



UNIVERSITY OF MISSOURI EXTENSION

# Adair County 2025



Annual Report

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**SERVE MISSOURI.  
DELIVER MIZZOU.®**

 **Extension**  
*University of Missouri*  
an equal opportunity/ADA institution



Office of Extension  
and Engagement  
*University of Missouri*

**VICE CHANCELLOR'S OFFICE**

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Dear County Commissioners, Elected Leaders, and Friends of MU Extension and Engagement,

As I reflect on the past year, I am struck by the remarkable progress we have made together. MU Extension continues to deliver on its mission of linking the University of Missouri with every community across our state, ensuring that Missourians have access to the knowledge, resources, and partnerships they need to thrive.

Through the dedication of our faculty, staff, councils, partners, and advocates, MU Extension continues to make a measurable difference across Missouri. Last year, we had more than 1.5 million educational contacts and generated more than \$1 billion in economic impact. Building on that momentum, your support also helped secure a \$5 million recurring increase in state funding. This important milestone is already being invested in people, programs, and facilities to strengthen agriculture, improve health and well-being, support local economic development, and prepare youth for leadership through 4-H.

We have also adapted to new realities. Even as the sunset of federal SNAP-Ed funding forced hard choices, our commitment to delivering nutrition and health programs to families in need has not wavered. We are expanding investments in rural health, civic leadership and community development to address the priorities Missourians tell us matter most. We are also aligning our work with university, state, and federal priorities to maximize impact, whether in rural healthcare, agricultural innovation or workforce development.

Our strengths remain clear: people, programs, and partnerships. From nearly 6,000 4-H volunteers to county council members, master gardeners, and master naturalists, Extension thrives because of the dedication of those who serve. Our trusted, research-based content was accessed nearly 2 million times and downloaded more than 76,000 times last year, and innovative programs, from soil testing to urban revitalization initiatives, continue to meet Missouri's evolving needs.

Thank you for your continued partnership. MU Extension belongs to all Missourians, and together we will keep building resilient communities, fostering innovation, and preparing our state for the future.

With appreciation,

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

# WHO WE ARE

## Faculty and Staff



Zac Erwin  
Field Specialist  
in Livestock



Jennifer Schutter  
Field Specialist in  
Horticulture



Theresa Eads  
4-H Youth  
Development Educator

Taylor Harris  
Youth Program Associate  
Jami Johnson  
County Office Support  
Tracie Moore  
Extension Engagement Specialist  
Darla Campbell  
Field Specialist in Community  
Development  
Valerie Tate  
Field Specialist in Agronomy  
Jeremiah Terrell  
Field Specialist in Human  
Development  
Mike Krauch  
Regional Director, Northeast Region

## Council Members

Rodney Sadler, Chairman  
Chris Clark, Vice-chairman  
Meredith Sevits, Secretary  
Martha Hulet, Treasurer  
Bob Behnen  
Gayla McHenry  
Sue Morton  
John Buck  
Traci Reeves  
Melissa Eitel  
David Hill  
Kathy Hoppe  
David Hoppe  
Lena Reardon  
Pam Danner  
Hayley Newman  
Paula Brawner  
Angie Buck  
Louise Smith  
Gwen Perrachione  
Andy Jackson



## County Commissioners

Mark Shahan  
Presiding Commissioner  
Bill King  
1<sup>st</sup> District Commissioner  
Gayla McHenry  
2<sup>nd</sup> District Commissioner

# BUDGET AND MORE

## Appropriations budget

### Income

County Appropriations 90,000

**Total Income 90,000**

### Expenses

Salaries/Benefits 56,040.05

Travel 2,957.00

Telephone 1,480.56

Postage 2,156.00

Office Supplies/Service 3,817.38

Utilities 5,160.45

Insurance 2,358.29

Contract Services 1,501.50

Repairs/Maintenance 1,729.76

**Total Expenses 77,200.99**

## Return on investment

University System 100,000

Donations 100

Program Revenue 6636.42

## State Fair Farm Family

Each year, the Adair 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 Jennifer Schutter family was selected to represent Adair County for 2025.



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



## Local support

Did you know you can donate directly to Adair 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

## MU Extension in Adair Community Impact Report

This report offers a detailed overview of how MU Extension positively impacts Adair County, showcasing the meaningful ways local engagement supports residents. It includes data on the number of students, employees, retirees and alumni affiliated with the University of Missouri System, along with the healthcare and extension services provided over the past year.

In addition, the report highlights the broader contributions of the UM System across Missouri in key areas such as education, research, healthcare, economic development and public service. It features metrics like job creation, financial aid distribution, research investment, healthcare access and broadband expansion.

This report is a valuable resource for understanding the measurable benefits the UM System brings to Missouri communities. It supports informed decision-making, advocacy efforts and strategic planning by illustrating the tangible impact of university-driven initiatives at both the local and statewide levels.

[Access Adair County's Impact Report.](#)



# GRAND CHALLENGES

## Grand Challenges

The Grand Challenges — Economic Opportunity, Educational Access, Health and Well-being, and Agricultural Stewardship — represent the most pressing issues facing Missouri communities. They are important because:

By focusing on these challenges, MU Extension in Adair County can better leverage university resources, data and partnerships to empower people to improve their lives, businesses and communities.

This report presents localized data and insights in how MU Extension in Adair County is addressing these challenges. Each section breaks down county-specific statistics compared to state averages.

[Access your Adair County's Grand Challenges Report.](#)





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

## Missouri 4-H for Ages 8 – 18



### What is 4-H?

4-H is where Missouri's young people find their spark and learn by doing. Whether raising animals, coding robots, growing gardens, or giving back to their neighbors, 4-H members gain real-world skills with the help of caring mentors.

Rooted in University of Missouri Extension, 4-H connects classrooms, communities, and families to create learning that sticks—building confident, capable leaders who are Beyond Ready for life. In 4-H, youth discover their strengths, practice resilience, and learn to lead with heart—preparing them not just for what's next, but for anything that comes their way.



4-H brings hands-on learning directly into schools through in-school and afterschool programs that extend classroom lessons. **Teachers, 4-H professionals, and volunteers** guide students through 4-H projects in areas such as science, agriculture, health, and leadership, helping youth connect learning to the real world.

Programs like **Show Me Embryology** give students a front-row seat to science in action as they watch chicks hatch and explore the life cycle of a chicken. These experiences help students grow curiosity, confidence, and critical thinking skills, preparing them to be Beyond Ready for whatever comes next.

Missouri 4-H Agriculture programs give youth hands-on experiences in areas such as animal science, veterinary science, plant science, and agronomy. Members explore the biology, care, and management of animals and crops while developing problem-solving, critical thinking, and leadership skills.

Youth can also put their knowledge into practice through statewide competitions, including **Livestock Judging, Meat Judging, Hippology**, the **Missouri 4-H Equine Tour** and more. These experiences help participants apply what they've learned, gain confidence, and prepare for future careers in agriculture and related fields.



## Legend



Agricultural Growth  
& Stewardship



Economic  
Opportunity



Educational  
Access &  
Excellence



Health  
& Well-Being

### Local Impact

#### 4-H Youth Development Program

By Theresa Eads, 4-H Youth Development Educator and Taylor Harris, Youth Program Associate

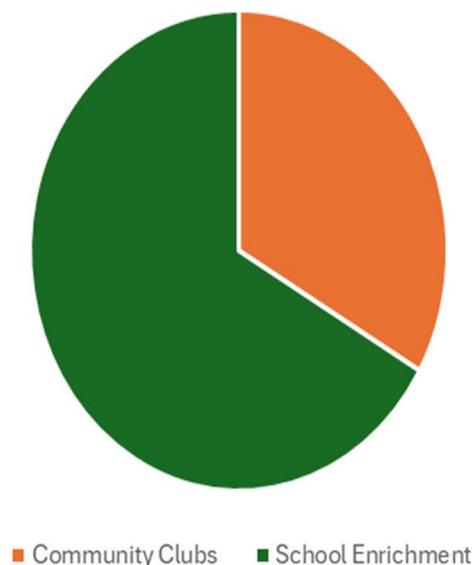
4-H programs are built on the belief that youth learn best by doing. With the support and guidance of adult volunteers serving as mentors, youth engage in hands-on learning experiences through projects in areas including engineering and technology, environmental science and natural resources, plant and animal science, leadership and personal development, expressive arts, and healthy living, in addition to taking on leadership positions which help to mold them into the caring, competent, and confident citizens who know the value of contributing to their communities.

#### During the 2024-2025 4-H Year 7 in 100 (or 7 percent) of Adair County Youth were reached through 4-H programming through MU Extension.

4-H programming reaches youth through a variety of delivery modes in Adair County, including Community Clubs, SPIN Clubs or short-term 4-H programming, and in-school or afterschool membership or school enrichment programming. These varied delivery modes allow participants to participate in the format that best meets their needs and interests, while focusing on multiple skills including public speaking, leadership, exploring sparks (or interests), developing life skills, responsibility, group decision making, and exploring college and career pathways.

#### Diagram of Adair County 4-H Enrollment by Delivery Mode

Adair County Delivery Modes



#### 4-H Community Club Members

- 92 youth reached through the Adair community clubs in Adair County during the 2024-2025 4-H Year.
- Over 80 4-H members were engaged in science related projects and experiences.
- Collectively, youth participated in 1,012 hours of documented community club work and 291 hours of community service in Adair County.

### Local Impact

#### **4-H School Enrichment, In-school and Afterschool Clubs**

- 278 youth were reached by school enrichment programs in Adair County in 2024-2025.
- Ten classrooms across the county were reached through the Embryology: Hatching Chicks in the Classroom program culminating in 20 hours of learning about development, agriculture and sanitation, in addition to responsibility.

#### **4-H Programming Participation**

- 34 youth served in a leadership role within their club or council. One youth from the County also held leadership roles beyond the county serving as (Regional Representative, Missouri State Council, Missouri Civic Engagement Ambassadors, Shooting Sports Ambassadors, National Congress Delegates, National Conference Delegates, Ignite Delegates)
  - 24 youth demonstrated their public speaking and communication skills by participating in the Achievement (Major Events) Event held in Adair County this year.
  - Adair County was represented by 24 youth exhibiting in the 4-H Building and Livestock Shows at the Missouri State Fair in 2025.
  - Adair County youth also sited in on their future through their shooting sports projects which strives to teach them focus and safety while honing their skills and developing sportsmanship. Nine youth competed in the Missouri 4-H State Shoot events this year.
  - Seven state level recognition forms were completed by members. Completing these forms allow 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.
  - One youth received a Missouri 4-H Scholarship as an investment in their future.
  - One youth learned more about civic engagement and the Missouri Legislature by participating in 4-H Day at the Capitol.
  - Ten youth participated in the 2024 Regional Roundup held in Macon and one youth in the 2025 Spring Energizer held in Paris where they connected with others and gained knowledge and skills through workshop sessions.
  - Youth also took their 4-H experience beyond the county lines participating in the following events:
    - State 4-H Teen Conference\*                      -State 4-H Congress\*
    - Zoo Apprenticeship Camp- Busch Garden
- Adair County members enrolled in a combined total of 99 projects during the 2024-2025 4-H Year. The top project areas included:
- Photography
  - Poultry
  - Foods
  - Beef/Goats
  - Aerospace/Woodworking

### Local Impact

#### 4-H Programming Impact

- 4-H members are twice as likely to go to college compared to their non-4-H peers and they tend to pursue careers in STEM fields (Lerner & Lerner, 2011).
- 4-H also prepares youth for the workplace. 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 yet to be identified. 4-H is the only youth development program with direct access to technological advances in agriculture, life sciences, and social sciences from the university system. This brings relevant science content and hands-on learning that helps youth thrive (Arnold, Bourdeau, & Nott, 2013).
- Youth who earn a bachelor's degree increase their annual earnings by \$2 million over their lifetime. (U.S. News and World report, 2011) If 50% of the Adair County youth participating in 4-H events on a college campus receive a Bachelor's degree, 4-H would help young people acquire \$6 million more in lifetime earnings.



### Profiles and Stories

#### Impact in Their Own Words

- “Most of all I like that 4-H makes me a better person, because I try to be a good role model to others and represent 4-H in a positive way by always smiling and encouraging those around me.”
- “I feel I fit in best when I am at a 4-H event or show.”



#### 4-H Volunteers

4-H Volunteers are the true muscle of the 4-H program, extending the reach of 4-H professionals and making a difference in the lives of youth by connecting them with a caring adult to support them in their development.

- Adair County 4-H members were supported by 55 enrolled, screened and oriented adult volunteers supporting the development of youth in the 2024-2025 4-H Year.
- Volunteers contributed 5,500 hours to the Adair County 4-H program valued at \$191,345.
- 11 volunteers participated in volunteer development efforts including the Club Leader Summit and Project Leader Summit offered by 4-H Professionals to learn and be equipped for the leadership roles in which they serve.

Adult volunteers serve as mentors for our youth, helping them transition into caring, healthy adults who contribute back to their communities, which is priceless.

### 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).

Arnold, M. E. (2018). From Context to Outcomes: A Thriving Model for 4-H Youth Development Programs. *Journal of Human Sciences and Extension*, 6(1), 11.  
<https://doi.org/10.54718/NBNL5438>

Independent Sector. (2023). *Value of Volunteer Time Report | Independent Sector Resources*. Independent Sector. <https://independentsector.org/resource/value-of-volunteer-time/>

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/bestcolleges/articles/2011/08/05/howhighereducation-affects-lifetime-salary>





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

## Agriculture and Environment



The **Missouri Master Gardener** program enables people of all ages to get in-depth horticultural training and apply what they've learned to improve their communities and educate others about gardening.



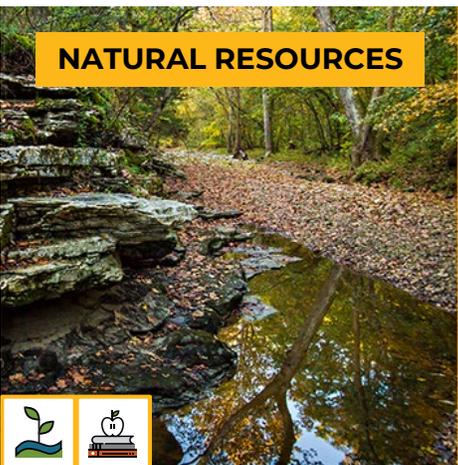
**In 2023, almost 4,000 Missouri Extension Master Gardeners completed over 149,000 VOLUNTEER HOURS throughout the state.**



**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. The program brings in the power of animal genomics through an enhanced DNA-option, Show-Me-PLUS.



**Since its inception more than 900 FARMS have enrolled, with an estimated statewide impact of \$200 MILLION.**



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

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

### Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

## Agriculture and Environment

### Local Impact

#### Show-Me-Select Replacement Heifer Program

By Zac Erwin, MU Extension Livestock Specialist

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 2025, 42 heifers were enrolled from Adair 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 2025, 1,080 Show-Me-Select heifers, totaling \$4,571,845, sold through SMS sales for an average price per head of \$4,233. 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 270-dollar increase in value. That equates to an added value of \$291,600 returned to participating producers in Northeast Missouri. Several area producers purchased heifers at these sales.

<u>County</u>	<u>2025 Enrollment (# of Heifers)</u>
Adair	42
Knox	534
Clark	257
Schuyler	77
Macon	201
Linn	27
Sullivan	24
Putnam	134
Grundy	59



Auctioneer, Dan Sullivan, looks for bidders at the 25<sup>th</sup> Annual Harold and Marvis Trump Bred heifer auction. Carthage, IL.



Show-Me-Select Sale in Kirksville (Photo courtesy of Zac Erwin)

## Agriculture and Environment

### Local Impact

#### Re-Thinking Business Decisions in Uncertain Times

By Zac Erwin, MU Extension Livestock Specialist

In a period marked by economic uncertainty, global geopolitical tension, trade disruptions, capital market volatility, and increasingly extreme weather events, agricultural businesses face both financial and emotional pressures. Against this backdrop, some producers are focused on managing risk and maintaining stability, while others are positioning their operations to capitalize on rapid change.

Dr. David Kohl shared timely insights on the state of the agricultural and broader economies, with a particular focus on implications for beef producers. Drawing on U.S. and global trends, he compared today's decision-making environment to a quarterback calling an audible as conditions on the field evolve.

The high-energy presentation, attended by 70 farmers, integrated time-tested strategies for business management, financial planning, and personal resilience. Participants were encouraged to adopt a mindset centered on adaptability, agility, and resilience—critical attributes for navigating uncertainty and seizing opportunities in today's dynamic beef industry.

#### Participant Comments:

Well run-informative-learned some new things.

Very helpful to continue our education.

Overall a great school.

Excellent Class!! Instructors were all great and really kept my attention. Slides seemed to work well and going to real feedlots was awesome.

Got a lot of Value out of the school, will recommend to other producers.

Very Good class overall. Great experience.



Pictured: Dr. David Kohl and Zac Erwin, MU Extension Livestock Specialist

## Agriculture and Environment

### Local Impact

#### **Beef Quality Assurance Training**

By Zac Erwin, MU Extension Livestock Specialist

Beef Quality Assurance (BQA) is a nationally recognized program that provides beef producers with science-based guidelines for implementing effective animal husbandry and management practices.

The program emphasizes continuous improvement in cattle care by integrating accepted research with practical, on-farm application.

During this training, 38 beef producers and youth participants received instruction on BQA best practices, including low-stress cattle handling, facility design and management, safe cattle transportation, accurate record keeping, and proactive herd health management. These practices contribute to improved animal well-being, enhanced beef quality, and stronger producer outcomes.

Maintaining active BQA certification is increasingly important as the entire beef supply chain relies on the program to demonstrate a shared commitment to food safety, cattle care, and consumer confidence in beef products.



## Master Gardener Program

### Local Impact

By Jennifer Schutter, MU Extension Horticulture Specialist

Number of Volunteers – 32, 1 Emeritus

Number of Volunteer Hours – 957

Dollar Value of Volunteer Hours - \$33,294.03

(\*[Independent Sector](#) at \$34.79/hour)

Number of New Volunteers – 7

Number of Continuing Education Hours-407

Number of Advanced Training Hours – 18

Pounds of Produce Donated – 873

Value of Pounds of Produce Donated – \$1,684.89

(\*[Feeding America](#) at \$1.93/pound)

Number of Chapter-led Education Events – 2

Number of Participants in Education Events-65

Number of Hotline Questions Answered – 0

Social Media Analytics – 0



Master Gardeners grew and donated 873 pounds of vegetables from the garden at the Pantry for Adair County.

- The Kirksville Area Master Gardeners meeting monthly, holding a business meeting and educational program or garden tour.
- They were involved in many projects throughout Adair County in 2025. These included beautification projects at the Adair County Veteran's Memorial, Brashear Park, Adair County Public Library, and daylily beds in several Kirksville parks.
- Master Gardeners grew a garden at the Pantry for Adair County garden and donated 873 pounds of produce to the pantry to distribute to clients.
- They continued their Monarch Initiative for the 12<sup>th</sup> consecutive year, by holding a plant sale in May at the Kirksville Farmers' Market, where they sold different species of milkweed and other pollinator plants, and provided educational material and answered questions about attracting monarchs and other pollinators to the garden.
- Master Gardeners assisted in folding the Garden Talk horticulture newsletter which reaches over 1,200 individuals.
- Master Gardeners assisted with work in the A.T. Still University Medicinal Garden. Plants were labeled and beds weeded and mulched.
- Master Gardeners assisted with starting and growing the All-American Selection plant seeds for the display garden at the Adair County MU Extension Center.
- They had a booth at an Earth Day Event in Kirksville, passing out information on gardening and answering questions.
- Master Gardeners attended the State Conference, where one of them was a session presenter.

## Agriculture and Environment

### Local Impact



#### Garden n' Grow

Nine youth participated in the 26th year of Garden n' Grow at the Adair County Extension Center held July 21-25. Garden n' Grow is a youth gardening program for children ages 8-13. Lessons were taught on various horticulture topics and food preparation.



#### All-America Selections

An All-America Selection Display Garden was planted at the Adair County Extension in the spring of 2025. All-America Selections is an independent non-profit (501c6) organization that tests new, never-before-sold varieties for the home gardener. After a full season of anonymous trialing by volunteer horticulture professionals, only the top garden performers are given the AAS Winner award designation for their superior performance.

- 6 in-person programs (71 total in attendance)
- 137 individuals toured the display garden
- 9 Youth learned about AAS garden and picked flowers and vegetables during Garden n' Grow
- 23 people played All-America Selection Bingo



#### Women in Agriculture

A Women in Agriculture program was held November 5, at Wildflower Grove in Green Castle. Twenty-five women attended the workshop, with 11 participating from Adair County. Various sessions on agriculture topics were taught throughout the day. These included Estate and Financial Preparedness, Artificial Intelligence and Agriculture, Missouri Beef Industry Update and Plant Diagnostics. Women in Agriculture programs bring women together to network, form connections, and gain knowledge they can use in their farm operation or agriculture business.

## Agriculture and Environment

### Local Impact

#### Master Naturalist

Ten Adair County residents completed The Master Naturalist course held during the fall of 2025. They learned information on various conservation related topics. The mission of Missouri Master Naturalist™ is to engage Missourians in the stewardship of our state's natural resources through science-based education and volunteer community service.

These individuals are members of the North Star Master Naturalist Chapter which meets monthly in Kirksville.



#### Master Pollinator Steward

Three Adair County residents completed The Master Pollinator Steward course held during the fall of 2025. The Missouri Master Pollinator Steward program was developed to educate the general public about the plight of pollinators and teach them steps they can take to benefit pollinators. The curriculum covers five chapters of information on insects, pollination, honey bees, native pollinators And conservation, and includes several hands-on activities.



## Master Gardener Program

### Profiles and stories



Dr. Dan Getman provides educational information on pollinators at the Kirksville Farmers' Market.



Master Gardeners provide gardening information at an Earth Day Event in Kirksville.



Master Gardeners take a tour and learn about the All-America Selection Display Garden at the Adair County MU Extension Center in Kirksville.



Master Gardeners fold and stuff horticulture newsletters that are sent out to nearly 1,000 individuals around the state.

## Agriculture and Environment

### Soil Testing

By Valerie Tate, MU Extension Field Specialist in Agronomy

Soil testing is a valuable tool for farmers. It is a process used to estimate the ability of the soil to support plant growth. Samples submitted to the University of Missouri Soil Testing Laboratory are analyzed for pH and 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 Laboratory 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
- to ensure public and private labs are providing reliable and quality soil test results to the citizens of Missouri.

University of Missouri Soil Testing Laboratory 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. This is a cost-effective way to determine if adequate fertilizer is being applied to obtain the yield goals set by the farmer. It also ensures the farmer is not applying excess fertilizer, which is not only costly, but can be damaging to the environment. In 2025, the MU Soil Testing Laboratory analyzed 15 soil samples from Adair County.



### Private Pesticide Applicator Training

By Valerie Tate, MU Extension Field Specialist in Agronomy

The private pesticide applicator license issued by the Missouri Department 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. New licensing requirements went into effect in 2025 which required producers to obtain a Category 20-CORE license which was valid for many restricted use pesticides. Producers who purchase and/or apply soil fumigants, non-soil fumigants, or apply restricted use pesticides using a drone, helicopter or airplane on their own farm or farmland they rent, must obtain supplemental licenses in addition to the CORE.

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
- personal protective equipment and how to clean it
- pesticide storage
- common Missouri pests
- integrated pest management (IPM) techniques.

During 2025, 39 agricultural producers in Adair County were trained and licensed to purchase and apply restricted use pesticides.

## Agriculture and Environment

### Local Impact

#### Farmers' Markets are a Primary Source of Price Data

By Darla Campbell, MU Community Development Specialist

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 2025. Five MU Extension Specialists collected data while providing production, marketing, and financial resources to producers around the state. The data is available seasonally on MDA's website and helps new and experienced producers determine market prices for their products. There was a total of 45 different markets visited in 2025 with 1908 prices collected.

I made 16 market visits to 12 different markets in Northeast and Central Missouri. These markets were in Kirksville, Unionville, Brookfield, Milan, La Plata, Louisiana, Hannibal, Palmyra, Mexico, Lancaster, and Columbia.

Vendors: Adair-18; Audrain-8; Boone-18; Callaway-9; Chariton-3; Cooper-5; Howard-2; Lewis-2; Lincoln-4; Linn-11; Macon-10; Marion-14; Monroe-1; Pike-9; Putnam-15; Ralls-16; Randolph-7; Schuyler-21; Sullivan-8, and Out of State-3.





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through credible statewide programs

## Business and Community



The annual **Connecting Entrepreneurial Communities** conference is designed for stakeholders, economic developers, businesses, local government, educators and nonprofits interested in increasing their communities' potential for entrepreneurship. In 2023, the conference offered breakout sessions in Benton County's shops and businesses, providing firsthand insight into the world of entrepreneurial communities.

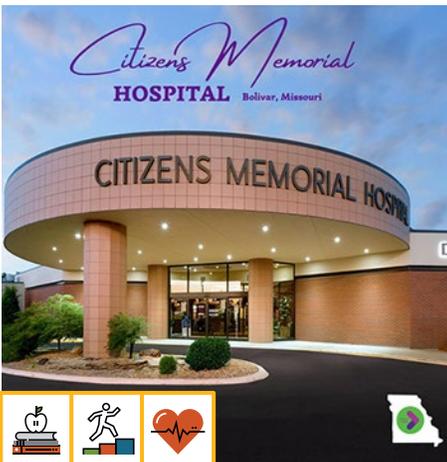
The conference drew 104 ATTENDEES, generating an estimated initial economic impact of around \$33,000 for Benton County.



### DEMOGRAPHIC, ECONOMIC AND WORKFORCE DATA TRAINING

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

**In 2022, Exceed provided data training to MORE THAN 200 MISSOURIANS. 95% of the attendees said that the information they learned was useful to their work.**



**Recovery Friendly Workplaces (RFWs)** foster a workplace culture that promotes employee safety, health and well-being through strategies that support managers and employees, including reducing stigma and providing recovery resources related to the challenges surrounding substance use disorders. The framework was developed in partnership with MU Extension's Labor and Workforce Development Program.

**As of 2024, 41 Missouri businesses have been designated recovery friendly workplaces, and 2,651 EMPLOYEES have been trained on addiction, stigma and naloxone distribution.**

### Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

## Business and Community

### Extension Tax Schools

University of Missouri Extension coordinated and offered tax education through one summer and three fall tax schools. The summer school was in person and live online. Fall schools were in Columbia and Springfield and an online school. 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 states, agriculture and natural resource tax issues, business tax issues, business entity tax issues, IRS issues, installment sales, tax benefits of home ownership, retirement tax issues, and individual tax issues. The schools were approved for up to 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 4,024 hours.

The teaching teams included CPAs, a former IRS stakeholder liaison, an IRS certified retired ag economics professor, an attorney, a certified financial planner, Missouri Department of Revenue, MU faculty and extension ag business specialists.

The evaluations had many positive comments and helpful suggestions. One comment from an online participant was “The video was outstanding – best I’ve seen on any CPE I’ve done live.”. Planning is underway to offer trainings in 2026. Local county residents benefit when local tax preparers have the opportunity to gain knowledge, which benefits their clients and communities. The tax schools are a program of the ag business and policy

program of MU Extension, coordinated by Mary Sobba with help from a team of ag business specialists throughout the state.

The resources for the schools included the IRS, 2025 National Income Tax Workbook from the Land Grant University Tax Education Foundation, and materials written by the instructors.

The 2025 school attendance totaled three hundred eighty-nine people, which was an 11% increase from 2024. The participants were from throughout Missouri and two from out of state. Nine of those participants were from Adair County.



### Serving on Public Boards

This comprehensive program is designed to help navigate your role with clarity, confidence, and purpose. Whether you're newly appointed or have years of experience, this class will deepen your understanding of board responsibilities and strengthen your leadership in public service.

Serving on a public board is a vital role in shaping community services, ensuring ethical governance, and managing public resources effectively. A pilot class was held in Kirksville in March where we asked for input on our updated curriculum.

Attendees – 4 Putnam, 1 Adair, 1 Schuyler, 1 Boone.



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

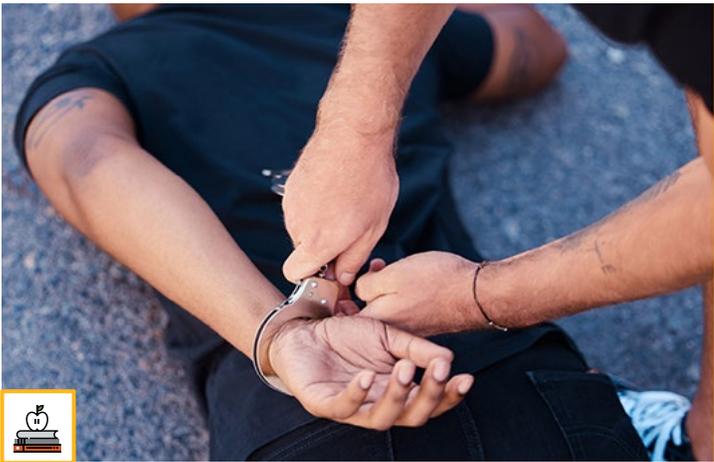
## Continuing Education



The **Missouri Extension Disaster Education Network** provides education and technical assistance to individuals and families, local governments, schools and organizations so they can prepare for and respond to natural and man-made disasters. Because of the unique relationship it maintains with each community, MU Extension is a key resource for the public, emergency services and public officials.



The programming from the **MU Fire and Rescue Training Institute** (MU FRTI) is available to all qualified fire and emergency first responders. Seventy percent of courses are held at the local departments or agencies. With most of the state's fire service personnel considered volunteer or part-time, this local access and flexibility assures training opportunities for all firefighter and emergency responders.



The **Law Enforcement Training Institute** (LETI) offers advanced training on a wide variety of topics, including defensive tactics, firearms, use of force and de-escalation. LETI offers customized programs for all required continuing education areas of concentration.

## Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being



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

## Health and Human Sciences



### Home Food Preservation

**Preserve the season's bounty in a safe and delicious way.**

Learn safe techniques for pressure canning, boiling water bath canning, steam canning, dehydration, and freezing.

Understand the importance of using safe food preservation and storage methods to avoid cross-contamination and food-borne illnesses.

**"This course made me more self-sufficient and improved my family's access to quality food."**



The **Diabetes Prevention Program** is recognized as "Full Plus," the highest status given by the CDC and is provided by licensed lifestyle coaches to prevent type 2 diabetes. Through lifestyle changes participants can achieve sustainable weight loss, increase in physical activity and learn coping skills to manage stress.

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



**Strengthening Families Program: for Parents and Youth 10-14**, is a seven-session series for parents or caregivers and their young teens to attend together to improve family communication, resolve conflict and improve parental skills.

**A research study conducted by the Partnerships in Prevention Science Institute found a RETURN OF \$9.60 for every dollar spent implementing the Strengthening Families Program.**

## Legend



Agricultural Growth  
& Stewardship



Economic  
Opportunity



Educational  
Access &  
Excellence



Health  
& Well-Being

## Health and Human Sciences

### Local Impact

#### HEALTH AND WELL BEING

BY JEREMIAH TERRELL, HUMAN DEVELOPMENT & FAMILY SCIENCE FIELD SPECIALIST



#### PROGRAM: MAKING MONEY COUNT

*Making Money Count* is a curriculum designed to help participants improve their overall economic well-being. Making Money Count is a curriculum designed to help participants improve their overall economic well-being. Each unit in Making Money Count includes additional resources to supplement learning, offer real life examples and reinforce the curriculum.

- Making decisions and communicating about money
- Values, goals, & attitudes about money
- Spending plan & budgeting
- Understanding contracts
- Credit as a tool
- Credit as a trust

This program had 24 contacts in Adair County and was delivered in partnership with the 2<sup>nd</sup> Circuit Treatment Court.

#### Program: Anger Management

Anger Management is a two-hour, three session, curriculum for participants to learn to:

- Understand underlying causes of anger
- Recognize the physical, emotional, & mental effects of anger
- Develop coping mechanisms to reduce anger

This program had 42 contacts in Adair County and was done in partnership with 2<sup>nd</sup> Circuit Treatment Court.

#### Program: Tackling the Tough Skills

Tackling the Tough Skills is a two-hour, five session, curriculum for building “soft skills” for work and life.

Topics include: Attitude, Responsibility, Communication, Problem Solving, Preparing for the Workplace. Participants were able to:

- Recognize how their attitudes have affected their lives
- Brainstorm ways to change negative self-attitudes
- Recognize their personal strengths, and see how in doing so they felt more responsibility in their lives
- Consider what commitments they were willing to make and to keep
- Make a plan for the future

This program had 45 contacts in Adair County and was done in partnership with 2<sup>nd</sup> Circuit Treatment Court.

## Health and Human Sciences

### HEALTH AND WELL BEING

BY JEREMIAH TERRELL, HUMAN DEVELOPMENT & FAMILY SCIENCE FIELD SPECIALIST  
CONT.



#### Program: Taking Care of You

Taking Care of You is a multi-session program offering practical strategies and experiences to help deal with the stress in life. Managing life's challenges in a healthy way allows you to take better care of yourself and your overall health. A rigorous program evaluation showed decreased stress levels and improved lifestyle behaviors. As a result of the program, participants:

- Cultivate positive emotions and resiliency to stress
- Discover opportunities in life's challenges
- Develop improved responses to stress in terms of their thoughts, emotions and behaviors
- Take better care of one's health-body, mind and spirit

This program had 40 contacts in Adair County and was done in partnership with the 2<sup>nd</sup> Circuit Treatment Court.

#### Program: Wits Workout

Wits Workout is based on brain health and aging research. "Just like muscles, our brains need exercise to maintain flexibility and strength," says Byers, co-author of Wits Workout. "Challenging ourselves with new and diverse activities promotes cognitive health and can help maintain brain function as we age." Join in with others to challenge your brain and learn more about keeping your brain healthy. This program had 48 contacts in Adair County and was done in partnership with the 2<sup>nd</sup> Circuit Treatment Court.

#### Program: Chronic Disease Self-Management

A six week program to assist participants with maintaining an active and fulfilling life when faced with chronic medical conditions. Participants learned information and skills that helped them to change behaviors and better manage their chronic health conditions. Education included:

- Better eating habits
- Reducing Stress
- Exercising
- Getting Healthy Sleep
- Dealing with the health system

This program had 66 contacts in Adair County and was done in partnership with the 2<sup>nd</sup> Circuit Treatment Court.