



UNIVERSITY OF MISSOURI EXTENSION

Polk County

2023

Annual Report



**SERVE
MISSOURI.**

**DELIVER
MIZZOU.**

110 E Jefferson
Bolivar, MO 65613
417-326-4916



Extension

University of Missouri

an equal opportunity/ADA institution



Office of Extension
and Engagement
University of Missouri

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

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December 2023

Dear county commissioners and friends of MU Extension and Engagement,

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

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

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

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

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

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

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

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

Sincerely,

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

Budget and more

Appropriations budget

Income

County Appropriations	41,750.00
Delarue Trust	9,000.50
City of Bolivar	5,000.00
Southwest Electric/CoBank	6,600.00
Soil testing/Resale	1,824 .00
Credit Card Rewards	<u>601.00</u>
Total Income	64,775.50

Expenses

Salaries/Benefits	40,211.08
Travel	2,349.35
Telephone, postage, data reim.	2,592.19
Office Supplies/Service	526.03
Utilities	2,265.33
Insurance	1,380.00
Repairs. Maintenance	552.29
Miscellaneous	<u>1,388.62</u>
Total Expenses	51,264.89

Restricted Accounts	32,827.40
CDs & Money Market	65,482.02
Shortcourses	4,843.87

Key Outcomes and Numbers

132 soil test were submitted for analysis. The knowledge gained from these provide citizens with crucial information concerning liming and fertilizing and cost saving measures.

38 individuals completed the requirements for the Private Applicators license.

244 social media posts were made along with 43 newspaper articles submitted for publication.

43 nitrate test were administered providing needed information to guide producers during the dry season.

14 pressure gauges were checked to assure safe canning for clients.

967 clients were provided information in person in the office. 1313 clients were provided assistance by telephone. 152 received information through email inquiries.

18 clients were loaned various types of tools for their complimentary use.

Over 600 individuals were provided information at various programs held in the county.

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



Local Support

Did you know you can donate directly to Polk County Extension with a gift to be used immediately or as an endowment contribution for long term efforts. Monies put into the endowment are left forever to earn interest with the county office benefiting each year. You can also direct your donation to a specific program such as 4-H or Master Gardeners.

Who we are

Faculty and staff



Mikayla Neil
Extension Engagement Specialist



Wesley Tucker
Ag Business & Policy Specialist



Velynda Cameron
4-H Youth Development



Jesse Arnold
January – July
Nutrition Program Assistant



Kathy Drake
Office Manager

Council members

Chairman - Craig Huff
Vice-chairman Lynn Williams
Secretary - Jennifer Schwartz
Treasurer - Alvin Rohrs
Joyce Dennis
Ramona Dryer
Mike Higginbotham
Jim Lower
Jeff Shelenhamer
Debra Agee
Erin DeHart
Glennis Evans
Heather Mustain
Drew Perry
Ashlee Pulley
Ronda Stewart
MFA – Doyle Spear
City of Bolivar – Chuck Brown
Polk County – Shannon Hancock
Farm Bureau – Bill Dryer
Polk County Cattlemen – Logan Chaney
Youth Liaison – Jackson Schuber



County commissioners

Presiding Commissioner – Shannon Hancock
Northern Commissioner – Kyle Legan
Southern Commissioner – Melinda Robertson

Polk County



University of Missouri System

COLUMBIA | KANSAS CITY | ROLLA | ST. LOUIS

UM System Footprint in the county in 2023



FY23 county students

80 students

- 59 Undergraduates
- 21 Graduate and professional students
- 54 Full-time students
- 26 Part-time students
- 11 Pell grant recipients (aid year 2023)



County employees and retirees

15 people employed by UM

- 12 Campuses
- 3 MU Health Care

7 UM retirees and beneficiaries

UM salary and retirement income:

\$417,592

UM state tax revenue: \$11,918

UM federal tax revenue: \$52,001



County alumni

Selected school alumni

- 13 Medicine
- 21 Nursing
- 27 Health Professions
- 6 Dentistry
- 9 Pharmacy
- 2 Optometry
- 19 Veterinary Medicine
- 85 Agriculture
- 57 Engineering
- 26 Law

Alumni teaching K-12

- 9 teachers
- 2.1% of all district teachers
- 2 principals and administrators
- 8.3% of all district principals and administrators



County breakdown

MU

- 53 students
- 308 alumni
- 10 employees

UMKC

- 3 students
- 62 alumni
- 1 employee

Missouri S&T

- 19 students
- 60 alumni
- 1 employee

UMSL

- 5 students
- 13 alumni
- 0 employees



County properties and offices

MU Extension in: Polk County



County population: 31,541



County services provided

Health care (FY23)

- 249 in-state patients seen at MU Health Care, with \$107,848 of uncompensated care
- 15 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 220 visits to 102 patients having ZIP codes associated with the county

Extension (2022)

- 2,746 Total educational contacts from MU Extension to residents of the county, including:
- 1,372 contacts related to productive farming, better gardening, and managing natural resources
- 1,374 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development

Polk County



University of Missouri System
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UM System Statewide Footprint

Economic and Community Development Highlights

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

\$3.1
billion

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

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



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

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



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

Education and Training Provided



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



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

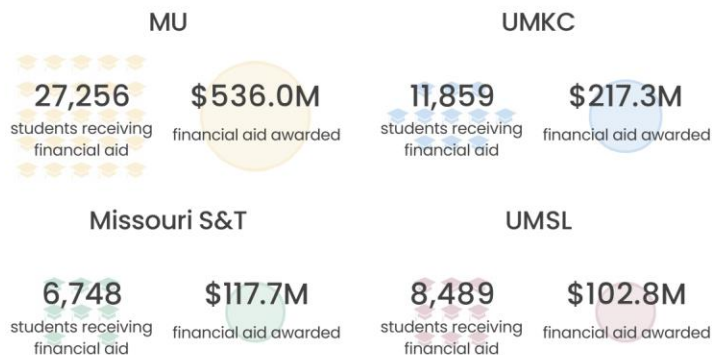


311,749 youth and stakeholder educational contacts in 4-H clubs, schools, camps and other programs (2022)

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



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



POLK 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

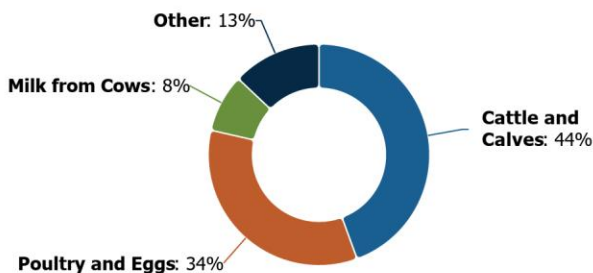
Knowing Local Challenges



CHALLENGE 1: Economic Opportunity: Agricultural Economics

Leading Agricultural Products

Total Commodity Sales: \$99,357,000



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 \$24,917,000 in 2017, an average of \$15,952 per farm. This is below the statewide average farm income of \$29,485.

Report Area	Total Farms	Average Farm Income
Polk	1,562	\$15,952
Missouri	95,320	\$29,485

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

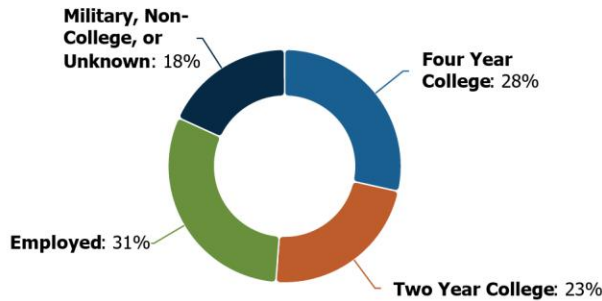
Data Source: US Department of Agriculture, National Agricultural Statistics Service, [Census of Agriculture](#). 2017.



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 330 graduates surveyed in the report area, 94 went to a four-year college, 75 to a two-year college, 101 directly entered the job market. The remaining 60 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 report area there are approximately 35 credentialed professionals providing mental health care to serve the area's 31,519 residents. The patient-provider ratio in the report area is 901 to 1, which means there is 1 provider for every 901 persons. The ratio of persons to providers in the report area is higher than the state average of 855:1, which means there are fewer providers per person in this area.

Ratio (Population to Providers)

901:1

Polk

Missouri

855:1

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 25 primary care physicians (MDs and DOs) to serve the area's 5,808 residents over the age of 65. The patient-provider ratio in the report area is 232:1, which means there is 1 provider for every 232 older adults. The ratio of adults to providers in the report area is lower than the state average of 242:1, which means there are more providers per person in this area.

Ratio (Population to Providers)

232:1

Polk

Missouri

242:1

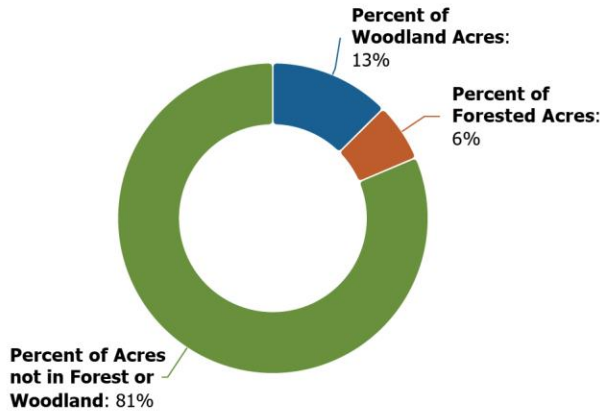
Data Source: Centers for Medicare and Medicaid Services, [CMS - National Plan and Provider Enumeration System \(NPPES\)](#). December 2023.

Data Source: US Department of Health & Human Services, Health Resources and Services Administration, [HRSA - Area Health Resource File](#). December 2023.



Forested, Woodland & Non-forested Acres

Sustainable management of forests and woodlands and harvesting of mature trees support the state’s \$10.3 billion forest products industries. Forests have a closed canopy (>80% cover) permitting little light to penetrate to the ground below. They consist of several overlapping layers of trees, with a mid-story and understory comprising a variety of shade-tolerant shrubs and a sparse layer of soft-stemmed plants. Woodlands have a more open canopy (30-80% cover), and their sparse, woody mid-story allows more sunlight to reach the ground. This light permits the growth of a dense ground cover containing a variety of wildflowers, grasses and sedges. Fire plays a large role in maintaining woodland habitats.



Data Source: Multi-Resolution Land Characteristics Consortium, [National Land Cover Database](#).

Rotational Grazing

A planned rotational grazing system allows time for vegetation to rest and recover before being grazed again. In 2017, nearly 16,000 Missouri farms reported practicing rotational or management-intensive grazing. With 11 million acres of row crops and nearly 2 million grazing livestock animals (mainly cattle), Missouri is well suited to capitalize on the grazing potential of cover crops. In addition to generating more income, grazing cover crops can have a positive impact on soil health. Manure, hoof action and the root responses that grazing elicits stimulate soil biological activity and lead to healthier soil and healthier crops.

Percent of Operations Utilizing Rotational Grazing



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



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

Missouri 4-H for ages 8 – 18



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



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



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

Legend



Agricultural Growth
& Stewardship



Economic
Opportunity



Educational
Access &
Excellence



Health
& Well-Being

Local Impact

POLK COUNTY 4-H YOUTH DEVELOPMENT



4-H empowers youth to reach their full potential working and learning in partnership with caring adults. The mission of 4-H is to provide meaningful opportunities for all youth and adults to work together to create sustainable community change. This is accomplished within three primary content areas, or mission areas – civic engagement and leadership, healthy living, and science. These mission areas reiterate the founding purposes of Extension through agriculture (e.g., community leadership, quality of life, and technology transfer) in the context of 21st century challenges and opportunities.



Number of Polk County residents served

413 4-H Members

37 Trained Adult Volunteers

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.

4-H clubs offer long and short-term educational experiences in which members learn life skills such as decision making, public speaking and working with others. Members learn by doing under the guidance of adult volunteers, who teach projects ranging from computer science and arts, to animal science and healthy living. Clubs also involve youth in community service, camping and educational trips. Regardless of how youth participate, all 4-H programs include mentoring and career readiness as core elements.

Community 4-H Clubs

- 4 community clubs – Eudora (Morrisville), Good Samaritan Boys Ranch (Brighton), Good Times (Halfway), and Woodlawn (Bolivar)

4-H SPIN and special-interest programs

- 5 County 4-H SPIN and special-interest clubs include community partnerships and events, day camps and other educational activities – Clover Kids, Embryology, SOPOCO (livestock), Shooting Sports, and Zoology

4-H school programs

- Polk County 4-H school programs are educational experiences that supplement learning in the classroom. Teachers, 4-H volunteers or 4-H staff lead these activities.
- Embryology – hatching chicks in the classroom = 142 in 12 classes at Bolivar and Fair Play
- GSBR Ranch School = 24 (arts & crafts, beef, foods, first aid and wildlife conservation); 11 (gardening program) and 26 (Ag Innovator Day camp).

Polk County

Missouri 4-H

Local Impact



During the *Polk County 4-H Capital Tour Trip* to Jefferson City – Polk County 4-H members met with Senator Sandy Crawford, State Representatives Mike Stephens and Tim Taylor, and explored the Capital. The 4-H members also enjoyed a special meeting in the Governor's office with Missouri Governor Mike Parson.

Accomplishments

Polk County 4-H members have demonstrated learning through the following activities:

County

- 12 Club Officers
- 4 County Council Officers
- 650 Projects registered by members – Projects with 25+ enrollment were beef, arts & crafts, archery, foods, gardening, photography and wildlife conservation
- 13 members participated in the Capital Tour to Jefferson City and met the Governor (April)
- 2 members spoke at the monthly Rotary meeting (March)
- 36 members exhibited 130 handmade projects at county exhibit night (June)
- 15 members participated in summer camps (June and July)
- 26 GGBR members participated in the *Ag Innovator* day camp (July)
- 23 members completed 37 project records (August)
- 12 Clover Kids completed the 4-H year (August)
- 7 members participated in the Agriculture Career Tour (August)
- 1 member attends the County Extension Council meetings as a Liaison from the 4-H Council
- 4-Hers also participate in many local events such as county 4-H council meetings, county-wide fundraisers, Handmade Exhibit Night, summer camps, the recognition celebration, Light the Park and community service activities.
- 6 members competed at the state shooting sports competition (August and September)

Regional and State Events

- 16 members competed at the regional shooting sports competition (June)
- 1 member competed at the state sport fishing competition (June)
- 2 members competed at the national shooting sports competition (June)
- 31 members exhibited 71 handmade projects at the Ozark Empire Fair (July-August)
- 23 members exhibited 37 handmade projects at the Missouri State Fair (August)
- 2 members competed in the State Public Speaking contest in Columbia (September)
- 2 members assisted as leaders at the summer zoo apprentice camps in Springfield, and Busch Gardens in Florida

Polk County

Missouri 4-H

Local Impact

Special Awards and Recognition

- 3 Club Officer awards
- 3 Camp Counselor awards
- 1 ECYL (Extension Council Youth Liaison)
- 1 4-H Key Award
- 1 4-H member was trained in and presented the National 4-H Program “Ag Innovators” at Humansville School, the Good Samaritan Boys Ranch, Woodlawn 4-H Club and a summer day camp (July)
- 1 4-H member served as a State Shooting Sports Ambassador
- 19 Newspaper articles published

Missouri 4-H Key Award

The Key Award, the highest award a 4-H member can receive, recognizes 4-H members who have achieved significant leadership at the club or group, community and state levels. The Key Award is a prestigious award rewarding 4-H members for their hard work and accomplishments as well as the contribution they have made to the overall 4-H program.

The objective of the Key Award is to encourage the growth of Missouri young people in the areas of leadership, community service and project excellence.

MO 4-H State Sportfishing Event

4-H members practiced their angling skills at the Little Dixie Lake Conservation Area with hopes to catch the most and largest fish. They also tested their knowledge of species and tackle identification, aquatic ecosystems, and fish anatomy in the sportfishing skill-a-thon.

Youth were divided into three categories based on age. Junior (ages 8-10), Intermediate (ages 11-13) and Senior (ages 14-18). Isaac Mabary from Polk County tied for 2nd with Drew Karsten from Lincoln County in the Intermediate level of the sportfishing skill-a-thon contest.



Jackson Schuber, 2023 recipient of the Missouri 4-H Key Award



Isaac Mabary 4th from the left in red

Polk County

Missouri 4-H

Local Impact

MO 4-H Shooting Sports State Shoot

At the Shooting Sports State Shoot, youth demonstrated their skills and competed within their chosen discipline(s). 655 individuals participated in 1225 events.



Imy Manning age 9 (left in the photo) placed first in the state in archery recurve in the Junior division



Ellie and Garrett Samek

MO 4-H State Public Speaking Contest

In this competition, participants excelled in extemporaneous speaking, prepared speaking, and humorous or dramatic interpretation. They honed their verbal communication skills to be effective and impactful speakers. This annual event marked the culmination of their year-long preparation, offering them a chance to demonstrate their abilities to a panel of judges. Senior winners in one of the six categories also had the opportunity to showcase their skills to the participants and their families at the contest's conclusion.

Garrett Samek (Bolivar) placed first in Intermediate Extemporaneous and Ellie Samek (Bolivar) placed second in Senior Prepared Speech.

Polk County

Missouri 4-H

Local Impact



The 2023 *Friends of 4-H* were Bolivar Tractor Supply and Mid West Archery. The awards were presented during the 2023 4-H Recognition Program held on November 4, 2023.



Friend of 4-H Award

Friend of 4-H – The purpose of this award is to recognize individuals or organizations who have made a major contribution to the 4-H program. Selection is on the basis of service to 4-H. Nominees are persons other than 4-H Leaders and past or present University Extension personnel.

4-H at the Missouri State Fair

The 4-H Clover Kid and Family Day showcased several 4-H opportunities including 4-H Zoo Apprentice Camp, 4-H Shooting Sports, the Missouri 4-H Foundation, and the Missouri 4-H State Council and Ambassador programs. Polk County 4-H volunteer Sheila Samek (with help from the teen ambassadors) shared the 4-H Zoo Apprentice Camp experience. Camps happen annually in June and July at Dickerson Park Zoo in Springfield, and at Busch Gardens (Tampa, Florida) in late December.



Polk County

Missouri 4-H

Local Impact

Missouri 4-H Members

Our programming empowers youth to be healthy – body and mind – with the skills to make healthy decisions and lead healthy lifestyles. Having the confidence and skills to lead healthy lifestyles not only improves overall well-being; it enables youth to tackle life’s challenges today and become leaders in their lives, careers and communities as they grow into responsible adulthood.



The Missouri 4-H program also prepares youth for the work place. Youth must be prepared to live and work in a world we cannot completely envision – competing for jobs that do not yet exist, using technologies that have not yet been invented to solve problems that have yet to be identified. 4-H is the only youth development program with direct access to technological advances in agriculture, life sciences, engineering, learning technologies and social sciences from the university system. This brings relevant science content and hands-on learning that helps youth thrive (Arnold, Bourdeau, & Nott, 2013)

How does this make Polk County and Missouri Better?

4-H, the nation’s largest youth development organization, grows confident young people who are empowered for life today and prepared for a career tomorrow. 4-H programs empower nearly 6 million young people across the U.S. through experiences that develop critical life skills. 4-H is the youth development program of our nation’s Cooperative Extension System and USDA and serves every county and parish in the U.S. through a network of 110 public universities and more than 3000 local Extension offices.

The research-backed 4-H experience grows young people who are four times more likely to contribute to their communities; two times more likely to make healthier choices; two times more likely to be civically active; and two times more likely to participate in STEM programs.

- Youth who earn their bachelor’s degree, increase annual earnings by \$2 million over their lifetime (U.S. News and World Report (2011).
- 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 on average 100 hours per year to the program. Valuing their time at \$31.80 per hour (Independent Sector, 2023) the contribution of Polk County 4-H volunteers was worth more than \$117,660 in 2023. More importantly, these individuals serve as role models and mentors for youth.
- Volunteers recognized during the 2023 annual Awards and Recognition program – 1st year (7), 5th year (3), 10th year (2) and 15th year (1).

Local Impact

References

Arnold, M., Bourdeau, V., & Nott, B. (2013). Measuring science inquiry skills in youth development programs: The Science Process Skills Inventory, *Journal of Youth Development*, 8(1)

Independent Sector (2023). Independent sector releases new value of volunteer time of \$31.80 per hour. Retrieved from <https://independentsector.org/blog/independent-sector-releases-new-value-of-volunteer-time-of-31-80-per-hour/>

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U.S. News and World Report (2011). How Higher Education Affects Lifetime Salary. Retrieved from <https://www.usnews.com/education/best-colleges/articles/2011/08/05/how-higher-education-affects-lifetime-salary>



HEAD



HEART



HANDS



HEALTH



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.**

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Polk County

Agriculture and Environment

Local Profiles and Stories



Wesley Tucker
*Field Specialist in
Agriculture Business*

Southwest MO Beef Conference

Polk County is the largest cow/calf county in Missouri. Therefore, Polk County Extension sponsors this regional educational event to update producers on key management practices and help improve their profitability. Producers from all over Southwest Missouri come to Bolivar to attend this great educational event. Topics included:

- Surviving the Winter on Limited Hay Supplies
- Bullet Proofing Your Beef Operation
- Rebuilding Our Forage Base for 2024

Pictured is Senator Sandy Crawford giving producers a legislative update.



Agricultural Lenders Seminar

All segments of agriculture are experiencing tremendous financial stress due to drought and highly volatile commodity prices. Extension used its annual ag lenders seminar to provide training and educational resources to local lenders to prevent a recurrence of the 1980's. On evaluations **100% answered the information presented would help them serve and advise their agricultural clients.**

Polk County

Agriculture and Environment

Local Profiles and Stories



Grazing School

Each year Polk County Extension, NRCS, and the Soil & Water Conservation District partner together to teach a five-night course on how to get the most out of your forages. With rising costs of land, fertilizer, diesel fuel, and feed, the management practices taught in this school are more important today than ever. On surveys of landowners that attended the grazing school more than 5 years ago, participants reported that attending the school allowed them to increase their profitability by an average of 22%.

Farm Succession Planning Workshops

Farm succession planning is so important if we want to see the next generation be successful. Rural America is about to transition many businesses from one generation to the next. To help meet this crucial need, Polk County Extension partnered with Missouri Department of Agriculture (MDA) to offer succession planning workshops. Topics included:

- Navigating family roles and business roles to prevent conflict
- Improving communication within the family farm business
- Sharing farm management decision-making with family during short-term crises
- Organizing a plan to transition farm ownership and management responsibilities to the next generation

In addition to the workshop, Polk County Extension staff provided one-on-one counseling to help families through the farm transition process. Families travel from many counties away to the Bolivar office to receive counseling. This is a tremendous resource we have in our community.

Polk County

Agriculture and Environment

Local Profiles and Stories



Drought Management Meetings

2023 was an extremely difficult year for Polk County. Extreme weather conditions included a cold, wet spring that quickly transitioned to a hot, dry summer. When relief did not return in the fall it left cattle producers with little options for feeding their herds. Polk County Extension partnered with surrounding counties to provide a series of drought management meetings to help producers consider their options to avoid selling their herds.

Polk County Livestock & Forage Conference

Since beef & forage production are so vital to our county, Polk County Extension hosts this annual conference to educate producers on timely production topics. This year's conference included presentations on:

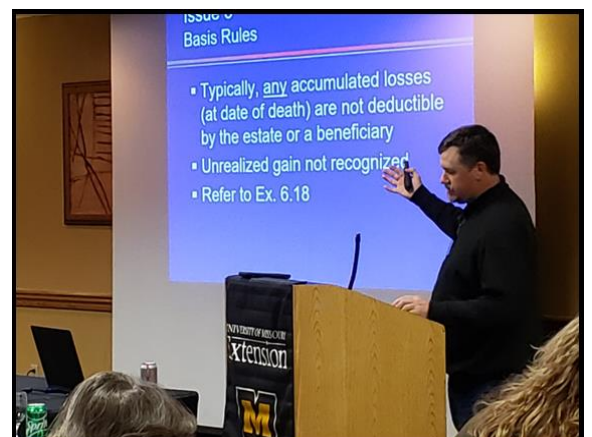
- Antibiotic Label Change: Vet Prescription Required
- Getting Thin Cows Bred Back
- Pasture & Hayfield Recovery

Supervisory Training

As businesses promote employees from within the skills that made them a good front line employee are not the same skills needed to manage other people. Polk County Extension provides human resource training on important topics such as leading teams, coaching employees, conflict resolution, and legal responsibilities of managers.

Farm Tax Management Workshops

Polk County Extension hosted and taught farmer tax meetings to help local producers understand the changes in recent income tax legislation. This program will help producers make better management decisions and improve the profitability of their operations.



Polk County

Agriculture and Environment

Local Profiles and Stories

Extension Tax Schools

Polk County Extension and the University of Missouri Extension ag economics department 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 and Wesley Tucker with help from a team of ag business specialists throughout the state.

The resources for the schools included the IRS, the National Income Tax Workbook from the Land Grant University Tax Education Foundation, and materials written by the instructors.

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



Polk County

Agriculture and Environment

Local Profiles and Stories



Sheep & Goat Field Day

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!”



Polk County

Agriculture and Environment

Local Profiles and Stories



JUNE

01

ECONOMICS & MARKETING
Economic Outlook
Jennifer Lutes
University of Missouri
What is the economic outlook for meat goats and the industry?

02

FORAGE & NUTRITION
Planting Grasses for Grazing
Dr. Homero Salinas

03

MIDWEST GOAT PRODUCERS COURSE
3 DAYS
\$15.00 PER DAY
DAILY 9:30 AM - 3:30 PM

Mid-West Goat Producer's Course

Seventy-two (72) producers attended the four-day course May 31st – June 3rd in Sedalia, MO. Speakers covered forage & nutrition, economics & marketing, and herd management.

On the final day producers participated in value-added demonstrations that included a carcass meat cutting, goat milk soap making, and goat milk cheese making.

“It’s very interactive; so, you’re getting valuable information along with real examples.”



Polk County

Agriculture and Environment

Local Profiles and Stories

Wm Terry Halleran

MU Extension Agronomy Specialist

Another year has come and gone. In the area of agronomy, for MU Extension, the topic has been all about the drought. Pastures running short if not out, hay production ½ to 2/3rds at best, stocking rates, culling cows, cutting dry land corn for silage as it did not make, nitrates/nitrate poisoning, buying overpriced hay, where can I get hay, shipping cost, alternative feed sources, planting something that will grow in a drought because we need something, etc. The list goes on and on. The drought was and still is a major concern as we go into the next year.

To address these and other issues the following offerings were made in the counties I serve- Dallas, Hickory, Camden, Polk and Laclede. Even if all were not taught specifically in your county, they were made available in surrounding counties and available to all. Courses were even taught by zoom for those who wished to attend that way.

Courses/ teaching opportunities offered throughout the year: (in Person or by Zoom)

1/9- Understanding Your Hay Crop and How to Use it for Maximum Potential

1/17- Gardening Program for the Boys Ranch 4 H students Polk County (Planted gardening seeds)

2/2- PPAT Polk County

4/6 4/10, 4/24, 5/23- Container Grown Gardening Class St. Clair, Camden, Polk Counties

4/11, 4/14, 4/18- Polk County Grazing School (Instructor/Guest Speaker

6/6- Pesticide program for Community Outreach Ministries program Polk County

8/29- All Hay is not Created Equal (Zoom)

10/9, 10/11, 10/16, 10/18, 10/20 - Fall and Winter Drought Plans for Feeding

12/11, 12/13, 12/19- Bee keeping Workshop Dallas, Polk, St. Clair

Several articles were written and/or released in my counties, as needed, to address the current issues at hand.

Many were released through the local extension offices internet and public communication systems.

Articles published and or sent out throughout the year:

1/6	Just What Kind of Hay Did You Buy This Year?
4/10	Is Bee Keeping For you?
6/12	Forage Livestock Town Hall Videos DROUGHT ISSUES
7/7	Be Careful What You Feed Your Cattle.
7/19	Timely Pasture Renovation Tips
7/20	Water as a Resource.
8/2	Seeding for Annual Pasture Within a Perennial Pasture
11/15	Broomsedge is not a quality grass for cattle.
4/5 – 9/27	Troublesome Pasture Plants of the Week Articles

Along with the classes listed above Farm Visits were made in every county I serve. They included Hay and Forage testing, Pasture Evaluations, Soil Testing, etc.

Most all soil test handled in my counties come across my desk for evaluation and recommendation. Hopefully I have helped those in need of soil health concerns.

Along with this the Annual Hickory County Bus Tour, August 7-10, was taken with several from my counties in attendance.



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



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

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



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

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



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

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

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

*Missouri Department of Mental Health 2020 Status Report

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Local Impact



Della Miller Field Specialist in Human Development

*Serving Laclede, Camden, Dallas,
Polk, Benton, Hickory, Wright and
Webster Counties*

What Individuals Found Most Helpful After Taking Mental Health First Aid:

“The ALGEE action plan is what I found most helpful. It gives you something to work through when you see someone struggling.”

“Talking through different scenarios helped me get a feel of how a conversation may go in real life”

Collaborative Teamwork

Childcare Provider Workgroup Childcare programming by Human Development and Family Science Field Specialists in-person and virtually was completed statewide. The childcare programming provides statewide clock hours for professional development for childcare providers who are required to obtain 12 hours each year. In 2023, 610 childcare providers attended across the state of Missouri through 36 sessions amounting to 1,220 clock hours provided for professional development. This program served 32% of Missouri counties and the City of St. Louis.

- I contributed to this effort by teaching or moderating three (3) virtual classes to fifty-seven (57) participants in six (6) counties.
- As an acknowledgment of our teamwork, we were awarded
 - *Early Childhood Childcare Training Award (2023). 3rd place National Extension Association for Family & Consumer Sciences.*
- **Building Strong Families (BSF)** In January 2022, the University of Missouri Extension was approved as a contractor with the Missouri Division of Social Services. This enabled Human Development and Family Science Specialists to offer parenting education to parents who seek to maintain or regain custody of their children. Through Zoom and in-person classes, the team served 91 parents, and a total of 740 hours were earned, impacting over 181 Missouri children.
- I contributed to this effort by teaching or moderating three (3) sessions virtually with participants from twenty-three (23) throughout Missouri.
- As acknowledgment of our teamwork success, we were awarded:
 - *National Winner Human Development-Family Relationships Award (2023). 3rd place National Extension Association for Family & Consumer Sciences.*
 - *Human Development-Family Relationships (2023). 2nd Place. Central Region. National Extension Association of Family & Consumer Science.*

Mental Well-Being

Mental Health First Aid

Since December 2020, 921 participants across Missouri and four additional states have become certified as mental health first aiders by completing Mental Health First Aid for adults and youth.

I completed the certification to teach Mental Health First Aid for adults in August of 2023. Since completing the certification I have facilitated/co-facilitated three (3) virtual Mental Health First Aid for adult programs which resulted in the following outreach and teaching results:

- Instructed **Mental Health First Aid** three (3) times to sixty-four (64) participants from twenty (20) counties in Missouri.
- Scheduled **Taking Care of You (TCOY)** once with a limited number of participants. This class was at the request of the county.

Local Impact

SNAP-Ed Public Value Statement 2023

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

A total of 654 participants were from Polk County.

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

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

During 2023, 104 youth and 993 adults were served through schools, community groups and agencies. The following is a list of the locations where participants were served in Polk County:

Schools	Agencies
Bolivar Primary School	Bolivar Home School co op
Morrisville Elementary	OACAC
	Polk County Library

Here is a great success story from Jesse Arnold, Former NPA.

I taught Kids in the Kitchen with a home school co-op. We learned how to dice, chop, and cut vegetables and fruits. We did all the lessons in Kids in the Kitchen Lesson B. I received a message from the home school co-op I taught. It was a picture of enchiladas and a message saying " Those cooking classes are really paying off for Daniel! He helped make these delicious chicken enchiladas (Smiley face emoji mm mm mmmmm.) I just supervised and did the oven part. He shredded the chicken, chopped the onion, and mixed the filling all together. Then after a brief demonstration of how to roll them, he finished the rest. Look out Top Chef, here he comes!!

Polk County

Health and Human Sciences

Local Impact



Hannah Whittaker, Nutrition and Health Specialist- I joined Polk County on November 1st of 2023 and wanted to take a moment to introduce myself. I attended Missouri State University and received my bachelor's in agriculture business, and I am currently attending Grand Canyon University to receive my masters degree. I have been working with Extension since March of 2022 and started out as a Youth Program Associate, working with the 4-H in Cedar County. I accepted the Nutrition and Health Specialist position and have really enjoyed exploring this area of MU Extension. In 2024 I plan to teach food preservation classes, Stay Strong Stay Healthy, Cooking Matters, and more. I am excited to be serving those located in Dallas, Cedar, Polk, and Hickory Counties.

Polk County

Local Impact

Sam, Liz, Jackson and Jacob Schuber represented Polk County as the 2023 Missouri State Fair Farm Family.

