



UNIVERSITY OF MISSOURI EXTENSION

Macon County

2023 Annual Report

**SERVE
MISSOURI.**

**DELIVER
MIZZOU.**

111 N. Rollins Street
Macon, MO 63552
660-385-2173



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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Columbia, MO 65211
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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

Who we are

Faculty and staff



Tracie Moore-Extension Engagement Specialist

Deanna Turner-County Office Manager

Jennifer Schutter-Horticulture Field Specialist

Valerie Tate-Agronomy Field Specialist

**Darla Campbell-Community Development
Field Specialist**

Jason Morris-Agriculture Field Specialist

Kent Shannon-Ag Engineering Field Specialist

Jeremiah Terrell-Human Development Field Specialist

**Candance Rodman-Nutrition and Health
Field Specialist**

Council members

Nikki Wilson-Chairman

Rachelle Chiarottino-Vice Chairman

Ashlea Neill-Secretary

Jennifer McVicker/Scott Tuttle-Treasurers

Carol Burstert

Angela Helton

Lindsey Howell

Brad Moore

Austin Ray

Norman Peters

Beth Mettes



County commissioners

Dean Still-Presiding Commissioner

Kevin Southern-District I Commissioner

Clarence Walker-District II Commissioner



Budget and more

Appropriations budget

Income

County Appropriations	47208.37
Total Income	47208.37

Expenses

Salaries/Benefits	25718.48
Travel	2256.00
Telephone	1466.63
Office Rent	7875.00
Office Supplies/Service	7390.14
Utilities	1877.71
Insurance	442.17
Total Expenses	47026.13



State Fair Family

Each year, the Macon 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 the community through leadership roles in organizations, support youth in the areas such as 4-H and FFA and are respected by the neighbors and community. The Jonathan and Rachelle Chiarottino family was selected to represent Macon County for 2023.



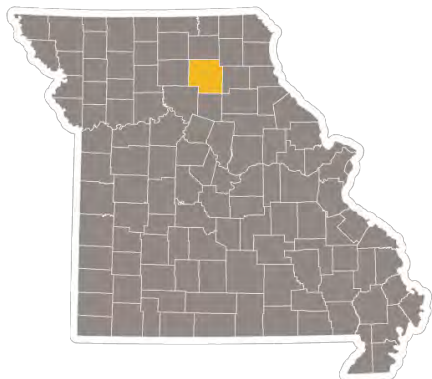
MU Extension is a unique funding partnership.

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

Local Support

Did you know you can donate directly to Macon 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

Macon County



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

UM System Footprint in the county in 2023



FY23 county students

81 students

- 61 Undergraduates
- 20 Graduate and professional students
- 62 Full-time students
- 19 Part-time students
- 17 Pell grant recipients (aid year 2023)



County employees and retirees

57 people employed by UM

- 17 Campuses
- 40 MU Health Care

22 UM retirees and beneficiaries

UM salary and retirement income: \$2.9 million

UM state tax revenue: \$87,265

UM federal tax revenue: \$426,001



County alumni

Selected school alumni

- 6 Medicine
- 32 Nursing
- 47 Health Professions
- 3 Dentistry
- 6 Pharmacy
- 1 Optometry
- 8 Veterinary Medicine
- 137 Agriculture
- 46 Engineering
- 12 Law

Alumni teaching K-12

- 33 teachers
- 15.3% of all district teachers
- 3 principals and administrators
- 25.0% of all district principals and administrators



County breakdown

MU

- 63 students
- 434 alumni
- 17 employees

UMKC

- 6 students
- 29 alumni
- 0 employees

Missouri S&T

- 11 students
- 25 alumni
- 0 employees

UMSL

- 1 student
- 20 alumni
- 0 employees



County properties and offices

Bertha Brown Farm
MU Extension in: Macon County



County population: 15,173



County services provided

Health care (FY23)

- 3,530 in-state patients seen at MU Health Care, with \$1.4 million of uncompensated care
- 4 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 662 visits to 442 patients having ZIP codes associated with the county

Extension (2022)

- 1,553 Total educational contacts from MU Extension to residents of the county, including:
- 79 contacts related to productive farming, better gardening, and managing natural resources
- 1,361 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development
- 113 contacts related to starting businesses, developing community leaders, or renewing the local economy

UM System County Impacts

2024 UM Systemwide Impact Data Sheets

Macon 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)

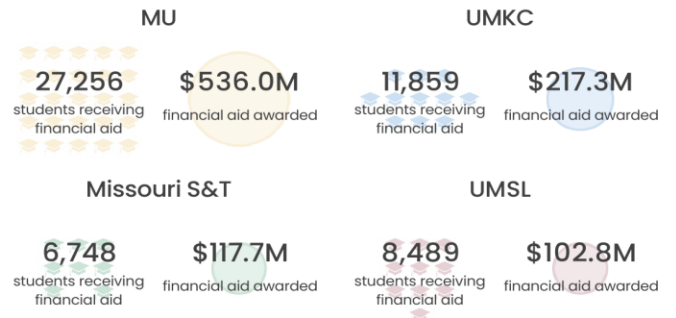


311,749 youth and stakeholder educational contacts in 4-H clubs, schools, camps and other programs (2022)

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.

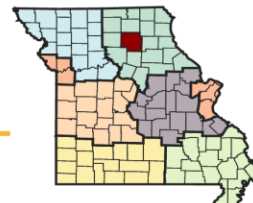
The university advances Missouri citizens and communities through its mission of teaching, research, public service, and economic development across our four campuses and University of Missouri Extension.

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

MACON 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

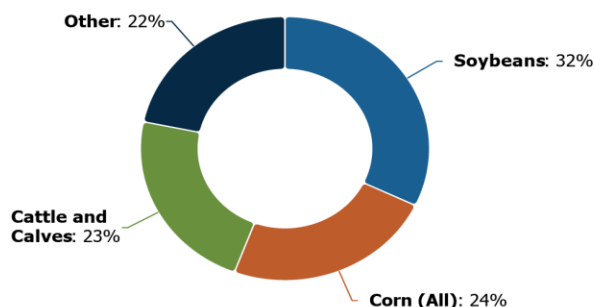
Knowing Local Challenges



CHALLENGE 1: Economic Opportunity: Agricultural Economics

Leading Agricultural Products

Total Commodity Sales: \$116,906,000



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 \$38,018,000 in 2017, an average of \$32,690 per farm. This compares favorably to the statewide average farm income of \$29,485.

Report Area	Total Farms	Average Farm Income
Macon	1,163	\$32,690
Missouri	95,320	\$29,485

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

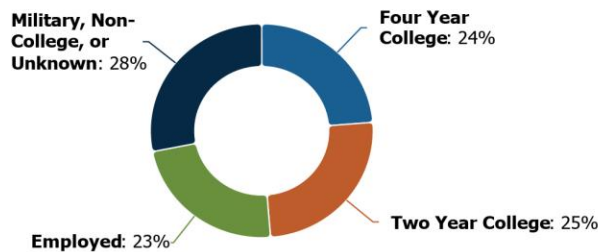
Grand Challenges



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 160 graduates surveyed in the report area, 38 went to a four-year college, 40 to a two-year college, 37 directly entered the job market. The remaining 45 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 4 credentialed professionals providing mental health care to serve the area's 15,209 residents. The patient-provider ratio in the report area is 3,802 to 1, which means there is 1 provider for every 3,802 persons. The ratio of persons to providers in the report area is higher than the state average of 832:1, which means there are fewer providers per person in this area.

Ratio (Population to Providers)

3,802:1

Macon

Missouri

832:1

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 5 primary care physicians (MDs and DOs) to serve the area's 3,447 residents over the age of 65. The patient-provider ratio in the report area is 689:1, which means there is 1 provider for every 689 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)

689:1

Macon

Missouri

242:1

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

Data Source: US Department of Health & Human Services, Health Resources and Services Administration, [HRSA - Area Health Resource File](#). February 2024.

Macon County

Missouri 4-H

Local Impact

4-H Clubs

Katie Hogan

Macon County 4-H is a community of 199 youth building life skills, contributing to their community, and becoming college and career ready. One in every ten Macon 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. Macon County served youth through five community clubs, and one SPIN Club offering long-term educational experiences in which members learn life skills such as decision making, public speaking, and working with others.

- There were 199 members in the community clubs and SPIN club in Macon County during the 2022-2023 4-H Year.
- Over 166 4-H members were engaged in science related projects and experiences.
- Collectively youth participated in 2090 hours of community club work in Macon County.



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 the 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.

Macon County members enrolled in a combined total of seven hundred and fifty-three projects in 2023. The top project areas included:

- Country Cured Bacons
- Beef
- Arts and Crafts
- Photography
- Woodworking
- Country Cured Hams
- Swine
- Clover Kids
- Poultry
- Cake Decorating
- Foods
- Welding



Macon County

Missouri 4-H

Local Impact



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

- Sixty-five youth participated in a total of five different events during the 2023 Macon County 4-H Achievement event.
- Nineteen members participated in the Northeast Region Energizer held in the spring of 2023 in Kirksville and fifty-seven members and leaders attended the Northeast Region 4-H Round Up, held in Macon in the fall.
- Thirty-three Macon County youth exhibited in the 4-H building and livestock shows at the Missouri State Fair. Two youth participated in the Show-Me Ware program at the State Fair, where young entrepreneurs have the opportunity to sell items they have made through their 4-H experiences. Seven youth presented demonstrations in the 4-H building and one youth's project was selected as a Best of Show entry in the building.
- Twenty-four state level recognition forms were completed by members. 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.
- Twenty percent of the age-eligible member in Macon County took their leadership experience beyond the county lines, attending Teen Conference or State Congress with transportation being provided utilizing the OATS bus.
- Twelve members participated in the State 4-H Teen Conference, which offered youth a fantastic opportunity to experience being a teen in 4-H. This event provides a safe and enjoyable campus experience where youth can enhance their skills and forge new friendships.
- Twenty-six youth from Macon County Participated in skill development contests on the State level including State Meats Contest, State Livestock Judging, State Fashion Revue, State Poultry Day and State Public Speaking. Participation in these events helps youth to develop confidence and practice their decision making and public speaking skills through competitions tied to project areas they are passionate about.
- Two Macon County Youth were selected to serve as 4-H Ambassadors, a leadership opportunity that works in conjunction with the State 4-H Council to promote 4-H and plan youth events on the regional and state levels.
- Fifty-four Macon County youth attended the 4-H Day at the Cardinals on May 20, 2023.
- Ten Macon County youth participated in 4-H Camp.
- As responsible citizens, we promote generosity and community strengthening through service. One hundred and seventy-nine meals were donated in Macon County through the 4-H Feeding Missouri Initiative in 2023.
- Macon County 4-H utilized a 4-H Day of Service Grant to recognize over thirty emergency personnel, veterans and members of the military during their Stars and Stripes event. Over two-hundred hours were devoted to the planning and orchestration of the event with an estimated four hundred people attending. Through the event twenty-six care packages were distributed and youth learned about the importance of recognizing the contributions of our first responders, veterans, and service men and women in the community.
- Macon County was represented at State 4-H Congress by eight delegates. Delegates attended workshops covering diverse areas from science to leadership development that were complemented by experiences at the MU Student Center, social activities, and inspirational speakers. State Congress plays a vital role in helping these teens develop essential life skills, exploring potential career paths, nurturing leadership abilities, and fostering new friendships with peers from across the state.

Local Impact

Impacts of Programming

Katie Hogan

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 in 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.

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

- “4-H has taught me many skills such as leadership, public speaking, and responsibility and that is why I stay active.” – *Macon County 4-H member, age 17*
- “If the 4-H is involved, things happen- and that is something I am proud of!” – *Macon County 4-H member, age 14*
- “4-H has taught me to stretch myself and do new things, even if I am not great at them. Being able to speak in front of a crowd is something most people fear more than death. Because of 4-H, I do not fear public speaking at all.” – *Macon County 4-H member, age 17*
- “...4-H had been a great learning tool and helped provide me with a bright future. I’ve had so many unique learning experiences and am proud to say that I have impacted my community and my club.” – *Macon County 4-H member, age 14*
- “I want to be involved, but I don’t want to just have a list of things that I have signed up for, I want to make a difference.” – *Macon County 4-H member, age 14*



4-H School Enrichment- Embryology

Katie Hogan

- There were one hundred and seventeen students from five classrooms who participated in the Hatching Chicks in the Classroom program in 2023.
- Collectively, students participated in over seven hundred 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 chick. 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.

Macon County

Missouri 4-H

Local Impact

4-H Volunteers

Katie Hogan

- Macon County 4-H members were supported by 72 enrolled, screened and oriented adult volunteers supporting the development of youth in 2023.
- Volunteers contributed 7200 hours to the Macon County 4-H program valued at \$228,960.

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.



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.

Macon 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 University of Missouri 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. This is a cost-effective way to determine if adequate fertilizer is being applied to obtain the yield goals set by the farmer without applying excess fertilizer which is not only costly but can be damaging to the environment. In 2023 there were 34 soil samples from Macon County analyzed by the MU Soil Testing Lab.

Pesticide Applicator Training

Valerie Tate

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. They must be 18 years of age and directly involved in the production of agricultural commodities to obtain this license.

Pesticide applicator training helps reduce the harmful effects of improper pesticide use. 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 wear and how to clean it, pesticide storage, common Missouri pests, and integrated pest management (IPM) techniques.

During 2023, 28 agricultural producers in Macon County were trained and licensed to purchase and apply restricted use pesticides.



Macon County

Agriculture and Environment

Local Impact

Master Gardeners

Jennifer Schutter

The Macon-Shelby Master Gardener chapter, with 10 active members, one being emeritus, meets each month at the Macon County Extension Center. In 2023, these Master Gardeners completed 531.5 hours as a chapter. Macon-Shelby County Master Gardeners completed 209.75 volunteer hours. Of this, 160.75 were service hours to their communities with a value of \$5,111.85, using the value of \$31.80 per volunteer hour, for 2023, from the Independent Sector. Master Gardeners are required to complete 6 hours per year of continuing education, which totaled 49 hours for Master Gardeners from Macon-Shelby Counties. The Master Gardeners were involved in many projects including maintaining the Healing Gardens at Samaritan Hospital in Macon. The gardens provide much needed and appreciated respite for healthcare workers, patients, and their families, and provide space for outdoor physical therapy. Master Gardeners plant, water, weed, mulch, deadhead plants in the healing garden all through the growing season. They also maintained and planted flower beds at the post office in Macon, judged a vegetable show at a county fair, assisted elderly gardeners with their lawns and landscapes, maintained beds at local churches, and much more.



Horticulture Program

Jennifer Schutter

Mary Wilson, an Advanced Master Gardener from Highland, Illinois, presented “Gardening Shortcuts for the Busy, Aging, and Budget Conscious” to a crowd of thirty-five gardeners on March 27, 2023, in Macon. The program was sponsored by the Macon-Shelby Master Gardeners and was attended by Master Gardeners and garden enthusiasts from six counties.



Macon County

Agriculture and Environment

Local Impact

Regional Grazing School

Valerie Tate

Management intensive Grazing (MiG) emphasizes controlling harvest of pastures with grazing livestock. Under continuous grazing, livestock are given access to pasture as one unit for the entire grazing season with little or no management intervention. MiG involves dividing large pastures into smaller grazing cells or paddocks. Livestock graze one paddock for a short duration and then move to another paddock. This provides a recovery or rest period for the forage, resulting in increased forage production and an opportunity for legumes to be competitive in a pasture.

Surveys of past participants indicate that implementing MiG increased beef cattle production by 22 percent on the same acres which had been continuously grazed. They reported benefits of increased carrying capacity, more grazing days, less feed and hay used, improved forage quality, less time and labor, increased soil fertility, improved health and conception rates of cattle, and improved ease of handling cattle.

Regional Grazing Schools are taught by MU Extension regional faculty and Missouri's Natural Resources Conservation Service personnel. The schools are three days long and include classroom sessions, field exercises and a visit to a farm using MiG. A Regional Grazing School was held in Linneus September 12-14, 2023. Twenty-four producers attended and 4 of those producers were from Macon County.



Macon County

Agriculture and Environment

Local Impact

Missouri Farm Lease education provide producers and landlords valuable assistance

Darla Campbell

Forty-three people attended the 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.



Agriculture Lenders' Seminars

Darla Campbell and Mary Sobba

Eighty-three lenders from 25 Missouri counties, with 3 lenders from Macon County, and 1 from Illinois, attended this year's seminars held in Mexico and Brookfield. 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 University of Missouri's 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.



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. Six 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, 7 of those from Macon County, visited in 2023 with 2246 prices collected.

I made 14 market visits to 12 different markets mostly in Northeast Missouri. These markets were in Kirksville, Unionville, Brookfield, Milan, La Plata, Louisiana, Hannibal, Palmyra, Mexico, Booneville, and Columbia.

Macon County

Agriculture and Environment

Local Impact

Extension Farm Tax Schools

Mary Soba

University of Missouri Extension ag economics department and ag business specialists worked together to coordinate one summer and three fall tax schools. The summer school was in person and online. Fall schools were in Columbia and Springfield and online. The schools were designed for those who prepare taxes including enrolled agents, tax preparers, CPAs, individuals, and attorneys.

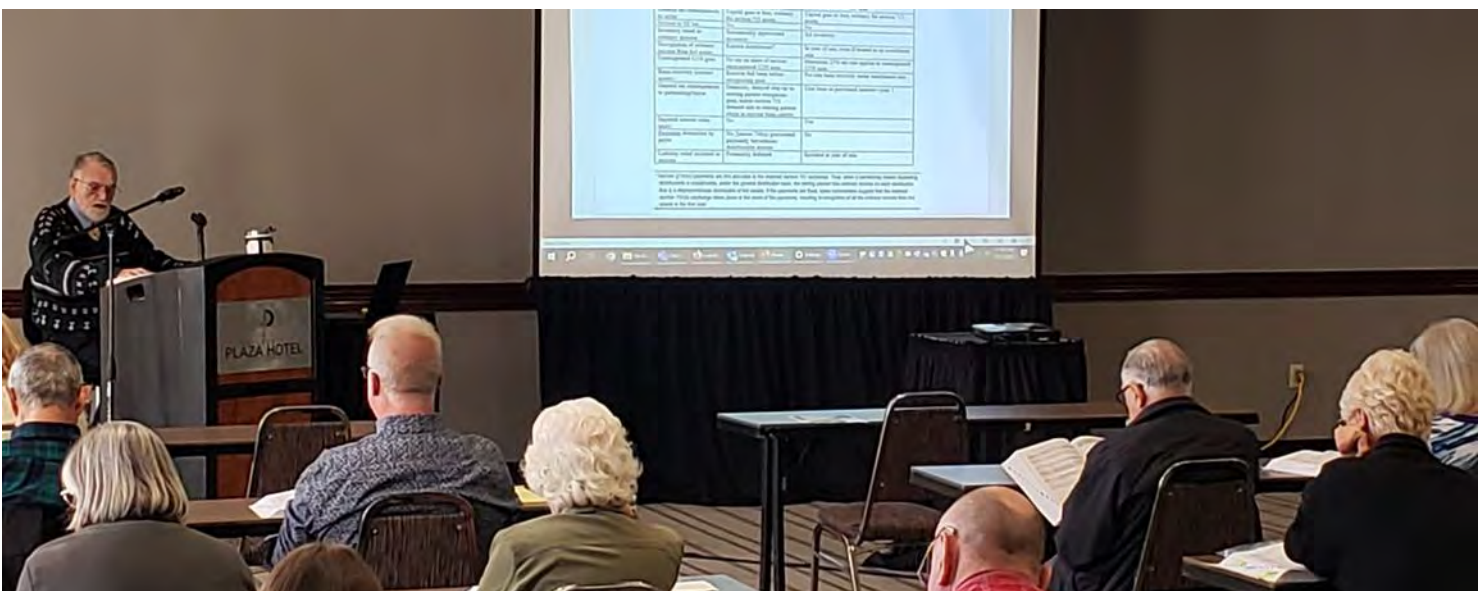
The training included updates on legislation, rulings and cases, individual taxpayer issues, agricultural and natural resources topics, ethics, trusts and estates, agriculture and natural resource tax issues, business tax issues, business entity tax issues, IRS issues, penalties and defenses, Form 4797 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 were 3,336 hours.

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

The trainings received positive evaluations and planning is underway to offer trainings in 2024. Local county residents' benefit when local tax preparers have the opportunity to gain knowledge, which benefits their clients and communities. The tax schools are a program of the ag business and policy program of MU Extension, coordinated by Mary Sobba, with help from a team of ag business specialists throughout the state.

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

The 2023 school attendance totaled three hundred twenty-seven people. The participants were from throughout Missouri with 8 people from Macon County attending.



Macon County

Health and Human Sciences

Local Impact

100 Miles 100 Days *Candace Rodman*

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



Strength in Numbers *Candace Rodman*

This was a 12-month educational program that encouraged participants to set new health goals each month based on topics such as nutritional eating, sleep, and health myths.



Macon Community Garden Project *Candace Rodman*

In partnership with the Youth Specialist, we created a committee of volunteers to help plan a large in-ground community garden where participants could plant their own plots to give access to those who don't have space or who are learning to garden, as well as 50 raised beds around the county sponsored by various organizations and business owners.



Strong and Balanced *Candace Rodman*

This pilot program was a combination of Extension's Stay Strong, Stay Healthy strength training and Tai Chi for Arthritis and Fall Prevention programs. In the 16, two-hour sessions participants worked on gaining strength and balance to prevent falls and injury.