



UNIVERSITY OF MISSOURI EXTENSION

Sullivan County

2023 Annual Report



109 N. Main St. Ste. 30
Courthouse, 3rd Floor
Milan, MO 63556
660-265-4541



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**
108 Whitten Hall
Columbia, MO 65211
PHONE 573-882-2394
EMAIL: cchiggins@missouri.edu

December 2023

Dear county commissioners and friends of MU Extension and Engagement,

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

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

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

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

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

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

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

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

Sincerely,

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

Who we are

Faculty and staff



Tracie Moore, Extension Engagement Specialist

Amber Sayre, County Office Support

Hillary Robedeaux, Youth Program Associate

Ashlyn Stout, Youth Development Educator

Jennifer Schutter, Field Specialist in Horticulture

Valerie Tate, Field Specialist in Agronomy

Zac Erwin, Field Specialist in Livestock

Mike Krauch, Regional Director

Council members

David Hauser, Chairman

Robin Moschetti, Secretary

Jodi Deterding, Treasurer

Christine DeRyke

Susan Guffey

Tim Lewis

Larry Mechlin

Geri Riddick

Oscar Mensa

Gregory Snyder

Chris May



County commissioners

Chris May, Presiding Commissioner

Danny Busick

James Howard

Budget and more

Appropriations budget

Income

Student Fees	440.00
County Appropriations	25,319.46
Gift/Grants/Contracts	500.00
Resales/Educational Services	2,180.75
Total Income	28,440.21

Expenses

Salaries & Wages	25,204.79
Travel	957.00
Postage	13.27
Telephone	1,260.11
Advertising	188.50
Publishing/Printing	195.30
Supplies/Services	1,823.13
Soil Test Expenses	150.00
Repairs/Maintenance	241.84
Total Expenses	30,033.94



State Fair Farm Family

Each year, the Sullivan County MU Extension Council, in cooperation with the Missouri Farm Bureau selects a family to represent them at the Missouri State Fair. We select a family actively engaged in agriculture, supporters of MU Extension, active in their community through leadership roles in organizations, support youth in areas such as 4-H and FFA and are respected by the neighbors and community. The David and Kathleen Hauser family was selected to represent Sullivan County for 2023.

Missouri 4-H Hall of Fame

Individuals who have created exceptional legacies of volunteer service and dedication to Missouri 4-H are recognized and honored with membership in the Missouri 4-H Hall of Fame. In 2023, Sullivan County's Martha Ware was inducted into the Hall of Fame for all her work with the 4-H program.



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



Local Support

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

UM System County Impacts

2024 UM Systemwide Impact Data Sheets

Sullivan County



University of Missouri System
COLUMBIA | KANSAS CITY | ROLLA | ST. LOUIS

UM System Footprint in the county in 2023



FY23 county students

30 students

- 22 Undergraduates
- 8 Graduate and professional students
- 26 Full-time students
- 4 Part-time students



County employees and retirees

2 people employed by UM

- 2 Campuses



County alumni

Selected school alumni

- 13 Nursing
- 7 Health Professions
- 2 Dentistry
- 1 Pharmacy
- 3 Veterinary Medicine
- 59 Agriculture
- 7 Engineering
- 2 Law

Alumni teaching K-12

- 7 teachers
- 6.4% of all district teachers
- 2 principals and administrators
- 28.6% of all district principals and administrators



County breakdown

MU

- 15 students
- 104 alumni
- 2 employees

UMKC

- 9 students
- 16 alumni
- 0 employees

Missouri S&T

- 4 students
- 5 alumni
- 0 employees

UMSL

- 2 students
- 4 alumni
- 0 employees



County properties and offices

MU Extension in: Sullivan County



County population: 6,045



County services provided

Health care (FY23)

- 588 in-state patients seen at MU Health Care, with \$324,040 of uncompensated care
- 5 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 114 visits to 75 patients having ZIP codes associated with the county

Extension (2022)

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

UM System County Impacts

2024 UM Systemwide Impact Data Sheets

Sullivan County



University of Missouri System
COLUMBIA | KANSAS CITY | ROLLA | ST. LOUIS

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)

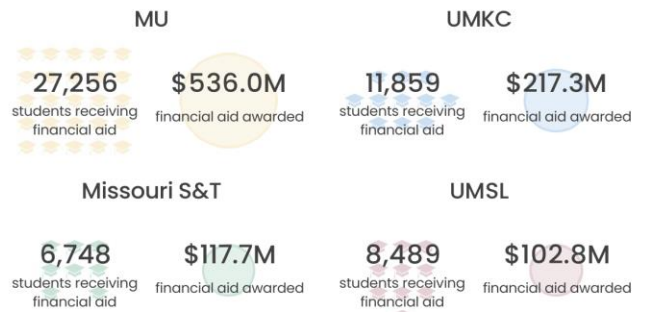


311,749 youth and stakeholder educational contacts in 4-H clubs, schools, camps and other programs (2022)

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.

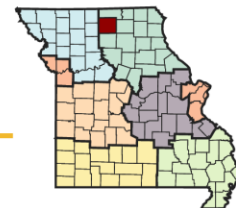
Supporting the University of Missouri is an investment in the future of Missouri.

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



SULLIVAN 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

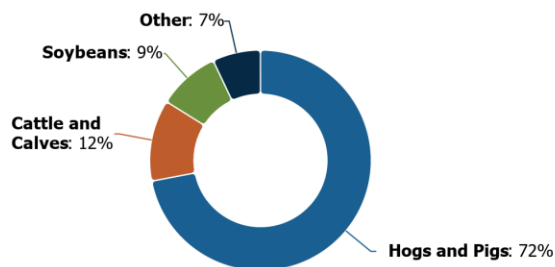
Knowing Local Challenges



CHALLENGE 1: Economic Opportunity: *Agricultural Economics*

Leading Agricultural Products

Total Commodity Sales: \$178,438,000



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

Net Farm Income

Net farm income (total sales, government payments, and other farm-related income minus total farm expenses) reflects the strength of the local agricultural community and can be an important measure for lenders and policy makers. The report area had a combined net farm income of \$51,363,000 in 2017, an average of \$76,547 per farm. This compares favorably to the statewide average farm income of \$29,485.

Report Area	Total Farms	Average Farm Income
Sullivan	671	\$76,547
Missouri	95,320	\$29,485

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

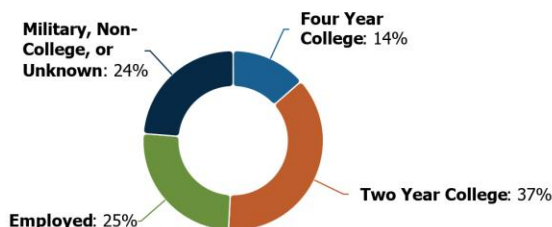
Grand Challenges



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

Post High School Report

The 12-month post-graduation activity of recent high school graduates can inform communities about postsecondary education, career readiness, and characteristics of the future workforce. In 2022, of 59 graduates surveyed in the report area, 8 went to a four-year college, 22 to a two-year college, 15 directly entered the job market. The remaining 14 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

This indicator reports the number of providers with a CMS National Provider Identifier (NPI) that specialize in mental health. Mental health providers include licensed clinical social workers and other credentialed professionals specializing in psychiatry, psychology, counseling, or child, adolescent, or adult mental health. The number of facilities that specialize in mental health are also listed (but are not included in the calculated rate). Data are from the latest Centers for Medicare and Medicaid Services (CMS) National Provider Identifier (NPI) downloadable file.

Ratio (Population to Providers)

Missouri	855:1
----------	-------

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

Primary Care Providers

Older adults make up a historically large percentage of the U.S. population and meeting the healthcare needs of an aging population can be challenging. In the report area, there are approximately 2 primary care physicians (MDs and DOs) to serve the area's 1,259 residents over the age of 65. The patient-provider ratio in the report area is 630:1, which means there is 1 provider for every 630 older adults. The ratio of adults to providers in the report area is higher than the state average of 242:1, which means there are fewer providers per person in this area.

Ratio (Population to Providers)

Missouri	242:1
Sullivan	630:1

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

Sullivan County

Missouri 4-H

Local Impact

4-H Clubs

Hillary Robedeaus

Sullivan County 4-H is a community of 223 youth building life skills, contributing to their community, and becoming college and career ready. Two in every ten Sullivan County youth under the age of eighteen participated in a MU Extension 4-H Youth Development program in 2023.

4-H programs are grounded in the belief that youth learn best by doing. Through hands-on projects 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. Sullivan County served youth through four community clubs, one In-school 4-H Clubs, and one after-school 4-H Clubs offering long-term educational experiences in which members learn life skills such as decision making, public speaking, and working with others.

- There were 223 members in the community clubs, in-school, and afterschool 4-H clubs in Sullivan County during the 2022-2023 4-H Year.
- Over 41 4-H members were engaged in science related projects and experiences.
- Collectively youth participated in 2,453 hours of community club work in Sullivan County.



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

- 9 youth participated in a total of 5 different events during the 2023 Sullivan County 4-H Achievement event.
- 65 exhibits at the 2023 Sullivan County Fair from 14 4-H members who are also supported through youth programming.
- Sullivan County youth exhibited 11 exhibits in the 4-H Building and livestock shows at the Missouri State Fair.
- A state level recognition form was completed by a member. These forms provide members with a vital step in the Experiential Learning Model. Members reflect on the things they have done and learned throughout the 4-H year and how they can apply what they have learned in the upcoming year.
- As responsible citizens, we promote generosity and community strengthening through service of 174 meals were donated in Sullivan County through the 4-H Feeding Missouri Initiative in 2023.

4-H 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 under this guidance of adult volunteers, who lead a wide variety of projects that support 4-H members in finding their SPARK. Club and project leaders also involve youth and teens in community service, leadership opportunities, and educational trips. 4-H project work and related educational experiences help youth explore interests in citizenship, communication, and leadership.

Sullivan County members enrolled in a combined total of 143 projects in 2023. The top project areas included:

- Swine
- Arts and Crafts
- Beef
- Sheep



Sullivan County

Missouri 4-H

Local Impact

4-H Volunteers

Hillary Robedeaus

- Sullivan County 4-H members were supported by 33 enrolled, screened and oriented adult volunteers supporting the development of youth in 2023.
- Volunteers contributed 3,300 hours to the Sullivan County 4-H program valued at \$104,940.

Volunteers participate in development opportunities like project leader training and club leader summits, in addition to ongoing support from MU Extension youth faculty and staff, gaining knowledge in how to offer a valuable learning experience for the youth they are working, with while maintaining a safe, supportive environment. Volunteers create, support, and are a vital part of the 4-H community. Dedicated volunteers help to organize club meetings, fundraisers and events. They also provide learning opportunities for youth in their projects, teaching life skills and instilling qualities of character like respect and responsibility in members. Adult volunteers serve as mentors for our youth, helping them transition into caring, healthy adults who contribute back to their communities, which is priceless.

Sullivan County 4-H Members: Their Story and Things They Have Learned Through 4-H

- "I wonder what next year's robots club will do?!" – Robotics Club member 11 years old
- :My child can't stop talking about the robot arm he's building; best \$20 I've ever spent!" – Parent of a Robotics Club member (Robotics is happening now)



Findings from a 2021-2022 evaluation study shows that Missouri 4-H:

Missouri 4-H Inspires Kids to Do	Missouri 4-H Grows True Leaders	4-H Builds Leadership and Communication Skills	4-H Builds Social and Emotional Skills
<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 97% said they like to learn about people who are different than them. • 93% said they think about others' feelings before they say something. • 75% reported feeling comfortable being a leader. 	<ul style="list-style-type: none"> • 95% help others reach their goals. • 86% are 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. 	<ul style="list-style-type: none"> • 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.

Sullivan County

Missouri 4-H

Local Impact



4-H School Enrichment- Embryology

Hillary Robedeaux

- There were 155 students from eight classrooms who participated in the Hatching Chicks in the Classroom program in 2023.
- Students participated in over 62 hours of learning with the “Chick It Out” program.

During the Embryology program, students learn about the 21-day development occurring within a fertilized, incubated egg that can result in the hatching of a chick. Students identify the parts of an egg and discover what each part provides for the developing chick. Students learn how to tell if an egg is raw or boiled and explore the strength of the egg’s shell, providing protection to the developing chicks. Students review the necessity of hand washing due to potential contamination caused by salmonella in poultry and poultry products. Students often gain experience with death and disabilities. Throughout the experience, students are charged with rotating the eggs three times a day and are responsible for checking to make sure the incubator has water and is maintaining the correct temperature. Once the chicks hatch, the students care for them, providing feed, water, warmth, and a calm environment.

Impacts of Programming

Students practice life skills including decision making and responsibility, helping them to develop qualities that will shape their development into adults. Students are provided with the opportunity for a practical experience that connects with the core subjects of communication arts, math, science, and health. Youth with hands-on experience with science are more likely to pursue science-related careers, which are critical to our county, state, national, and global economy. Students are conscious of the need to practice proper hand washing techniques to prevent the spread of illness and disease. Students also learn compassion and develop an understanding of how to accept individuals with disabilities, as well as how disabilities can be compensated for.

4-H SNAC Clubs

Hillary Robedeaux

4-H Student Nutrition Advisory Council (SNAC) clubs are offered in a variety of settings including before school, during school, afterschool, and in other community settings helping youth build knowledge about nutrition and fitness. Youth participate in a leadership project where they are encouraged to become an ambassador of Healthy Living in their communities by designing and implementing a leadership project that will improve education and the fitness of others. Across the state, youth have developed creative ways to advocate for healthy living. In 2023, there were 91 SNAC Clubs across Missouri with 2,577 youth participating and reaching 4,300+ youth through the leadership projects. In Sullivan County, SNAC efforts reached 22 youth and leadership projects completed included The Tasting Tigers 4-H SNAC Club.

This program provided 14 combined hours of science and nutrition related programming for Sullivan County students presented by Extension faculty and staff in conjunction with the classroom teacher. Students developed an awareness of the world around them through science and connected agricultural products, with where they come from, resulting in more informed consumers with an appreciation for the agricultural producers providing safe, reliable food sources. The experience provided students the opportunity to apply skills already learned in a practical, real-world situation, which helps them to see the value and application of topics learned through formal education.

Resources

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 \$31.80 per hour. Retrieved from:

<https://independentsector.org/blog/independent-sector-releases-new-value-of-volunteer-time-of-31-80-per-hour/>

Lerner, R.M., Lerner, J.V. (2011). The positive development of youth: Report of the findings from the first seven years of the *4-H Study of Positive Youth Development*. Retrieved from <http://www.4-h.org/about/youth-development-research/>.

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>

Sullivan County

Agriculture and Environment

Local Impact



Soil Testing

Valerie Tate

Soil testing is a valuable tool for farmers. It is a process used to estimate the ability of the soil to support plant growth. Soil samples submitted to the MU Soil Testing Lab are analyzed for soil pH and soil nutrients including phosphorus, potassium, calcium and magnesium. Soil can also be tested for micronutrients including sulfur, zinc, manganese, iron and copper.

The objectives of the MU Soil Testing Lab are to help farmers make effective use of fertilizer to increase their financial returns, benefit society with improved environment and water quality through efficient use of fertilizer on farms, lawns and gardens, and to ensure public and private labs are providing reliable and quality soil test results to the citizens of Missouri.

University of Missouri Soil Testing Lab ensures Missouri farmers are efficiently using the plant nutrients, which are applied to agricultural fields, by providing unbiased, research-based fertilizer and limestone recommendations based on soil fertility analysis. In 2023, there were 25 soil samples from Sullivan County analyzed by the MU Soil Testing Lab.



Pesticide Applicator Training

Valerie Tate

The private pesticide applicator license, issued by the Missouri Dept of Agriculture, is required for producers wanting to purchase and apply restricted use-pesticides. Restricted-use pesticides are classified as such because without additional training they pose a risk to people, animals, or the environment. Agricultural producers needing to obtain or renew certification of this license must take this pesticide safety training every five years. They must be 18 years of age and directly involved in the production of agricultural commodities to obtain this license.

During the training, participants learn about safe handling of pesticides, proper mixing, calibration techniques, environmental ramifications of improper mixing or careless application, chemical breakdown of pesticides in the environment, what records are needed, pesticide formulations, pesticide storage, common Missouri pests, and integrated pest management (IPM) techniques.

During 2023, 14 agricultural producers in Sullivan County were trained and licensed to purchase and apply restricted use pesticides.

Agriculture Lenders' Seminars

Darla Campbell and Mary Sobba

Eighty-four lenders attended this year's seminars. One Sullivan County lender attended. Lenders learned about Crop and Livestock Outlook, Macroeconomics, Rental Rates & Land Values, MU Budgets, Input Costs, Renewable Energy, FSA, and MASBDA Programs. Lenders in attendance managed over 6007 farm loans totaling more than \$105,020,500.

By attending Agricultural Lenders' seminars, lenders are able to help their clients make better decisions based on risk management tools, budgets, and other resources provided. This benefits their portfolio of producers and landowners by an increased understanding of enterprise budgets, market outlook, and other decision-influencing factors affecting families' and businesses' financial health.



Sullivan County

Agriculture and Environment

Local Impact

Training and Certification for NE Youth in Agriculture

Darla Campbell, Jennifer Schutter, Penny Kittle, Zac Erwin, Kelli Harris, Shyla Elliott, & Sara Thompson

The Schuyler FFA Alumni Career Development Experience (CDE) was held on March 20, 2023. There were 17 schools with 195 students and 22 Vocational Agriculture teachers in attendance. From Sullivan County, 32 attended. Of the youth participating, 9 were in Ag Sales, which is a Leadership Development Experience (LDE) and 186 were in CDEs. Out of the 186 tested, 110 scored proficient. Youth in vocational agriculture programs for three or more years are required by DESE to test at a certified site before graduation.

A total of 11 events were offered – Dairy Cattle, Dairy Foods, Horses, Livestock, Forestry, Entomology, Agronomy, Floriculture, Farm Business Management, Ag Mech, and Ag Sales.

This opportunity is valuable for our youth not planning to attend college or trade school. This gives them a chance to show employers their aptitude in the area they tested proficient. The experience helps youth explore potential careers in agriculture.



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

Darla Campbell

The Missouri Department of Agriculture partnered with University of Missouri Extension to collect farmers' market price data on crops present at Missouri farmers' markets June-October of 2023. MU Extension Specialists collected data while providing production, marketing, and financial resources to producers around the state. There was a total of 63 different markets visited with 2246 prices collected. These markets were in Kirksville, Unionville, Brookfield, Milan, La Plata, Louisiana, Hannibal, Palmyra, Mexico, Booneville, and Columbia.

Garden Talk Newsletter

Jennifer Schutter

The Garden Talk newsletter is received by 61 Sullivan County residents each month, informing them of timely gardening tips and other important gardening information. The newsletter also includes upcoming horticulture programs and activities. Some residents receive it electronically.



What's Inside

- Cranberries for the Holidays
- Sweet Potato vs. Yam
- Tree Campaign
- November gardening tips
- Upcoming events
- Updating our mail list



AN INVASIVE SPECIES: SPOTTED LANTERN FLY

The Spotted Lanternfly (SLF) is native to China and was first detected in Pennsylvania in September 2014. Spotted lanternfly feeds on a wide range of fruit, ornamental and woody trees, with tree-of-heaven being one of the preferred hosts. Spotted lanternflies are invasive and can spread long distances by people who move infested material or items containing egg masses. Juvenile spotted lanternflies, known as nymphs, and adults prefer to feed on the invasive tree of heaven (*Ailanthus altissima*) but also feed on a wide range of crops and plants, including almonds, apples, apricots, grapes, hops, maple trees, nectarines, oak trees, peaches, pine trees, plums, poplar trees, sycamore trees, walnuts and willow trees.



The Spotted Lanternfly does not fly long distances. Instead, it is a hitchhiker. Starting in the fall, SLF seek out outdoor surfaces and lay mud-like egg masses on the tree bark, outdoor gear such as lawn mowers, bikes and grills, methods of transport and more. SLF egg masses are about an inch long and resemble a smear of mud. If found in an area known to have an SLF population, residents should crush them and scrape them off. Travelers passing through the SLF quarantine areas should thoroughly check their vehicles, trailers, and even the clothes they are wearing so they do not accidentally transfer the lanternfly from a quarantine area to another area.

Missouri Farm Lease Education provide producers and landlords valuable assistance

Darla Campbell

Forty-three people, including eight from Sullivan County, attended two farm lease classes held in 2023, offered both online and in-person. Topics included current rents and trends, items to include in a lease, terminating a farm lease, crop and livestock share arrangements, and flex leases. Additionally, I answered one-on-one questions throughout the year.

The goals of farm lease education include establishing a fair lease for all parties and minimizing disputes on lease issues. Good communication and fair lease arrangements lead to less litigation, better neighbors, and higher productivity.

Sullivan County

Agriculture and Environment

Local Impact



Master Gardeners

Jennifer Schutter

In 2023, Sullivan County Master Gardeners completed 343.5 volunteer hours. Of this, 299.25 were service hours to their communities with a value of \$9,516.15, using the value of \$31.80 for 2023 per volunteer hour from the Independent Sector. Master Gardeners are required to complete 6 hours per year of continuing education, which totaled 44.25 hours for the Sullivan County Master Gardeners. Community service projects included: beautification at Green Castle City Hall and the Depot, which included spring clean-up, pruning roses, planting flowers in the beds, and watering and caring for the beds and container plants throughout the summer; beautification at the scatter garden in Oakwood Cemetery in Milan, which included clean-up, weeding, planting, watering of plants and deadheading plants throughout the summer; helping elderly gardeners care for their garden beds and lawn; garden bed clean-up at local churches in Green City; and beautification including watering throughout the summer at the Green City Library and Museum.

Consultations

Throughout the year, citizens of Sullivan County receive information and advice on various gardening questions to help them make more informed choices about their vegetable gardens, flower gardens, fruit trees, lawns and landscapes and soil testing.

Master Pollinator Steward

Jennifer Schutter

Two Sullivan County residents participated in the six-week Master Pollinator Steward Course. The course teaches research-based information to meet the growing public interest in honeybees and native pollinators. It also provides a better understanding of the importance of pollinators to society, identifies opportunities for individuals and communities to create or improve pollinator habitats in their area, and provides a broader education on plants and pollinators for new and experienced beekeepers. In addition to classroom presentations, participants attended field trips to see native plants, pollinators and a prairie.

Show-Me-Select Replacement Heifer Program

Zac Erwin

The Show-Me-Select program focuses on increased adoption rate by farmers in Missouri of management practices that offer potential to improve long-term reproductive efficiency of their herds and resulting profitability. Also focusing on increasing marketing opportunities for and adding value to Missouri-raised heifers with the creation of reliable sources of quality replacement heifers in terms of genetics and management.

In 2023, 240 heifers were enrolled from Sullivan County in the Missouri Show-Me-Select Replacement heifer program. Show-Me-Select producers sell heifers in sanctioned Show-Me-Select Heifer Sales held annually at Kirksville Livestock, LLC and F & T Livestock in Palmyra, MO. SMS producers also sell in other public auctions and private treaty. In 2023, 841 Show-Me-Select heifers, totaling \$2,245,873, sold through SMS sales for an average price per head of \$2,670. Analyzing data from these sales show that Show-Me-Select tagged heifers when compared to those that do not carry the Trademarked tag, realize a 274-dollar increase in value. That equates to an added value of \$230,434 returned to participating producers in Northeast Missouri. Several area producers purchased heifers at these sales.



Sullivan County

Agriculture and Environment

Local Impact

Feedlot School

Zac Erwin

“Missouri was once a top 10 state for feeding cattle, but much of that institutional knowledge was lost decades ago,” said Eric Bailey, assistant professor of animal sciences and state beef nutrition extension specialist. “With recent increases in packing plant capacity in Missouri, MU Extension identified a need to provide educational opportunities to farmers wanting to feed out cattle.” This is the fourth Feedlot School offered by MU Extension in recent years.

“There has been considerable interest from beef producers in northern and, specifically, northeast Missouri to explore more diversified strategies within their operations,” said Zac Erwin, livestock specialist in Adair County. “Nearly a decade of slim to negative profit margins at the cow/calf level will cause producers to think about doing things differently.”

With the beef industry on a slow march toward becoming more vertically integrated, Erwin said, producers that are diversified are realizing they may hold a competitive advantage. Diversification is “the ultimate risk-management strategy,” he said.

Over half of the feedlot school attendees currently feed cattle in Missouri and 40% plan to begin feeding cattle in Missouri following school attendance. Of those that attended, 96% plan to increase their on-farm feeding capacity. The Feedlot School contributes to MU Extension’s goal of doubling the economic impact of agriculture production in Missouri by 2030 through educating farmers on all aspects of cattle feeding.



24th Missouri Livestock Symposium

Zac Erwin

The Missouri Livestock Symposium (MLS) started in 2000 as a means of providing the latest research and best management practices to area livestock producers and landowners. The MLS has evolved into an annual educational program attracting hundreds of livestock producers from across the Midwest and is considered a source for professional development by area agricultural educators and professionals. The MLS involves a 20 member, all volunteer planning committee contributing approximately 672 hours annually to planning and another 293 hours for event implementation.

The Missouri Livestock Symposium features a true multi-disciplinary and cross-agency approach to program planning with a diverse committee consisting of producers, Extension specialists, University researchers and governmental liaisons. The inclusion of diverse backgrounds and people strengthen the program direction and overall program delivery.

Strong attendance was noted in 2023 Livestock Symposium. Keynote speaker, Corbitt Wall, DV Auction Market Analyst, headlined the return as he spoke about “The Packer’s Playbook.” Many notable topics and speakers were featured on Saturday, December 2nd as livestock producers looked for answers and interaction with experts in livestock production.



Sullivan County

Agriculture and Environment

Local Impact



Mid-West Goat Producer's Course

Jennifer Lutes

Seventy-two producers, including twelve from Sullivan County, attended the four-day course May 31-June 3. Speakers covered forage and nutrition, economics and 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. One participant stated, "It's very interactive, so, you're getting valuable information along with real examples."

Food Safety Modernization Act

Brenda Schreck

Food Safety Modernization Act (FSMA) aims to ensure the United States food supply is safe by shifting the focus from responding to preventing contamination in livestock foods. MU Extension livestock specialist Brenda Schreck met with agriculture firms that provide and/or process livestock feed. Schreck created one new firm plan in the state and continues to maintain twenty-three in the northeast region.

Discussions were held on the implementation of documentation for animal feed safety preventive controls on-site, and the firm's efforts for animal feed safety, as required by FDA. Feed safety manuals aid firms in maintaining accurate documentation of preventive measures as they are conducted on-site.

Improving grassland sustainability in Missouri

Zac Erwin

The NRCS + MU Grasslands Project was formed in 2017 as a collaboration between two organizations: the Natural Resources Conservation Service (NRCS) and University of Missouri Extension (MU).

This cooperative project combines experts from both organizations to provide technical advice and education on grazing plans, soil health, native warm season grasses, and National Resource Inventory (NRI). The goal of the NRCS + MU Grasslands Project is to improve grassland sustainability in Missouri while strengthening, increasing and encouraging the voluntary approach and participation of private landowners in NRCS programs.

Many programs are held throughout the region in relation to this project, including farm visits, grazing schools, technical assistance, and field days.

Missouri AgrAbility

Brenda Schreck

AgrAbility helps farmers with disabilities and their families succeed. The program links University of Missouri and Lincoln University extension services with a nonprofit disability organization, to provide practical education and on-the-farm assistance, promoting agricultural and rural independence. Services offered by the program include professional training, information dissemination, technical assistance, on-site farmstead or off-site assessment, and referral to other service providers. Brenda Schreck, Missouri AgrAbility Outreach Coordinator for the Northeast Region at MU Extension, assisted a Sullivan County producer with the AgrAbility program this year.



Sullivan County

Health and Human Sciences

Local Impact

FNEP

The Expanded Food and Nutrition Education Program (EFNEP) brought \$1,626,730 federal funds to Missouri. These funds were used to enroll 526 limited-resource families in nutrition education and meal preparation classes, representing 1,926 family members. Additionally, 1,980 youth were enrolled in EFNEP classes, with 22 of these youth participants residing in Sullivan 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.



SNAP-Ed

The Supplemental Nutrition Assistance Program Education (SNAP-Education or SNAP-Ed) brought \$10,874,798 in federal funds to Missouri. During FY2023, Missouri's SNAP-Ed program reached over 78,000 Missourians through direct classroom education. Each person participated in an average of 6 hours of education, totaling over 15,000 hours. In addition, an additional 760,135 people participated in indirect education. Direct and indirect education resulted in over 1.8 million total contacts with Missourians, with 33 participants from Sullivan 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 their 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.

