



UNIVERSITY OF MISSOURI EXTENSION

Randolph County

2023

Annual Report

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**DELIVER
MIZZOU.**



Extension
University of Missouri

an equal opportunity/ADA institution



Office of Extension
and Engagement
University of Missouri

OFFICE OF THE VICE CHANCELLOR
FOR EXTENSION AND ENGAGEMENT
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December 2023

Dear county commissioners and friends of MU Extension and Engagement,

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

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

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

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

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

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

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

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

Sincerely,

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

Who we are

Faculty and staff

Chelsea Reed, Office Administrative Assistant

Jacqueline Sweany, YPA

Candace Rodman

Brittney Ames

Jeremiah Terrell

Mary Sobba

Valery Tate

Lyann Ritter

Heather Conrow

Jim Meyer, EES

Mike Krauch, Regional Director

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Council members

Cindy Cross, Chairman

Atina Roberts, Vice-chairman

Melissa Boots, Secretary

Matt Douglas, Treasurer

Roy Morales-Kuhn, Interim Chairman

Merl Riley, Interim Vice-chairman

Penny Vanduzer

Betty Mayo

Kevin Brown

John Smith

John Tracy

Bonnie McKeown

Alison Dunwoody

County commissioners

Sid Conklin

Presiding Commissioner

John Tracy

Eastern District Associate Commissioner

John Hobbs

Western District Associate Commissioner



Budget and more

Appropriations budget

Income

County Appropriations	30,000.00
Miscellaneous Contributions	160.00
Soil Test & Publication Income	81.00
Miscellaneous Income	460.93
Program Reimbursements	600.00
Balance Transfers	5,661.71
Total Income	36,963.64

Expenses

Salaries/Benefits	16,718.05
Travel	2,141.22
Communication	741.89
Office Rent	7,700.00
Office Supplies	2,009.74
Utilities	2,762.44
Insurance	558.84
Miscellaneous Expense	1,666.87
4-H Camp Fees	90.08
Soil Test Expenses	300.50
Repairs/Maintenance	36.84
Copier Maintenance Agreement	2,237.17
Total Expenses	36,963.64

Local Support

Did you know you can donate directly to Randolph 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.



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

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Randolph County



UM System Footprint in the county in 2023



FY23 county students

182 students

- 148 Undergraduates
- 34 Graduate and professional students
- 142 Full-time students
- 40 Part-time students
- 52 Pell grant recipients (aid year 2023)



County employees and retirees

370 people employed by UM

- 135 Campuses
- 231 MU Health Care
- 4 UM System

103 UM retirees and beneficiaries

UM salary and retirement income: \$20.3 million

UM state tax revenue: \$625,399

UM federal tax revenue: \$3.0 million



County alumni

Selected school alumni

- 4 Medicine
- 58 Nursing
- 72 Health Professions
- 11 Dentistry
- 8 Pharmacy
- 11 Veterinary Medicine
- 139 Agriculture
- 64 Engineering
- 19 Law

Alumni teaching K-12

- 78 teachers
- 24.6% of all district teachers
- 2 principals and administrators
- 10.5% of all district principals and administrators



County breakdown

MU

- 157 students
- 723 alumni
- 134 employees

UMKC

- 12 students
- 43 alumni
- 0 employees

Missouri S&T

- 7 students
- 25 alumni
- 0 employees

UMSL

- 6 students
- 17 alumni
- 1 employee



County population: 24,652



County services provided

Health care (FY23)

- 7,173 in-state patients seen at MU Health Care, with \$4.8 million of uncompensated care
- 10 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 1,644 visits to 1,012 patients having ZIP codes associated with the county

Extension (2022)

- 4,592 Total educational contacts from MU Extension to residents of the county, including:
- 10 contacts related to productive farming, better gardening, and managing natural resources
- 4,582 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development



Construction projects

- \$674,372 remitted to 1 county vendor, for 5 projects



County properties and offices

MU Extension in: Randolph County

Randolph 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

MU		UMKC	
27,256	\$536.0M	11,859	\$217.3M
students receiving financial aid	financial aid awarded	students receiving financial aid	financial aid awarded

Missouri S&T		UMSL	
6,748	\$117.7M	8,489	\$102.8M
students receiving financial aid	financial aid awarded	students receiving financial aid	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.

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



RANDOLPH 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

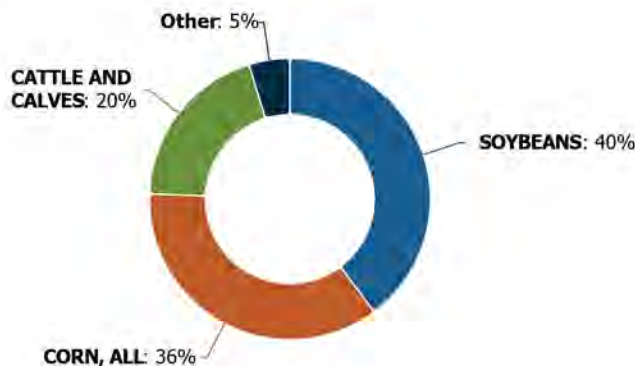
Knowing Local Challenges



CHALLENGE 1: Economic Opportunity: Agricultural Economics

Leading Agricultural Products

Total Commodity Sales: \$84,609,000



Data Source: US Department of Agriculture, National Agricultural Statistics Service, [Census of Agriculture](#), 2022.

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.

Report Area	Total Farms	Average Farm Income
Randolph	791	\$36,173

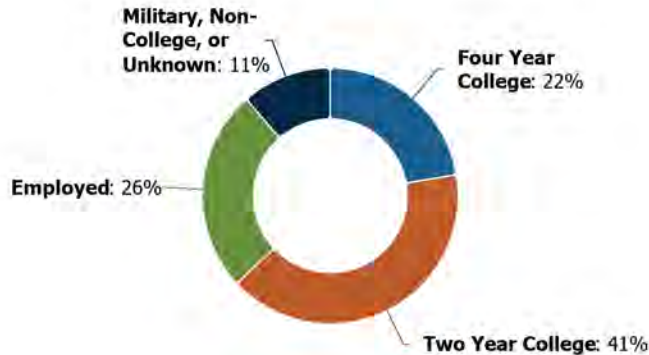
Data Source: US Department of Agriculture, National Agricultural Statistics Service, [Census of Agriculture](#), 2022.



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 246 graduates surveyed in the report area, 55 went to a four-year college, 100 to a two-year college, 63 directly entered the job market. The remaining 28 are reported as in the military, not in college, or unknown.



Data Source: [Missouri Department of Elementary & Secondary Education](#). 2022.



CHALLENGE 3: Healthy Futures: *Mental Health*

Deaths of Despair

Untreated mental health conditions, substance abuse, and stress have caused an epidemic of “deaths of despair” across the United States. Research shows that deaths due to suicide, alcohol-related disease, and drug overdose have caused the first decreases in U.S. life expectancy in the 21st century. Within the report area there were an estimated 70 deaths of despair, or 41.37 deaths per 100,000 population between 2011 and 2017. This rate is lower than the state rate of 52.01 per 100,000, and represents an increase of 19.19% since the 2001-2007 report period.

Mortality Rate, 2014-2020

41.37

Missouri

52.01 😞

Randolph



Poor Mental Health Days

Self-reported mental health status is a widely used measure of health-related quality of life. In 2018, adults in the report area averaged of 5.6 mentally unhealthy days per month, which is higher than the state average of 5.3. This measure of mental health status has worsened since 2014, when adults in the report area averaged 4.4 mentally unhealthy days per month.

Average Poor Mental Health Days per Month, 2018

5.6

Missouri

5.3 😞

Randolph



Data Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](#). Accessed via [County Health Rankings](#). 2021.

Data Source: Centers for Disease Control and Prevention, [CDC - National Vital Statistics System](#). Accessed via [CDC WONDER](#). 2014-20.



CHALLENGE 4: Agricultural Growth & Stewardship: Food Security & Access

The ability to access healthy and affordable food can be a challenge in Missouri’s rural and urban communities alike — with negative impacts on people’s health and food security status. Food insecurity is the lack of access, at times, to enough food for an active, healthy life. It is associated with many adverse social and health outcomes. Missouri’s overall food insecurity rate is 11.8% — and 12.8% for children under age 18. More than half of Missouri’s 114 counties and the City of St. Louis report food insecure populations of 12.6% or higher. Multiple interventions that address the root causes of food insecurity can impact this critical public health issue. Learn more at the [Food Security Story Map](#).

Population Living in a Food Desert

16.83%

Randolph

Missouri

17.69%

Data Source: US Department of Agriculture, Economic Research Service, [USDA - Food Access Research Atlas](#). 2019.

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Missouri 4-H for ages 8 – 18



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



4-H's Leadership and Civic Engagement programs foster understanding, confidence and decision-making skills to empower youths to become informed and active young citizens. 4-H civic engagement initiatives prepare young people to become future leaders by engaging them in programs where they have voice and influence.



Missouri 4-H Agriculture and STEM programs employ hands-on activities that foster problem-solving, creativity, critical thinking and exploration in engineering and technology. Agriculture programming emphasizes biology, environmental science, agri-science, veterinary science and engaging activities such as animal care and agronomy. STEM programs delve into computer science, robotics, aerospace, physics, chemistry and veterinary science.



Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Randolph County

Missouri 4-H

Local Impact

4-H Members

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. Randolph County served youth through 7 community clubs, 2 SNAC clubs offering long-term educational experiences in which members learn life skills such as decision making, public speaking, and working with others.

- There were 548 members in the community clubs, SPIN clubs, in-school, and afterschool 4-H clubs in Randolph County during the 2022-2023 4-H Year.
- Over 375 4-H members were engaged in science related projects and experiences.
- Collectively youth participated in over 4,800 hours of community club work in Randolph County.

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

- Major events Day where members developed their public speaking and decision-making skills
- The Northeast Region Energizer held in the spring of 2023 in Kirksville and the Northeast Region 4-H Round Up held in Macon in the fall where members connected with others and explored their sparks, or area of interest.
- The Randolph County Fair where members showcased the project learning they achieved through the year.
- Members represented Randolph County with exhibits displayed in the 4-H Building at the Missouri State Fair
- Seven 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.
- Three 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.
- Randolph County was represented at State 4-H Congress by one delegate. The youth 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.
- Randolph County youth participated in the State Shoot events displaying the knowledge and skill they developed in their individual disciplines

One in every five Randolph County youth under the age of eighteen participated in a MU Extension 4-H Youth Development program in 2023.

Randolph County

Missouri 4-H

Local Impact

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.

Randolph County members enrolled in a combined total of four hundred and ninety-nine projects in 2023. The top project areas included:

- Arts and Crafts
- Photography
- Swine
- Woodworking
- Country Cured Hams
- Cake Decorating
- Shotgun
- Archery
- Country Cured Bacon
- 4-H Clover Kids
- Smallbore Rifle
- Horse Riding

Impacts of 4-H Programming

- 4-H members are twice as likely to go 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 Randolph County youth participating in 4-H events on a college campus receive a Bachelor's degree, 4-H would help young people acquire \$3 million more in lifetime earnings.

4-H Volunteers

- Randolph County 4-H members were supported by one hundred and twenty enrolled, screened and oriented adult volunteers supporting the development of youth in 2023.
- Volunteers contributed 12,000 hours to the Clark County 4-H program valued at \$381,600.

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.

Randolph County

Missouri 4-H

Local Impact

4-H School Enrichment- Embryology

- There were two hundred and forty-four students from nineteen classrooms who participated in the Hatching Chicks in the Classroom program in 2023.
- Students participated in a combined 1,464 hours of learning with the “Chick It Out” program.

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

Impacts of Programming

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

4-H SNAC Clubs

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

In Randolph County, SNAC efforts reached one hundred and six youth.

Randolph County

Missouri 4-H

Local Impact

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.

Resources

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

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

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

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



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 through credible statewide programs
Agriculture and Environment



MU Extension specialists

play an important role in addressing emergencies and disasters. MU Extension specialists swiftly distribute information so farmers and ranchers can make timely decisions that safeguard their enterprises.



The Missouri Integrated Pest Management Program,

funded by USDA grants, has been an important extension program for 30-plus years. Mizzou IPM distributes articles, pest monitoring data and publications on how to improve the application of integrated pest management strategies and systems.

The MU Soil Testing Program delivers research-based nutrient and lime recommendations to more than 32,500 customers annually.



Management-intensive grazing involves dividing large fields into smaller paddocks and systematically rotating livestock among them. Producers who attend grazing schools learn how to reduce costs through improved livestock, grazing and pasture management while getting insights into fencing, watering systems and grazing system design.

The annual impact of management-intensive grazing is estimated to be \$125 MILLION per year in Missouri.

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Randolph County

Agriculture and Environment

Local Impact

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.

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

Soil Testing

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 27 soil samples from Randolph County analyzed by the MU Soil Testing Lab.

Randolph County

Agriculture and Environment

Local Impact

Management intensive Grazing (MiG)

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
total attended MiG.

Agriculture Lender Seminars

Lenders learned about crop and livestock outlook, agriculture policy, rental rates & land values, MU budgets, input costs, USDA Farm Service Agency, and Missouri Agricultural and Small Business Development Authority (MASBDA) programs. Lenders in attendance manage 6,007 farm loans totaling \$115,500,000.

By attending University of Missouri's Agricultural Lenders' seminars, lenders gain knowledge to help their clients make better decisions based on objective education and resources. More information and better decisions benefit their portfolio of producers, landowners, and ag-businesses through enhanced understanding of enterprise budgets, market expectations, and other decision influencing factors affecting families' and businesses' financial health.

Eighty-three lenders from 25
Missouri counties and Illinois
attended this year's seminars in
Mexico and Brookfield.

Randolph County

Agriculture and Environment

Local Profiles and Stories



Pictured:
lenders from 25 counties at the 2023
seminars held in Mexico and Brookfield.



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AMERICA'S
SBDC
MISSOURI

CLIENT HIGHLIGHT



LOCS
— OF —
GLORY

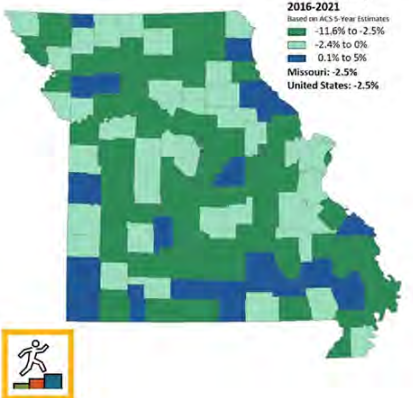
The **Missouri Small Business Development Centers** (SBDC) provide professional training and customized one-on-one counseling to small businesses across the state. Working with the Missouri SBDC helps business owners make confident decisions.

FY2020-2022, Missouri SBDC ASSISTED 878 STARTUPS and helped Missouri small businesses earn more than **\$440 MILLION.**



Missourians from all walks of life celebrated the **2023 Missouri Good Neighbor Week**, Sept. 28 to Oct. 4, by completing and reporting neighboring acts and nominating others as the most engaged neighbors in their counties.

In 2023, the goal was to document 15,000 acts of neighboring. That goal was surpassed with 19,752 Missourians being positively affected during MISSOURI GOOD NEIGHBOR WEEK.



The **Missouri Economy Indicators (MEI)** series explores business, industry and workforce topics that affect Missouri's economy. The data is shared through newsletters and on social media. MU Extension faculty and staff receive talking points and collateral to share with local stakeholders.

In 2022, MEI published 15 issues, and MEI online resources were accessed MORE THAN 5,000 TIMES. Two out of five MEI newsletter recipients reported using the information to help guide policy or decision-making in their work.

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Randolph County

Business and Community

Local Impact

Extension Tax Schools

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 live online. Fall schools were in Columbia and Springfield and in addition a was online. The schools were designed for those who prepare taxes including enrolled agents, tax preparers, CPAs, individuals, and attorneys.

The training included updates on legislation, rulings and cases, individual taxpayer issues, agricultural and natural resources topics, ethics, trusts and estates, agriculture and natural resource tax issues, business tax issues, business entity tax issues, IRS issues, penalties and defenses, form 4797 sales of property, retirement tax issues, like-kind exchange issues. The schools were approved for 8 and 16 hours of continuing education credit by the IRS, Missouri Bar and for CFP continuing education. Total continuing education hours reported to IRS for the schools was 3,336 hours.

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

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





MU EXTENSION **Serves MISSOURI and Delivers MIZZOU** through credible statewide programs **Community and Professional Health Education**



MU **Continuing Education for Health Professions** (CEHP) provides evidenced-based, relevant and responsive learning activities designed to narrow professional practice gaps with respect to knowledge, competence, and performance of the healthcare team. A commitment to lifelong learning, in partnership with those we serve, contributes to excellence in practice and improved health outcomes.

CEHP provided 169 LEARNING ACTIVITIES which reached over 53,000 PROFESSIONALS across all Missouri counties.



The **Diabetes Prevention Program** is a CDC-recognized program provided by licensed lifestyle coaches to prevent type 2 diabetes. Through lifestyle coaching 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



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Health & Well-Being

Randolph County

Community and Professional Health Education

Local Impact

PROGRAM: MAKING MONEY COUNT

Making Money Count is a curriculum designed to help participants improve their overall economic well-being.

This flexible curriculum can be used one-on-one or in group settings. Units can stand alone or can be combined with other units to provide a money management program or course.

This program had 101 contacts in Randolph County. This program was delivered twice in Randolph County. One in partnership with Caring Community Partnership. One in partnership with First Baptist Church.

Program: Boost Your Brain & Memory

Boost Your Brain & Memory, is a multi-faceted brain health program that goes beyond simple brain games. The evidence-based program focuses on a variety of lifestyle factors that impact brain health, and on memory strategies that participants can implement in their daily lives. Boost Your Brain & Memory offers a unique, whole-person approach to brain fitness.

The program incorporates video segments and instructor-led exercises to guide older adults through a comprehensive overview of:

- Physical Activity
- Emotional Health
- Intellectual Activity
- Nutrition
- Spiritual Activity
- Social Engagement

This program had 90 contacts in Randolph County and was done in partnership with Caring Community Partnership..

PROGRAM: FOCUS ON KIDS

A 2.5 hour class, ordered by state statute, for all divorcing parents with kids still at home. The program reviews the five predictors of positive outcomes for children when their parents' divorce. Through class discussion and viewing video vignettes, parents are reminded of the importance of keeping their children out of the conflict. This program had 58 contacts in Randolph County and was done in partnership with the 14th Circuit Court.

Participants learn that:

- Avoiding conflict in front of the child improves the child's outcomes.
- Open & frequent communication between parents **must** be maintained.
- Children need to know: both parents love them & will remain in their lives and that the divorce isn't the child's fault.
- Importance of listening to their children.

Randolph County

Community and Professional Health Education

Local Impact

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. This program had 152 contacts in Randolph County. This program was delivered twice in Randolph County. One was done in partnership with the Moberly Correctional Center. One was done in partnership with Mid-Missouri Homeschool Coop.

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

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 66 contacts in Randolph County and was done in partnership with Caring Community Partnership.

467

Total of Human
Development Program
Contacts.

**SERVE
MISSOURI.**

**DELIVER
MIZZOU.®**



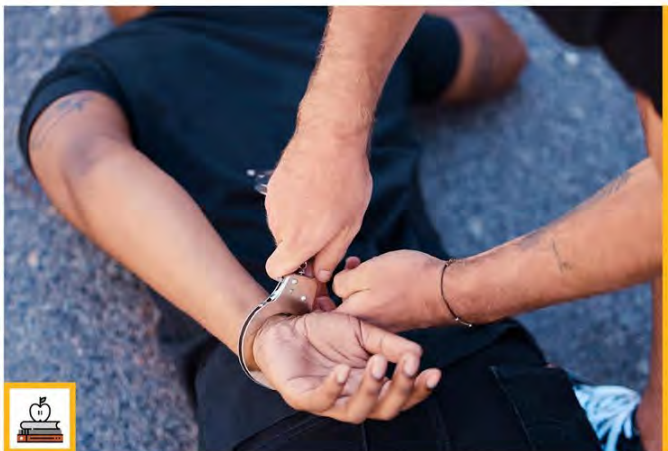
MU EXTENSION **Serves MISSOURI and Delivers MIZZOU** through credible statewide programs **First Responder Education**



Established in 2002, the **Fire Officer Certificate Program** is designed for those who wish to further their professional development without the time and expense of traditional college classes. This program has been developed and evaluated to ensure it provides structured curriculum delivery and academic rigor. The program requires completion of 288 hours of instruction within three years.



The programming from the **MU Fire and Rescue Training Institute** (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 firefighters 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



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Economic Opportunity



Educational Access & Excellence



Health & Well-Being



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



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

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

“This course made me more self-sufficient and improved my family’s access to quality food.”



MU Extension offers research-based **home food preservation** courses and publications to help people cut food waste and save money.



A Matter of Balance helps older adults overcome their fear of falling, increase their activity levels and reduce their risk of falls. In eight classes, participants learn fall-prevention strategies, develop personal prevention plans, acquire balance-improving exercises and make lifestyle changes to minimize their fear of falling.

“I have cleaned my house of clutter for safety, put non-slip stickers on my tub floor, I’m getting much more regular exercise and I’m feeling stronger.”

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Randolph County

Health and Human Sciences

Local Impact

Strength in Numbers

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.

180 contacts



100 Miles 100 Days

This year's 100 Miles, 100 Days Extension initiative made a significant impact statewide, attracting over 1,300 participants in Missouri, including Randolph 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.

826 contacts

Living Well with Chronic Conditions

Participants learned to manage any chronic conditions through tools such as action planning, nutrition health, physical activity and more.

120 contacts



Randolph County

Health and Human Sciences

Local Impact

Taking Care of You

This program shows participants the importance of self-care, time management, forgiveness and resilience through meaningful anecdotes and in-class practice.

16 contacts

Stay Strong, Stay Healthy

This 8 week, 16 session virtual class provides inactive middle-aged and older adults with access to a safe, structured, and effective exercise program capable of building muscle and increasing bone density, thus decreasing frailty, osteoporosis, and the risk of falls.

73 contacts

Moberly Grow-A-Garden Project

A group of volunteers formed a committee to create a community garden on a donated lot in downtown Moberly. We had 35 plots that participants could plant as well as a small pollinator garden. We hosted 4 educational sessions and donated over **800 pounds** of produce to community organizations.



1,215 total contacts made in
Randolph County in 2023

Randolph County

Health and Human Sciences

Local Impact

Supplemental Nutrition Assistance Program Education (SNAP-Education or SNAP-Ed)

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

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

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

Schools

Moberly Head Start
Northeast R-IV High School
Westran Elementary
Moberly Early Childhood

Agencies

Community Day Care Learning Center
Randolph Co Health Dept.
National Public Health Fair Week
Family Life Fellowship
Moberly Farmer's Market

**A total of 214 participants
were from Randolph County.**

Randolph County

Health and Human Sciences

Local Profiles and Stories

Success stories from direct programming efforts

While I was working with the Community Childcare Learning Center, we tried multiple different vegetables that were new to the children. We learned through Show Me Nutrition that they needed to vary their vegetables. One child stated that she loved the sugar snap peas and would ask her parents to have some at home. The next day, the child's father approached me. He said that she came home so excited to tell all about her day when Ms. Brittney visited and that she loved the vegetables that they tried. He also said that they had made a grocery list that night with new vegetables for their family to try!

Pictured right: Brittney providing adult gardening lessons in Moberly Community Garden.



Pictured: Brittney working with students as part of the program

