



UNIVERSITY OF MISSOURI EXTENSION

Chariton County

2023 ANNUAL REPORT

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Office of Extension
and Engagement
University of Missouri

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

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December 2023

Dear county commissioners and friends of MU Extension and Engagement,

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

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

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

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

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

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

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

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

Sincerely,

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

Who we are

Faculty and staff



[Manoj Chhetri, Field Specialist in Horticulture](#)

[Chelsea Corkins, Extension Engagement Specialist](#)

[Sue Robison, Field Specialist in Nutrition & Health](#)

[Amelia Waddle, Nutrition Program Associate](#)

[Rebecca Bentley, Youth Program Associate](#)

[Carie Johnson, County Office Manager](#)

[Fred Smith, Field Specialist in 4-H Youth Development](#)

[Katie Neuner, Field Specialist in Ag Business](#)

[Heather Conrow, Field Specialist in Livestock](#)

[Valerie Tate, Field Specialist in Agronomy](#)

[Jeremiah Terrell, Field Specialist in Human Development](#)

[Kent Shannon, Field Specialist in Agricultural Engineering](#)

[Connie Griffith, Nutrition Program Manager](#)

[Marsha Moore, Small Business Development Center Business Counselor](#)

[Mark Christian, Small Business Development Center Business Specialist](#)

[Kris Bocking, Missouri APEX Accelerator Counselor](#)

(Pictured above in [blue](#))

Council members

Chase Young, Chairman

Doug Kruessel, Vice-chairman

Susan Creason, Secretary

Debbie Littleton, Treasurer

Debbie Fischer

Beverly Henke

Heather Junkins

Jared Meyer, Appointed Commissioner

Debbie Minshall

Angie Neidholdt

Ryan Niemeier, Appointed Farm Bureau Rep

Raechel Ostermann

Deb Seyler



MU Extension Council Members:

- Work with Extension Specialists to provide the county educational programs.
- Manage finances of local extension operations.
- Provide and oversee personnel to carry out Extension activities.

County commissioners

Evan Emmerich, Presiding Commissioner

Terry Milford, Western District

Jared Meyer, Eastern District

Budget and more

Appropriations budget

Income

County Appropriations	40,000.00
Student Fees	2,197.50
Investment Income	714.99
Gifts/Grants/Contracts	19,192.23
Resales/Educ Services Fees	2,335.00
Misc Income	34.45
Total Income	64,474.17

Expenses

Salaries/Benefits	37,312.07
Travel	3,686.01
Telephone	965.52
Office Supplies	1,632.91
Insurance	1,607.14
Professional Services	14,100.00
Postage/Advertising	233.75
Publishing/Printing	1,005.93
County Programs	1,211.41
Soil Testing Exp	60.65
Publications for Resale	271.19
4-H Council	3,103.31
Extension council Operations	248.62
Total Expenses	65,438.51

Chariton County Highlights & Partners

- County services provided included 1,208 total educational contacts from MU Extension to residents in Chariton County included:
 - 79 contacts related to productive farming, better gardening, and managing natural resources.
 - 1,123 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development.
 - 6 contacts related to starting businesses, developing community leaders, or renewing local economy.
- MU Extension faculty, staff, Extension Council members, and volunteers worked to spread knowledge and resources throughout Chariton County in 2023 including:
 - Goose Festival, Government Day, Chicks in the Classroom/Embryology, Clover Kids Camp, Babysitting Clinic, & Drivers Education.

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



Local Support

Did you know you can donate directly to Chariton 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.



Missouri 4-H Positive Youth Development

Chariton County 4-H Program makes a difference!

Chariton County 4-H served more than 480 youth through four organized community clubs, Embryology school enrichment and 4-H Clover Kid camp. Youth “learned by doing” with 88 youth participating in the Chariton County Government Day. 137 youth participated in the Embryology School enrichment program. Chariton County has four clubs, with 91 youth members, 24 volunteers, and 29 Clover Kids.

Projects range from shooting sports, arts and crafts to animal science, and healthy living. Chariton County faculty and staff worked throughout the year to produce quality, positive youth development opportunities that are fun, educational, and community focused.

Volunteers are the core of the 4-H Program. They help create, support, and deliver educational programs and experiences. Chariton County Shooting Sports continues to grow and greatly appreciates the dedicated volunteers!



It's Fun to BEE a Clover Kid

2023 Clover Kid Camp was held in Keytesville's Maxwell Taylor Park on June 21st. Kids receive a shirt, book and bag while making new friends through craft projects and learning about bees and honey.



Day of Service

4-H Club leaders along with several youth made packages for the county's fire departments, law enforcement and 911 operators in appreciation of their service to the people of Chariton County.

In 2023, Chariton county 4-H members participated in:

- 4-H day of Service
- Clover Kids Camp
- Chariton County Youth Fair
- 4-H Week Activities
- Missouri State Fair
- 4-H Achievement Day
- State 4-H Fashion Revue
- Show Me Quality Assurance
- 4-H Camp in Knob Noster
- Missouri State Shoot
- Chariton County Government Day
- 98 Curriculum Projects

**Enhancing Youth Lives in
Chariton County**



Agriculture & Environment

Backyard Laying Hen Workshop

This workshop was held in Brunswick in November 2023. At this program, youth and adults both new to and experienced with laying hens learned about management, biosecurity, regulations and candling.

Livestock Specialist Heather Conrow partnered with the state poultry specialist from Lincoln University to help educate 15 participants from 6 surrounding counties, including Chariton.



Left: Participants learned about the basic of backyard poultry. Right: Youth and adults engaged in hands-on learning opportunities that included grading eggs, safe supplies, and biosecurity.



Pesticide Applicator Training

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.

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.

Valerie Tate, Agronomy Specialist, taught this course in Chariton County in 2023.



During 2023, 33 agricultural producers in Chariton County were trained and licensed to purchase and apply restricted use pesticides



Agriculture & Environment

Horticulture, Insects, and Disease Identification

Chariton county, amongst others in the NW region, submit plant and insect samples, pictures, and descriptions for identification by horticulture specialists. Kathi Mecham and Manoj Chhetri (both Horticulture Specialists) responded through on-site visits, emails, and personal phone calls with the community to help individuals care for their gardens and plants.

Requests this year ranged from plant naming, to disease recognition and insect classification.



To the left is a tomato plant with herbicide damage. Consulting an MU Extension Horticulture Specialist could offer insight to this issue.

Soil Testing for Fields and Gardens

Soil testing is a valuable tool for farmers and gardeners. 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.

In 2023 there were 8 soil samples from Chariton County analyzed by the MU Soil Testing Lab.

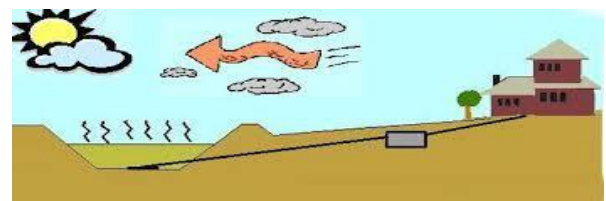
The objectives of the MU Soil Testing Lab are:

- 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;
- To ensure public and private labs are providing reliable and quality soil test results to the citizens of Missouri.

Soil testing is a cost-effective way to determine if adequate fertilizer or amendments are being applied to obtain the desired yield both in the field and garden without applying excess fertilizer which is not only costly, but can be damaging to the environment.

On site septic systems

The most common question 2023 for Ag Engineering Specialist, Jim Crawford, was septic lagoons going dry from the drought and what should they do. Each is slightly different, but the general recommendation is to add water to maintain its function and to keep the bottom seal from cracking and causing leaks in the future.



A diagram of how an on-site septic system works when incorporating a lagoon in place of a leach field.

The average cost to replace a septic system is approximately \$20,000. MU Extension offered citizens across NW Missouri with resources for simple, preventative steps to maintain their system and to avoid this cost.

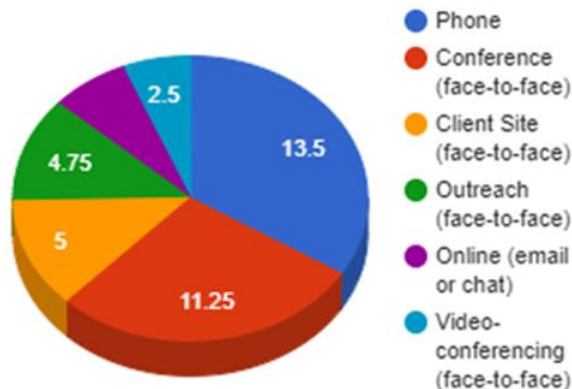


Business & Community

Socially Disadvantaged & Veteran Farmers & Ranchers Grant Wraps up Year Two

The Socially Disadvantaged and Veteran Farmers, and Ranchers grant submitted the fourth quarter report for year two in September. This is a three-year grant that assists socially disadvantaged and veteran farmers and ranches in owning and operating successful farms. Katie Neuner is the team lead on business counseling on the grant. They have worked with 36 clients in 20 Missouri Counties.

Counseling / Contact Type (hours)



The counseling efforts through this program have resulted in \$40,359 to producers in services and grants.



Chelsea Corkins, KC Wolf, Sue Robison and Becky Bentley (Left) and Fred Smith and Fred Bird (Right) all braved the weather and attended this year's **Goose Festival in Summer, Missouri**. They were promoting MU Extension, Nutrition & Health and 4-H.



Volunteer Income Tax Assistance (VITA) Tax Preparation

Tracie Moore, Community Development Field Specialist, and Doug Helmers, local volunteer, were part of the 2023 NWMO VITA Tax preparation team, offering free tax prep to people needing assistance filing their 2022 tax returns. The NWMO VITA program allowed low income, disabled, and older clients to get their returns prepared for free when they didn't feel comfortable using free online resources themselves.

Local Impact:

- 14 individuals/couples filed their 2022 taxes with the VITA program in Chariton County

Volunteers spent 377 hours preparing 263 tax returns in Northwest Missouri.

Cost savings to taxpayers (\$200 per tax return) was \$52,600.

Total federal refunds in northwest Missouri were \$126,116, with \$56,980 being returned from the state.



Health & Human Sciences

100 Days, 100 Miles

This year's 100 Miles, 100 Days Extension initiative made a significant impact statewide, attracting over 1,300 participants in Missouri, including 10 from Chariton County and more than 240 in our Northwest Region. 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..

The program's weekly motivational emails provided valuable education and fueled a friendly county competition, adding a bit of excitement into the challenge. Whether participants reached the coveted 100 miles or not, the ultimate goal of our initiative was to instill a lasting enjoyment of movement through a blend of encouragement, accountability, and motivation.



Pressure Canner Testing

Chariton County hosted a Pressure canner testing day at the Chariton County Courthouse and tested 37 canners in total with just a couple not passing inspection (left).

Sue Robison provided guidance as the Health & Nutrition Specialist for Chariton County.

It is recommended that pressure canner be tested once a year for safe food preservation. Funding was obtained through the Joe W. Ingram Trust to provide giveaway items, we had many happy winners including our grand prize (new pressure canner) winner, Fay Lindbloom. (Pictured on cover)

Stay Strong Stay Healthy

The Stay Strong Stay Healthy program utilizes 8 exercises with the assistance of hand and ankle weights to build muscle, increase bone density, and improve balance. Held at the Chariton Courthouse with 3 participants.

According to the American Hospital Association, in 2020, the average cost for one day stay in a hospital in Missouri was \$2, 668. By addressing the fall risk through education, MU Extension Fall Prevention programs enhance well-being, reduce medical expenses, preserve quality of life and contributes to supporting the local economic well-being of the community through support of local business and volunteerism.



Matter of Balance- The 8-session program hosted by Sue Robison, Nutrition & Health Specialist, introduces participants that falls are preventable. This program uses awareness, exercise, and changing the mindset on falls are not apart of aging.

Held at Marceline Senior Center for Linn & Chariton County residents with 16 participants.



Health & Human Sciences

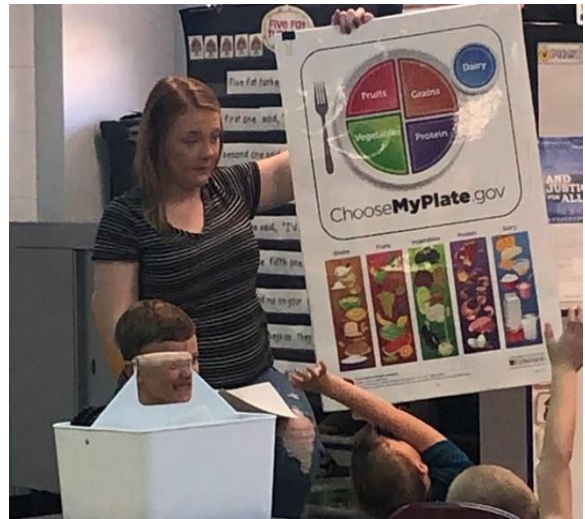
SNAP-Ed Program

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

A total of 125 participants were from Chariton 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.



Amelia Waddle, Nutrition Program Associate, teaching at Brunswick Elementary School

Adventures in Nutrition with Show-Me Chef Kindergarten Class

Amelia recently started her first session of Show Me Nutrition classes. The programming was in the prekindergarten and Kindergarten classes at Brunswick Elementary and the Kindergarten class at Keytesville Elementary in Chariton County. The students were so excited for each class. It is wonderful helping them learn about healthy eating through our Family Nutrition Education Program classes. Amelie am looking forward to my next programming session following Winter Break!



Goose Festival Crunch Off: Several Missouri Crunch Off events were held during the month of October, distributing more than 7,500 Missouri grown apples or bags of popcorn to educate the public on their connection to local agriculture.



Chariton County

UM System Footprint in the county in 2023



FY23 county students

53 students

- 42 Undergraduates
- 11 Graduate and professional students
- 35 Full-time students
- 18 Part-time students



County employees and retirees

45 people employed by UM

- 14 Campuses
- 30 MU Health Care
- 1 UM System

24 UM retirees and beneficiaries

UM salary and retirement income: \$2.7 million

UM state tax revenue: \$79,074

UM federal tax revenue: \$387,629



County alumni

Selected school alumni

- 3 Medicine
- 24 Nursing
- 28 Health Professions
- 2 Dentistry
- 5 Pharmacy
- 4 Veterinary Medicine
- 130 Agriculture
- 27 Engineering
- 5 Law

Alumni teaching K-12

- 25 teachers
- 21.0% of all district teachers
- 3 principals and administrators
- 50.0% of all district principals and administrators



County breakdown

MU

- 38 students
- 319 alumni
- 14 employees

UMKC

- 4 students
- 31 alumni
- 0 employees

Missouri S&T

- 4 students
- 8 alumni
- 0 employees

UMSL

- 7 students
- 4 alumni
- 0 employees



County properties and offices

MU Extension in: Chariton County



County population: 7,432



County services provided

Health care (FY23)

- 1,814 in-state patients seen at MU Health Care, with \$993,795 of uncompensated care
- 1 in-state patient seen at UMSL Center for Eye Care with a statewide average of \$34.82 per patient in 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 607 visits to 369 patients having ZIP codes associated with the county

Extension (2022)

- 1,208 Total educational contacts from MU Extension to residents of the county, including:
- 79 contacts related to productive farming, better gardening, and managing natural resources
- 1,123 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development
- 6 contacts related to starting businesses, developing community leaders, or renewing the local economy



Chariton County

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

MU

27,256

students receiving financial aid

\$536.0M

financial aid awarded

UMKC

11,859

students receiving financial aid

\$217.3M

financial aid awarded

Missouri S&T

6,748

students receiving financial aid

\$117.7M

financial aid awarded

UMSL

8,489

students receiving financial aid

\$102.8M

financial aid awarded



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.