

Business Growth/Change

The rate of business change reflects the net gain or loss in total establishments. The report area saw a net loss of 6 businesses between 2011 and 2021. There were 317 establishment "births" and 323 "deaths" contributing to the change. The rate of change was -1.83% over the ten year period, which is lower than the state average of 9.32%.



Data Source: US Census Bureau, [US Census Business Dynamics Statistics](#). 2011-2022.

Largest Job Sectors

Understanding the local economy is vital to describing a community. In this region, the largest sector by employment size is Government and government enterprises, which employs 1,133 people. The average wage for the industry is \$58,466. Retail trade and Construction are the next largest sectors, and they employ 802 and 581 workers, respectively.

Job Sector	Total Employment	Average Wage
Government and government enterprises	1,133	\$58,466
Retail trade	802	\$30,254
Construction	581	\$26,669

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



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

Access to Early Childhood Education

Head Start is an early childhood education program for at-risk children through age 5. Families utilizing Head Start have better success meeting developmental goals and achieving economic stability. In 2018, there were 2 Head Start programs in the report area, or 22.32 per 10,000 population. Access to head start is higher in this area than in the state.

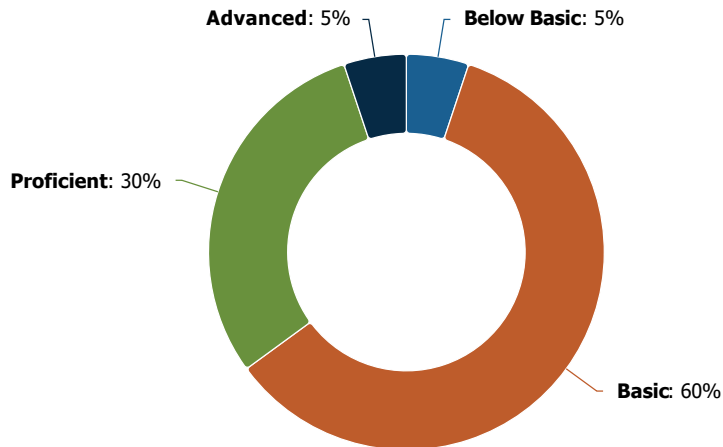
Head Start Programs, Rate (Per 10,000 Children Under Age 5)



Data Source: US Department of Health & Human Services, [HRSA - Administration for Children and Families](#). 2024.

English Language Arts Proficiency

Starting in the 4th grade, public schools emphasize proficiency in reading and reading comprehension. The ability to comprehend becomes the foundation to find and process information in later years and it is important to prevent children from falling behind. Of the 175.00 fourth graders tested in 2018, the known total number of students who had a basic level of English Language Arts was 82.00. The number tested as below basic was 7.00, basic was 82.00, proficient was 41.00, and advanced was 7.00.



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

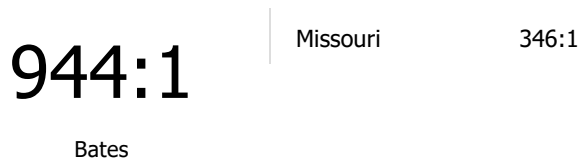


CHALLENGE 3: Healthy Futures: *Access to Care*

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 17 credentialed professionals providing mental health care to serve the area's 16,042 residents. The patient-provider ratio in the report area is 944 to 1, which means there is 1 provider for every 944 persons. The ratio of persons to providers in the report area is higher than the state average of 346:1, which means there are fewer providers per person in this area.

Ratio (Population to Providers)

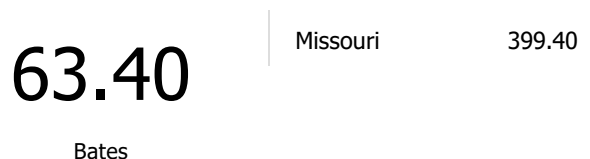


Data Source: Centers for Medicare and Medicaid Services, [CMS - National Plan and Provider Enumeration System \(NPPES\)](#). December 2024.

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 2 primary care physicians (MDs and DOs) to serve the area's 3,153 residents over the age of 65. The patient-provider ratio in the report area is 1,577:1, which means there is 1 provider for every 1,576 older adults. The ratio of adults to providers in the report area is higher than the state average of 250:1, which means there are fewer providers per person in this area.

Rate per 100,000 Seniors



Data Source: US Department of Health & Human Services, Health Resources and Services Administration, [HRSA - Area Health Resource File](#). 2021.



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

Jobs Derived

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

Percent of Jobs Derived from Agriculture

34.2%

Bates

Missouri

23.55%

Data Source: Missouri Department of Agriculture, [Missouri Agricultural and Small Business Development Authority](#). 2021.

Value Added

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

Percent of Total Value Added from Agriculture

31.2%

Bates

Missouri

21.98%

Data Source: Missouri Department of Agriculture, [Missouri Agricultural and Small Business Development Authority](#). 2021.



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

Missouri 4-H for ages 8 – 18



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



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



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

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence

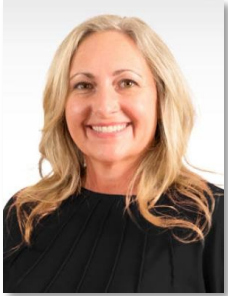


Health & Well-Being

Bates County

Missouri 4-H

Local Impact



Linda Clinton
Field Specialist in 4-H
Youth Development



Melissa Stong
Youth Program
Associate

Accomplishments:

Bates County 4-H serves youth through 10 organized clubs. The youth of Bates County have demonstrated learning through the following activities:

County Events and Activities:

- 40 club officers
- 3 County Council officers
- 652 projects registered by members
- 140 projects led by leaders
- 4-Hers also participate in many local events such as county 4-H council meetings, Bates County Youth Fair, Bates County Fashion Review, recognition celebration, club officer training, 4-H week celebrations, Teen Conference, Huckster's Day and community service activities.
- 1 Level 3, 1 Level 2, and 6 Level 1 Missouri Recognition Forms were completed by Bates County 4-H members

Regional and State Events:

- 50 non-livestock projects submitted to Ozark Empire Fair
- 42 non-livestock projects submitted to Missouri State Fair
- 3 of our 4-H members awarded Best of Show at the Missouri State Fair with their non-livestock projects
- 3 members participated in State Fashion Revue
- 2 members presented demonstrations at the Missouri State Fair
- 6 members competed at the state shooting sports competition



Busy Beavers 4-H
club scarecrow



Bates County 4-H archery
practice



Grand and
Reserve 4-H
in-building
projects

Local Impact

A community of 195 youth building life skills, contributing to their community, and becoming college and career ready.

Common Measures

These are the last results we have...

Findings from a 2021-22 evaluation study shows that Missouri 4-H:

Missouri 4-H Inspires Kids to Do

98% said they are willing to work hard on something difficult.

91% set personal goals.

97% said they try to learn from their mistakes.

98% said they treat others the way they want to be treated.

Missouri 4-H Grows True Leaders

97% said they like to learn about people who are different from them.

93% said they think about others feelings before they say something.

75% reported feeling comfortable being a leader.

4-H Builds Leadership and Communication Skills

95% help others reach their goals.

86% comfortable speaking in a group.

99% said they show respect for other's ideas.

85% Can work with someone who made them upset.

95% Look for ways to involve all members of a group.

4-H Builds Social and Emotional Skills

94% said they keep trying until they reach their goals.

89% Stop to think about their choices when making a decision.

97% reported that they like to learn new things.

91% of Missouri 4-H'ers surveyed said they are willing to try something they might get wrong.



Local Impact

4-H clubs

4-H programs are grounded in the belief that youth learn best by doing. Through hands-on projects in areas like science, health, agriculture, and civic engagement in a positive environment youth receive guidance from adult mentors and are encouraged to take on proactive leadership roles. Youth have the opportunity to concentrate on one focus area, or they can try a variety of programs throughout their 4-H experience.

Regardless of how youth participate, all 4-H programs include mentoring and career readiness as core elements.

- 4-H participants = 195
 - **Duplicates not removed.*
- 4-H Community Clubs: offer in-depth educational experiences in which members learn life skills such as decision making, public speaking, and working with others. Members learn by doing this under the guidance of adult volunteers, who lead a wide variety of projects that support 4-H members in finding their SPARK.
- 4-H offers Community clubs, SPIN (special interest) clubs, In school and Afterschool Clubs, and school enrichment. Families and communities can choose what fits their needs.

Volunteers

- 4-H members are supported by 51 youth and adult volunteers
- Volunteers are the core of the 4-H Program. They help to create, support, and deliver educational programs and experiences. Missouri 4-H volunteers report contributing an average of 100 hours per year to the program. Valuing their time at \$33.49 per hour (Independent Sector, 2024).

Reference

Independent Sector (2024). Independent sector releases new value of volunteer time of \$33.49 per hour. Retrieved from <https://independentsector.org/blog/independent-sector-releases-new-value-of-volunteer-time-of-33-49-per-hour/>



Marcia Jenkins being inducted into the Missouri 4-H Hall of Fame

Local Impact

4-H SNAC Clubs

The Student Nutrition Advisory Council (SNAC) clubs are available in various settings, including before school, during school, after school, and within community programs. These clubs empower youth to enhance their knowledge of nutrition and fitness. Participants take on leadership roles, becoming ambassadors of Healthy Living by designing and executing projects that promote nutrition education and improve fitness in their communities. In 2024, Missouri saw the establishment of 121 SNAC Clubs, engaging 2,543 youth and reaching over 7,330 others through their leadership initiatives.

In 2024, YPA Melissa Stong implemented SNAC clubs in Hudson elementary with 16 students, teaching Kids in the Kitchen and Butler High School with 74 students teaching Illinois Jr. Chef.

4-H SNAC Club Mini-grants

In 2024, the Missouri 4-H Foundation partnered with Healthy Blue to provide mini grants of up to \$500 per county, supporting 4-H SNAC clubs throughout the state in implementing their leadership projects. A total of 37 counties received funding, amounting to \$18,500 in mini grants.

Leadership Projects

4-H SNAC Club complete leadership project each year. This year youth created:

- Creating student cookbooks
- Rebuilding and planting in community gardens
- Weeding and maintaining garden spaces
- Teaching younger youth soccer skills
- Providing snacks for a local nursing home
- Cooking family meals
- Hosting bingo games with healthy foods and snacks
- Making salsa for faculty and staff
- Growing lettuce for their class pet, a bearded dragon
- Presenting to younger youth
- Organizing inclusive soccer games for the afterschool program
- Launching the "Healthy Choices, Happy Faces" initiative
- Designing yard signs and posters to promote food groups and healthy eating
- Raising awareness about healthy living
- Cooking garden produce for families and staff
- Donating fresh produce to local food banks
- Replacing garden beds with new ADA-accessible ones
- Setting up a salad bar for teachers
- Collecting and packing Buddy Bags for elementary students.

Bates County

Missouri 4-H

Local Impact

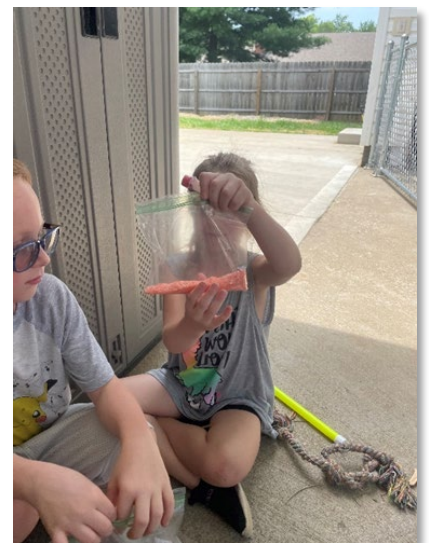
Missouri 4-H Summer Enrichment 2024

Missouri 4-H engaged in expanded and enhanced programming throughout the summer of 2024. 4-H team members across Missouri provided diverse educational opportunities to 5,349 young people. Program offerings included career and college awareness and exploration through simulations, program series, and day camps. In partnership with community libraries and community centers, youth unfamiliar and familiar with 4-H had the opportunity to engage in hands-on STEM programs, including coding, aerospace, robotics, embryology, and gardening.

Bates County offered the Explore 4-H backpack this summer. This program was for youth ages 5-10 and the purpose of the program was to highlight 4-H projects offered. Projects highlighted this year were cake decorating, geology, arts and crafts, crocheting, and woodworking. There were 100 participants in this program and 90% of them were not enrolled in the 4-H program but after participating in the program 10% of those did enroll in the 4-H program.

Responses to the family survey showed that 60% of youth developed better work habits, 70% of youth had an increased interest in learning, 84% felt that 4-H showed respect for their family's culture, and 70% felt that the 4-H program helped prepare their child for the future. Of the families that participated in the program, 41% had a parent who participated in 4-H as a child, and 48% were not 4-H participants.

Funding for the ARPA Summer Enrichment grant was made possible through a contract with the Department of Elementary and Secondary Education (DESE) to distribute a portion of the American Rescue Plan Act (ARPA) 1% Set-aside for Summer Enrichment to youth serving programs across the state.



Explore 4-H backpack program

Bates County

Missouri 4-H

Local Impact



YPA, Melissa Stong provided Embryology to the following schools:

- Butler Elementary: 72 students
- Hume Elementary/High School: 98 students
- Zion Lutheran School: 22 students
- Ballard High school: 37 students
- Hudson Elementary: 10 students



2024 Fashion Revue participants:

Front row: Susan Branson, Michah Luther, Emma Williams, Annabell Patrick

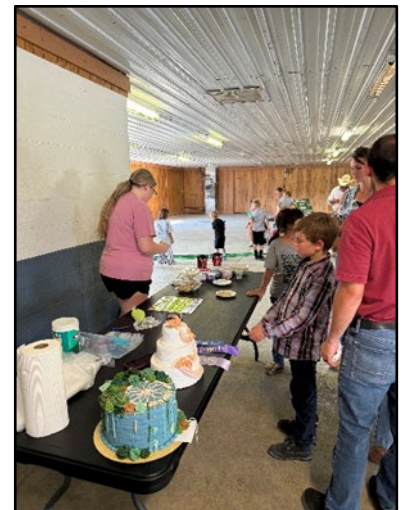
Back row: Isabel Branson, Olivia Williams, Hannah Williams



Bates County
4-H
Recognition
Award
Winners



4-H Meet and Greet





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



The Missouri Integrated Pest Management Program (IPM), funded by USDA grants, has been an important extension program for more than 30 years. Mizzou IPM distributes articles, pest monitoring data and publications on how to improve the application of integrated pest management strategies and systems in crops. In addition, the new Soybean Growth Monitoring Report is released through IPM every two weeks during the growing season.



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



Missouri Grazing Schools teach management-intensive grazing by dividing large fields into smaller paddocks and systematically rotating livestock among them. Producers who attend the 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 management-intensive grazing is estimated to be \$125 MILLION per year in Missouri.

“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



Heroes to Hives offers free professional training in beekeeping to veterans, promoting financial and personal wellness through community development. Missouri’s Heroes to Hives group has trained more than 1,200 veterans since 2021. It is the nation’s largest agriculture training program for U.S. military service members.

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Bates County

Agriculture and Environment

Local Impact

Ramón Arancibia Horticulture Specialist, West Central Region

MU Extension Specialist based in Bates County to service 11 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 direct 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 (see contacts in table below). Direct contact with farmers and other stakeholders to assist them in their operations was also through presentations at growers' conferences (Chair of the 2024 Great Plain Growers Conference: MO, KS, NE, and IA. <https://www.greatplainsgrowersconference.org>), training on Food Safety training (commercial produce growers in Bates and Vernon Co.), meetings at specific counties (Master Gardeners and garden clubs: Camden, Hickory, Laclede, St. Clair, Livingston, Carroll, Jackson, and Clay Co.), workshops (statewide growers and industry representatives), developed an educational program on 'hydroponic production of herbs at home' with displays and presentations at County fairs (Bates, Cedar, Henry, and Vernon Co.) and at the Laclede Co Agribusiness Summit and Expo, and contributed with inquiries to the weekly Q&A sessions of the Garden Hour (Statewide, <https://ipm.missouri.edu/townHalls/>). In addition, lectured on Ag. career development to school students (Hume High School Reality Day in Bates Co., Career Exploration field day at the SWREEC), judged 4H contest at the Bates Co. fair, and assisted as board secretary of the Soil and Water Conservation District in Bates and Vernon Co.

Contributed as reviewer/editor and Spanish translator of research and extension articles/books.

1. Midwest Vegetable Production Guide
2. Master Gardener Core Course and presentations

Videos created over five years that are posted in the YouTube MUIPM channel:

https://www.youtube.com/playlist?list=PLLUfLEphtKwu5F9_S7XfM7SvXH2Ak6RYd

1. Increase Sweet Potato Yield with Early Planting. (354)
2. Growing Watermelons for July 4th. Presenter (304)
3. Plastic Mulch Color & Soil Temperature (3.9K)
4. Strawberry Frost/Freeze Protection (1.6K)
5. Sweet Potato Harvest, Curing and Storage (690)
6. 2021 Sweet Potato Slip Production Trails (369)
7. Early Season Watermelon in MO (608)
8. On-farm sweet potato slip production trials (163)
9. Sweet potato planting (145)
10. Cucurbits: Flower types and fruit production (161)
11. Sweetpotato slip production for field planting (157)
12. High tunnel steamers (100)



Bates County

Agriculture and Environment

Local Impact

Direct contacts 2024

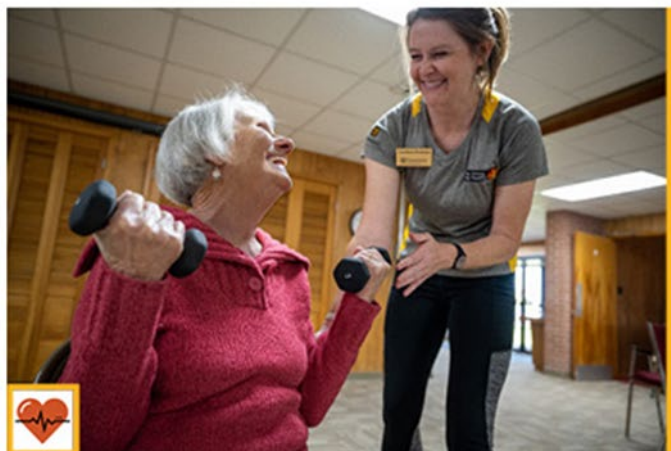
Event name	Role	Contacts	Sessions
Farmer and stakeholders' visits	Advisor	122	12
Great Plains Growers Conference 2024	Chair, presenter	487	2
Drip-irrigation strategies workshop	Presenter	48	2
Low Tunnel Workshop	Team member, presenter	76	2
Master Gardener and Garden clubs meetings	Presenter	95	6
Extension Master Gardener Training	Presenter	436	46
Master Gardener Program	Presenter	110	10
2024 Food Safety Modernization Act (FSMA)	Coordinator, Presenter	34	2
Inaugural Laclede County Agribusiness Summit and Expo 2024	Display presenter	158	1
Small Fruit Production Webinar Series - Berries and Grapes	Team member	56	1
Conventional Vegetable Production Series OFFICE HOURS	Team member	9	1
Growing Tree Fruit, Nut Crops, and Syrup Trees	Team member	65	1
County Council Annual Meeting	Presenter	51	1
Farmers Market networking	Advisor	70	16
Hume High school Reality Day	Presenter	200	1
Career Exploration field day at the SWREEC),	Presenter		
4H contest at the Bates Co. fair	Judge		
Soil and Water Conservation District in Bates and Vernon Co.	Secretary		

Indirect contacts 2024

Event name	Role	Contacts	Sessions
2024 Garden Hour with MU Extension	Team member, Moderator, presenter	9356	1
Stakeholders mail and email		249	12
Stakeholders phone calls		107	12
MU IPM Youtube Commercial Horticulture	Team member,	36744	1
Missouri Produce Growers Video Newsletter	Team member,	12971	1



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



Stay Strong, Stay Healthy teaches older adults basic exercises to boost strength, balance and overall daily functionality. Participants also gain insights into nutrition and wellness for healthy aging and active living.

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



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.**



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

Youth Mental Health First Aid is primarily designed for adults who regularly interact with young people (ages 12-17) facing mental health or addiction challenges while the adult version focuses on adults aged 18 and older. Participants learn how to offer initial assistance and guide individuals toward the care they need.

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

*Missouri Department of Mental Health 2020 Status Report

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Bates County

Health and Human Sciences

Local Impact



Sara Bridgewater
Field Specialist in
Nutrition and Health

This year has been a whirlwind, filled with many achievements! We accomplished a lot in 2024, with numerous programs held in Bates County. The AmeriCorps Grant was successfully renewed, and significant progress was made in the field of maternal health, with more updates to come in 2025. I've been exploring new ideas for programming and have put a lot of effort into shaping future projects. In 2024, I also applied for the non-tenure promotion to Associate Extension Professional and will learn the results later in 2025. I was honored to receive both team and individual awards this year, and I am truly grateful for the continued support I receive.

National Extension Association of Family and Consumer Sciences (NEAFCS)

- 2024 National 1st place, Innovative Youth Development Program Award
- *Reality Day*. Team
- 2024 Central Region 1st place, Innovative Youth Development Program Award
- *Reality Day*. Team
- 2024 Central Region 2nd place, Innovation In Programming Award
- *100 Miles, 100 Days*. Team

University of Missouri Extension

- 2024 Missouri Farm Bureau Federation Outstanding Family, Nutrition and Consumer Science Specialist Award

University of Missouri Extension Association (UMEA) Awards

- 2024 Outstanding Programming Award 2nd Place
- *Reality Day*. Team
- 2024 Connection and Engagement Award
- *Retired Seniors Volunteer Program*. Individual.

Show-Me Well-Being Conference

- 2024 Early Career Award, University of Missouri Extension Health and Human Sciences
- 2024 Team Award Seniors Farmers Market, University of Missouri Extension Health and Human Sciences

I'm excited for everything 2025 has to offer! One highlight will be graduating with my PhD in Teaching, Learning, and Curriculum. I'm also planning to pursue more training opportunities in maternal health to better support mothers, particularly in rural Missouri. As always, I'm incredibly grateful for the opportunity to serve Bates County and watch our programs continue to grow.



Bates County

Health and Human Sciences

Local Impact

Program: Reality Day

Number of Youth Involved: 104

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. The event featured over 30 local employers, community resources, and post-secondary programs, with support from AmeriCorps volunteers. Students participated in breakout sessions led by experts, including alumni, and engaged in a budgeting scenario and employer fair. Each student received a t-shirt emphasizing community and humanity.

- At least one student received a job offer.
- 240 lbs of canned goods were donated to the Hume Alliance Ministry.
- Volunteers rated the event highly, with an average communication score of 4.8 out of 5.

Team members that were involved in this program included:

- Sara Bridgewater, Nutrition and Health Field Specialist
- Ramon Arancibia, Horticulture Specialist
- Mikayla Neil, Extension Engagement Specialist
- Melissa Stong, Bates County Youth Program Associate
- Janet Fox, Cedar County Nutrition Program Associate
- Mellissia Butler, Vernon County Nutrition Program Associate



Bates County

Health and Human Sciences

Local Impact

Program: 100 Miles in 100 Days

Number of Bates County Participants: 47

This year's 100 Miles, 100 Days Extension initiative made a significant impact statewide, attracting over 807 participants in Missouri, including 47 in Bates 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.

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

Stay Strong, Stay Health

Stay Strong Stay Healthy Program is a 8-week (16 sessions) an exercise class offered through the MU Extension. The class is targeted for older adults to increase flexibility, improve balance, and increase strength. Sara Bridgewater was the instructor for the 8-week Stay Strong, Stay Healthy program. Tammy Roberts patterned with Sara Bridgewater to offer the program to a SNAP-ED program.

Stay Strong, Stay Healthy Level I

Number of Programs: 1

Total Number of Participants: 19

Stay Strong, Stay Healthy Level II

Number of Programs: 4

Total Number of Participants: 30

100% would recommend the program.

100% that did the pre and post-assessments increased flexibility.

Quotes from Participants:

- “This class helps me stay accountable to exercise on a regular basis. I enjoy socializing with others, staying active, and feeling better.”
- “I feel stronger.”
- “This class has made my life better. I am more active with my grandkids.”

Bates County

Health and Human Sciences

Local Impact

RSVP AmeriCorps Bates County Project

The Bates County MU Extension Office has a \$225,000 federal Retired Seniors Volunteer Program(RSVP) AmeriCorps grant in 2021 to 2024 that allows us to work with older volunteers and serve the county with service projects. In 2024, the grant was renewed for another three years dependent on funding and continued grant application. As a team we make it a priority to go out to the communities in the county, which has resulted in many projects going on across the county. This is a countywide project for Bates County population of a little over 16,000 we strive to reach "connect" with the whole county through partnerships, social media, and programs. We also have 92 volunteers now.

Service Projects Include:

- Community Gardens
- Reading Buddy System
- STEM Activities
- Summer Readiness Backpack Program
- Weekend Backpack Program
- 4H Activities

Team Members Involved Include:

- Sara Bridgewater, Nutrition and Health Field Specialist
- Mikayla Neil, Extension Engagement Specialist
- Ramon Arancibia, Horticulture Specialist
- Melissa Stong, Bates County Youth Program Associate
- Connie Pruden, Office Support



Bates County

Health and Human Sciences

Local Impact

Summer Readiness Backpack Program - Montessori-inspired Activities

Youth Participation: 140

The summer program gives students the opportunity to receive STEAM (Science, Technology, Engineering, Art, & Math) and Montessori-inspired activities. There will be 3 backpack pickup days during the summer. Pickup locations include Adrian, Rich Hill, and Butler. Students will receive 2-3 activities at each pickup. If more than one student lives in the household and some activities when appropriate may be limited to one to serve more households in the county.

100% reported they found the program beneficial.

100% of parents would recommend this program to another parent.

97% reported their child could count from 1 to 10 after this program.

Quotes:

- “Everything about this program is wonderful! As a speech language psychologist, these were excellent activities that promoted engagement and helped to provide opportunities for language development. I was amazed at the quality of the items we received with each pickup. I have a 5-year-old and a 3-year-old, and they were able to do all of the crafts and activities together. Thank you so much for putting this on!”
- “Highly recommend this to any parent with little kids who are school age yet. Can’t wait to sign up our youngest son once he’s old enough to participate.”
- “We LOVED this program and are so thankful to have had the opportunity to participate in something like this in our small town! Everything was organized so well! This program truly exceeded our expectations and really helped to give our daughter some additional educational and interactive activities over the summer.”
- “Thank you all SO much for everything you did to make this program possible!!!”
- “My kids loved the microscope and the terrarium! They were so excited to go see what new items we would get at each pickup and couldn't wait to get home and get started on them. Thank you so much!”
- “We really enjoyed all the learning, hands on activities! Something Wade loved was the dot sheets. We very quickly used the ones given and I found more on Google to print. Super easy and something I wouldn't think to do for my little one. He LOVED it.”
- “The excitement he had going to each pickup to see what he would be getting! The shoe to practice tying his shoes stays in my car so we can practice, love it!”
- “Having the resources to give my child different tools to gain knowledge and experiences. This program gifted my child with things that I was not able to gift her Due to financial struggles this summer. We are really hoping the program continues next year.”

Bates County

Health and Human Sciences

Local Impact

Exploring 4-H through a Summer Backpack Program

Youth Participants: 110

The summer program gives youth the opportunity to learn about 4-H through activities. 4-H has many projects. A few projects include: Arts and Crafts, Bowling, Foods, Sewing, Goats, and so many more! Come explore some 4-H projects through hands-on activities this summer. Three backpack pickup days occurred during the summer. Activities will relate to a project offered through 4-H. This opportunity gives a little taste of what 4-H is. Melissa Stong worked with Sara Bridgewater to plan the Explore 4-H backpack program for the summer.

100% of parents reported the Explore 4-H Backpack Program beneficial to your student's learning.

97% of parents reported the program helped build confidence in my child by empowering him/her with new skills.

100% of parents would recommend this program to another parent.

10% of the participants in the program joined 4-H in the fall of 2024.

Quotes and Favorite things from participants:

- “This was a great program, and we hope to do more of this in the future.”
- “Kids loved it - we signed up late as we're already aware and enrolled in 4-H, but they still had the best time with all the activities!”
- “WELL DONE! This was our first year participating in these programs. Thank you for providing this program within our area. My daughters truly enjoyed everything, and it was all age appropriate. I appreciated having activities to do with my children on rainy or slow days this summer. I also appreciated that you had a window in order to pick up the backpacks, since we were on vacation this summer. I hope this program continues next year!”
- “My son picked up the last bag with his babysitter and I didn't see him until the end of the day. When I pulled in the driveway, he was outside with his bug catching kit trying to capture a grasshopper. He immediately grabbed my hand and lead me to the front yard to proudly show me the birdhouse he had painted and already hung in a tree.”
- “We loved the hands-on learning.”
- “We both love to cook but enjoyed taking it a step further with cooking cookies and then using the decorating supplies to practice decorating the cookies.”



Bates County

Health and Human Sciences

Local Impact

Real Colors

Real Colors is a dynamic workshop that uses a personality type test to enhance team building and professional development. Participants understand human behavior, uncover personal motivators, and improve communication. The Hume R8 School participated in a Real Colors workshop for a professional development day. There were 30 participants.

- 92% Strongly Agree Real Colors training increased my knowledge about personality types.
- 92% Strongly Agree Real Colors training increased my knowledge about my own communication style.
- 100% Strongly agree and agree I will utilize the tools and skills learned in the Real Colors training.
- 100% Strongly agree and agree I found the Real Colors training useful and relevant.



Local Impact

SNAP-Ed Public Value Statement 2024

The Supplemental Nutrition Assistance Program Education (SNAP-Education or SNAP-Ed) brought \$11,145,237 in federal funds to Missouri. The funds support engagement with 74,864 Supplemental Nutrition Assistance Program (SNAP) recipients and eligible citizens of Missouri who learned about being active and healthy eating on a budget. This year we had 1,164,143 indirect educational contacts through newsletters, health fairs, food pantries, and the Show Me Nutrition helpline.

3549 direct and indirect contacts were made in Bates 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.

EFNEP Public Value Statement 2024

The Expanded Food and Nutrition Education Program (EFNEP) brought \$1,624,777 federal funds to Missouri. These funds were used to enroll 559 limited-resource families in nutrition education and meal preparation classes, representing 2,068 family members. Additionally, 2,864 youth were enrolled in EFNEP classes.

312 of these youth and adult participants reside in Bates 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.