



UNIVERSITY OF MISSOURI EXTENSION

Boone County

2024 Annual Report

1012 N Highway UU
Columbia, MO 65203
573-445-9792

**SERVE
MISSOURI.**

**DELIVER
MIZZOU.**



Extension
University of Missouri

an equal opportunity/ADA institution



Office of Extension
and Engagement
University of Missouri

Vice Chancellor's Office
108 Whitten Hall
Columbia, MO 65211
PHONE 573-882-2394
EMAIL cchiggins@missouri.edu

December 2024

Dear county commissioners, elected leaders and friends of MU Extension and Engagement,

As we reflect on the past year, I want to express my deep gratitude for your support of MU Extension and for your partnership in enhancing the lives of Missourians.

Your support for MU Extension fuels Missouri's agriculture, strengthens families, prepares our youth and promotes the health, well-being and vitality of our communities. Over the past year, our programs have focused on addressing key needs throughout the state:

- **Expanding access to 4-H:** To make 4-H more accessible, we've introduced more in-school and after-school clubs, reducing barriers and creating opportunities for young Missourians to develop essential skills and leadership abilities.
- **Supporting agriculture and land stewardship:** We're addressing critical issues such as succession planning for family farms, rural mental health, agricultural business management and land stewardship. These initiatives are helping Missouri's farmers plan for the future and preserve the health of our land for future generations.
- **Advancing health initiatives:** Our team of community health field specialists, covering every region of the state, works directly with local leaders to assess health needs and bring UM System resources and expertise to these communities, supporting healthier lives and stronger communities.
- **Promoting economic development:** MU Extension is helping to create economic opportunities by working with individuals, supporting businesses in their growth and collaborating with communities to enhance local vibrancy. Through these efforts, we help bring new jobs, skills and possibilities to Missourians across the state.
- **Providing essential training:** Our continuing education programs prepare Missouri's firefighters and health care workers to meet the demands of their roles with the latest skills and knowledge, ensuring they are well-prepared to serve our communities.

As you read through this annual report, I hope you feel as proud as I do of the accomplishments we've achieved together. The dedication and professionalism of MU Extension's faculty and staff are inspiring, and I am grateful to work alongside them—and each of you—as we make Missouri a stronger, healthier and more vibrant place. Thank you for your continued support and partnership. Together, we are serving Missouri by delivering the University *for* Missouri.

Warm regards,

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

Who we are



Emily Blau
Nutrition Program Associate



Kris Bockting
Missouri ADFX



Mark Christian
Small Business



Heather Conrow
State 4-H Animal Science Educator; Field Specialist in Livestock



Christina Edholm
Field Specialist in Human Development



Allicyn Freyer
Nutrition Program Associate



Liz Harrison
Field Specialist in Nutrition and Health Education



Charles Holland
Director of Jefferson Farm and Gardens EEC, MU Family Impact Center, and Boone County Extension Operations



Letitia (Tish) Johnson
Field Specialist in Community Economic Development



Nancy Keim
FNEP Associate Director, East



Debi Kelly
Field Specialist in Horticulture; State Extension Master Gardener Coordinator



Marilyn Dilts
County Office Support Staff



Magdiel Lopez Soriano
Field Specialist in Livestock



Todd Lorenz
FIELD SPECIALIST IN AGRONOMY



Marsha Moore
Small Business Development Center Business Counselor



Kelly Rich
Nutrition Program Associate



Kent Shannon
Field Specialist in Agricultural Engineering



Mary Sobba
Field Specialist in Agricultural Business



Jana Weitkemper
MISSOURI APEX ACCELERATOR STATE DIRECTOR



Paul Zacharias
Small Business Development Center Business Counselor



Sandra Zapata Arias
Nutrition Program Associate

Boone County Extension Council Members

Justin	Aldred	Jessica	Porter
Abby	Barbata	James	Quinn
Marcia	Beckett	Emily	Shepard
Glenda	DeShon	Theresa	Shettlesworth
Dean	Larkin	Nancy	Shikles
Ethan	Miller	Dustin	Stanton
Mark	Ohrenberg	Jayne	Young
Charles	Paxton		

Boone County Elected Officials

- Presiding Commissioner Kip Kendrick
- District I Commissioner Justin Aldred
- District II Commissioner Janet M. Thompson

Budget and more

Appropriations budget

Income

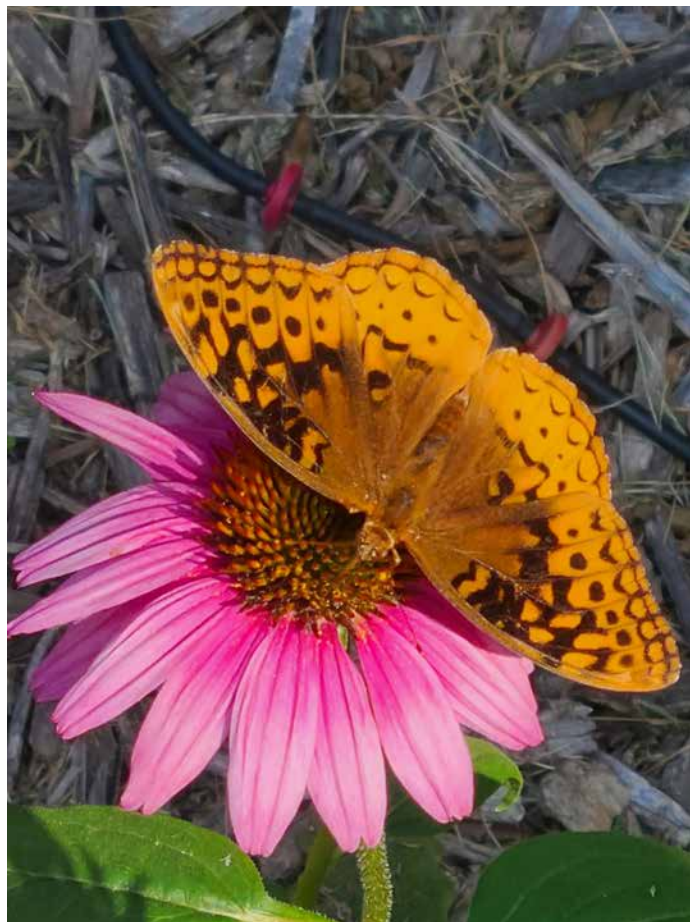
County Appropriations	85,000
Total Income	85,000

Expenses

Salaries/Benefits	38,000
Travel	5,000
Telephone	2,000
Contract services	8,000
Copier /printing	4,500
Office Supplies/Service	10,000
Utilities	7,500
Insurance	2,400
Misc	4,800
Capital Repairs	2,800
Total Expenses	85,000

Return on investment

County Appropriations \$85,000 x \$13 (per dollar) return on investment = \$1,105,000 in returned investment to Boone County



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



Local Support

Did you know you can donate directly to *Boone* 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 Grand Challenges: Local Solutions



BOONE 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

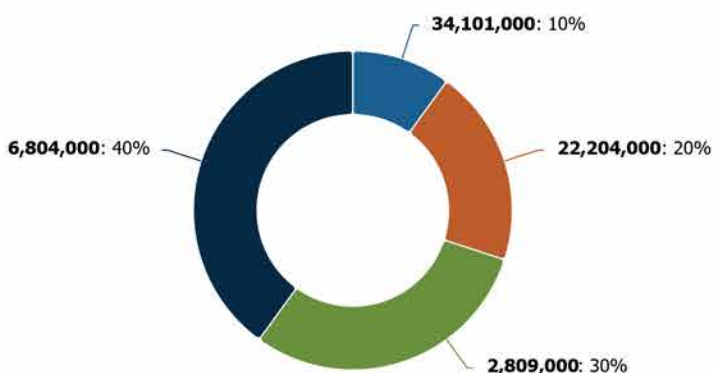
Knowing Local Challenges



CHALLENGE 1: Economic Opportunity: Agricultural Economics

Leading Agricultural Products

Total Rank (Sales): \$10



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 \$61,350,000 in 2017, an average of \$54,777 per farm. This is below the statewide average farm income of \$56,606.

Report Area	Total Farms	Average Farm Income
Boone	1,120	\$54,777
Missouri	87,887	\$56,606

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

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



CHALLENGE 2: Educational Access and Excellence: *Early Childhood Education*

Access to Early Childhood Education

Head Start is an early childhood education program for at-risk children through age 5. Families utilizing Head Start have better success meeting developmental goals and achieving economic stability. In 2018, there were 8 Head Start programs in the report area, or 7.67 per 10,000 population. Access to head start is lower in this area than in the state.

Head Start Programs, Rate (Per 10,000 Children Under Age 5)

7.67

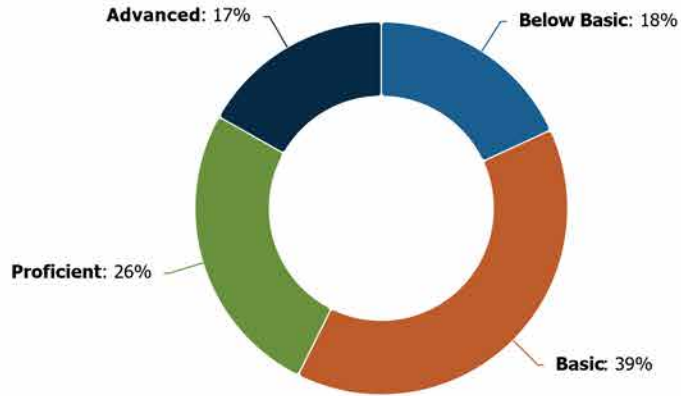
Boone

Missouri 13.13

Data Source: US Department of Health & Human Services, [HRSA - Administration for Children and Families](#). 2024.

English Language Arts Proficiency

Starting in the 4th grade, public schools emphasize proficiency in reading and reading comprehension. The ability to comprehend becomes the foundation to find and process information in later years and it is important to prevent children from falling behind. Of the 1,800.00 fourth graders tested in 2018, the known total number of students who had a basic level of English Language Arts was 700.00. The number tested as below basic was 323.00, basic was 700.00, proficient was 460.00, and advanced was 300.00.



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 427 deaths of despair, or 34.03 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 11.98% since the 2001-2007 report period.

Mortality Rate, 2014-2020

34.03

Boone



Missouri

52.01 😞

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

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 5.5 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 4.2 mentally unhealthy days per month.

Average Poor Mental Health Days per Month, 2018

5.5

Boone



Missouri

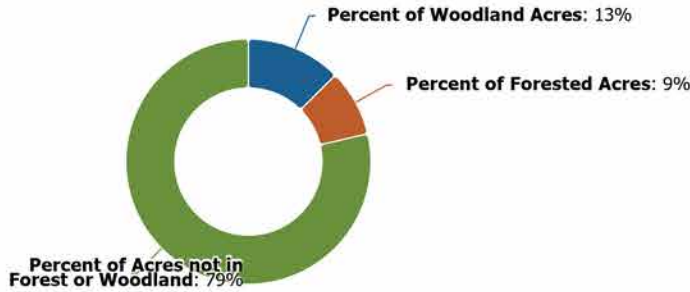
5.3 😞

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



Forested, Woodland & Non-forested Acres

Sustainable management of forests and woodlands and harvesting of mature trees support the state’s \$10.3 billion forest products industries. Forests have a closed canopy (>80% cover) permitting little light to penetrate to the ground below. They consist of several overlapping layers of trees, with a mid-story and understory comprising a variety of shade-tolerant shrubs and a sparse layer of soft-stemmed plants. Woodlands have a more open canopy (30-80% cover), and their sparse, woody mid-story allows more sunlight to reach the ground. This light permits the growth of a dense ground cover containing a variety of wildflowers, grasses and sedges. Fire plays a large role in maintaining woodland habitats.



Data Source: Multi-Resolution Land Characteristics Consortium, [National Land Cover Database](#).

Rotational Grazing

A planned rotational grazing system allows time for vegetation to rest and recover before being grazed again. In 2017, nearly 16,000 Missouri farms reported practicing rotational or management-intensive grazing. With 11 million acres of row crops and nearly 2 million grazing livestock animals (mainly cattle), Missouri is well suited to capitalize on the grazing potential of cover crops. In addition to generating more income, grazing cover crops can have a positive impact on soil health. Manure, hoof action and the root responses that grazing elicits stimulate soil biological activity and lead to healthier soil and healthier crops.

Percent of Operations Utilizing Rotational Grazing



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

Top Commodity Produced, Sales by County, Census of Agriculture 2022

County	Boone County
Most Produced Commodity by Sales	SOYBEANS
Sales from Top Commodity	34,101,000
Top Three Commodities by Sales	SOYBEANS, CORN, ALL, NURSERY, GREENHOUSE, FLORICULTURE, AND SOD





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

Missouri 4-H for ages 8 – 18



4-H In-school clubs meet during the school day. Members participate in projects that supplement their existing lessons. Clubs may meet for short periods or span the full 4-H program year. Members can elect officers and plan learning activities with options of public speaking, community service and links to career readiness.



4-H Natural Resources programs employ hands-on activities in climate science, environmental sustainability, renewable energy, sportfishing and wildlife conservation. The **Shooting Sports program**, which teaches marksmanship, safe firearm use, hunting and archery principles, is a prime illustration of how 4-H programs promote holistic youth development and responsible citizenship. Supported by caring adult leaders, these programs offer opportunities to cultivate life skills, self-worth and conservation ethics.



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

Boone County

Missouri 4-H

Local Impact

Hello from Boone County 4-H, we appreciate all your support. From October 2023 to September 2024, it was an exhilarating time to be a part of 4-H in Boone County. The season kicked off with exciting events like Ham Day, where families came together to start new projects and forge lasting connections. The solar eclipse viewing at Jefferson Farm was a memorable highlight, while the SMQA (State Meat Quality Assurance) program also took place at the Jefferson Farm and Garden Extension and Education Center. The Hallsville club hosted a fish fry, fostering community engagement and a spirit of service that permeated all activities. Beginning the year with 660 youth, Boone County 4-H saw a remarkable increase to 1,439 participants, showcasing the program's growth and appeal to diverse cultural backgrounds and interests, all centered on developing critical problem-solving skills.

Throughout the year, 4-H demonstrated its commitment to volunteer leadership and community involvement. The club leader summit facilitated rich discussions among leaders, providing a platform for collaboration on innovative activities and projects. Programs such as 4-H camp, State Congress, and the Teen Conference proudly represented Boone County, while the Spring 2025 Embryology program educated youth on the fascinating life cycle of chicks, allowing them to apply their newfound knowledge in real-world contexts. Additionally, the SNAC (Snack Nutrition Action Committee) program and KIK (Kids in the Kitchen) initiatives at the YMCA grew significantly, expanding from 45 to 91 participants in Ashland. The leadership component of these programs encouraged youth to create thoughtful gifts, like cards and granola mixes, for residents at Ashland Villa, a senior living community, thereby strengthening intergenerational ties.

To celebrate the incredible achievements of both youth and volunteers, a Recognition Night was held at the Hallsville Fairgrounds. This event showcased the remarkable talents of participants and honored those who dedicate their time to nurturing and supporting the youth, fostering a sense of belonging within the 4-H community. Meanwhile, the Junior Council has been actively promoting its mission, with five consistent members working to engage more youth in leadership roles. The staff has also been enhancing cross-cultural communication efforts, exemplified by the Japan exchange program, which brought a chaperone to Boone County, further enriching the community's cultural tapestry. Boone County 4-H continues to thrive, uniting individuals of all ages and backgrounds in a shared journey of growth and discovery.

Sincerely,

Elizabeth Rush

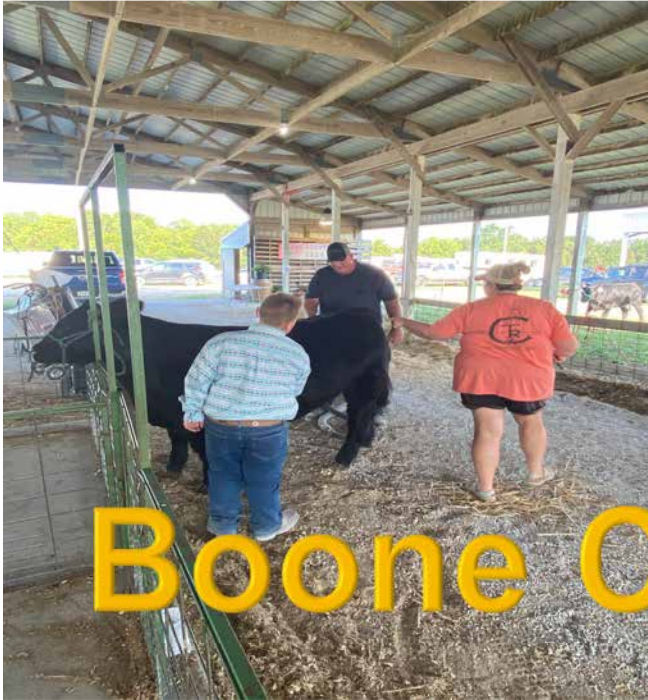
Elizabeth Rush

Youth Program Assistant

Boone County

Missouri 4-H

Local Impact



Boone County Fair

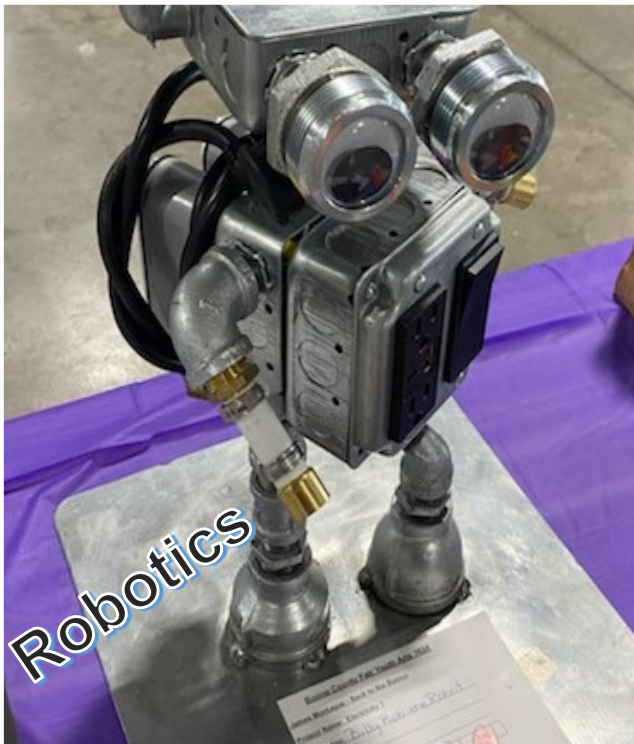



Educating Young Minds

Boone County

Missouri 4-H

Profiles and Stories



 **Camp Clover Point 4-H Camp**
Meeting friends, making memories, and having fun!





MU EXTENSION **Serves MISSOURI and Delivers MIZZOU**
 through credible statewide programs
Agriculture and Environment



The Missouri Integrated Pest Management Program (IPM), funded by USDA grants, has been an important extension program for more than 30 years. Mizzou IPM distributes articles, pest monitoring data and publications on how to improve the application of integrated pest management strategies and systems in crops. In addition, the new Soybean Growth Monitoring Report is released through IPM every two weeks during the growing season.



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



Women make up a growing portion of private forest landowners, and their knowledge and confidence in managing their land is invaluable. **The Women Owning Woodlands program** empowers women landowners to take action to secure the future of their land.



The Missouri AgrAbility Project provides practical education, on-the-farm assistance and agency referrals to farmers and ranchers with disabilities and their families to promote agricultural and rural independence. National Institute of Food and Agriculture (NIFA) an agency of the U.S. Department of Agriculture (USDA), administers the AgrAbility Project.



Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Boone County

Agriculture and Environment

Local Impact

2024 Agronomy Report

Todd Lorenz, Field Specialist in Agronomy

510 Jackson Rd, Boonville Mo, 65233; 660-882-5661

Missouri sets in a transitional climate zone where we can have the same winters as Michigan and the same summers as Georgia. The impact of 2024 weather extremes were both good and flawed. After almost 3 years of drought in the central Missouri area, spring rains seemed to offset moisture deficiencies in livestock and row crop production. Water sources seemed to replenish, spring forage production was up, and crop producers were optimistic about the year's production.

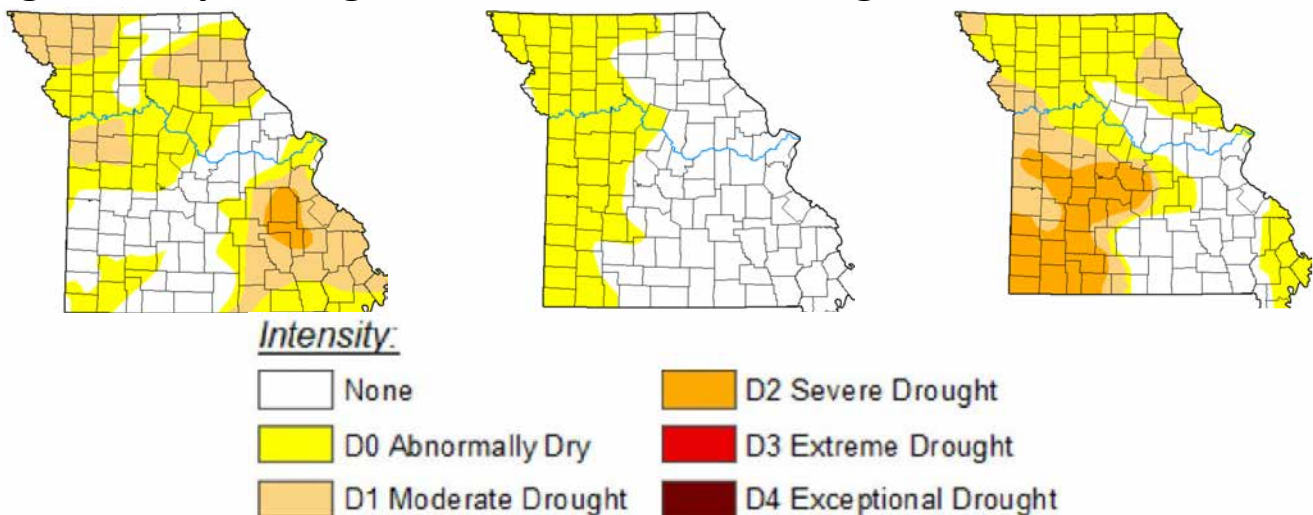
By June, central Missouri was showing no drought, but it was creeping back. By mid to late season, producers were already wanting two more inches of rain to finish filling soybeans. The silver lining was that there was adequate rainfall during the season to produce above average corn yields in much of the area. July and August rainfall was below the 30-year average and temperatures were above average. While soybean yields in the area were an improvement over previous droughty years, a few more late season rains would have improved yield significantly. The USDA Drought Monitor maps show growing season variations across the state (Figure 1). There were areas where rain showers were spotty at best and the maps may not reflect individual locations.

Boone County

Agriculture and Environment

Local Impact

Figure 1: April, August, and November Drought Monitor



As a result of our Private Pesticide Applicator Trainings crop producers and their advisers will not only be aware of the latest research related to pests and pesticide management but will also learn appropriate techniques of using that information to build efficient integrated pest management systems. The main goal is to improve awareness of aspects of the rapidly changing labels, potential personal injury, environmental degradation, and economic impacts from proper use of pesticides. The goal is to sustain an economically viable crop production industry in Missouri while diminishing potential negative impacts of crop production systems on the environment. This will enhance the economic and social viability of rural and urban Missouri while protecting the environment.
#2xAg2030; #ExtendMU

Boone County

Agriculture and Environment

Local Impact

Those who chose to fill out a survey at the Private Pesticide Applicator Trainings in counties that I serve represented over 70,000 acres from in and around central Missouri. Of those reporting, 100% believe Extension educational programs are important in their community. Also, 100% stated that the information provided will make them a better applicator. There were 34 producers from Boone who attended the Pesticide Applicator Program this year.

Soil testing is utilized by both gardeners and homeowners as well as agriculture forage and livestock production. Any production, from back yard gardens and lawn to full scale agriculture, that is attempted with insufficient information may result in crop failure and wasted money. Through our offices, the University of Missouri Soil Testing Laboratory provide accurate analysis of your soil and provides research-based recommendations on the crop that you are producing.

There were 3879 submitted soil samples through our laboratory this year.

Boone County

Agriculture and Environment

Profiles and Stories



Regional Private Pest Applicator training certifies producers for purchasing restricted use pesticides. Pests limit yields nationally by approximately 30%; safely controlling them using integrated pest management maintains economic value while protecting the environment

Nitrate quick tests being conducted from areas of drought stressed crops.



Boone County

Agriculture and Environment

Local Impact

The mission of the Missouri Master Gardener Extension Program is "helping others learn to grow." The program provides in depth horticultural training to individuals who then volunteer their time applying what they have learned to help others in their communities to learn about gardening and environmental education.

Boone County Master Gardeners

In 2024, the Heart of Master Gardeners (HMMG) had a very successful year providing learning to the citizens of Boone County. Forty active volunteers contributed \$70,095 back to the community.* Approximately 1,318 pounds of produce was donated to the Tiger Pantry.

Volunteer hours	1,725
Continuing education hours	314
Advanced education hours	54
<u>Total hours</u>	<u>2,093</u>

*Based on [Independent Sector Value](#)

Service and Education Activities

- The 7th Annual Butterfly Festival was held in June at Jefferson Farm and Garden where 1,681 people attended and learned how to attract butterflies to their yard and gardens.
- Provided support for the 2024 Tomato Festival at Jefferson Farm and Garden by planting, harvesting, cutting and dicing, over 400 varieties of tomatoes, and peppers for close to 1,300 attendees.
- Created a "hortline" team to assist with the Extension's gardening helpline. 14 calls were fielded from July-September.
- Maintained a learning garden which produced vegetables for the MU Child Development Lab.



University of Missouri Extension

- Participated in Columbia's annual Earth Day festival teaching upscaling common items into plant containers & cold frames.
- Provided gardening information and native plants to complement the MU Agroforestry's Chestnut Festival.
- Supported local business wellness expositions with information on edible production & 'horticulture' therapy.
- Hosted children's activities at events to plant the love of gardening to benefit people & the natural environment.

Social Media

In June, HMMGs, in partnership with MU Extension's Integrated Marketing Communications which creates reels, provided gardening content for 14 reels which educated citizens across the state.

Facebook views	122,026
Instagram views	4,993
YouTube views	2,727
<u>Total views</u>	<u>129,746</u>

Growth Opportunities in 2024

- Became 1 of only 200 gardens across the U.S. as an [All-American Selections Display Garden](#) housed at Jefferson Farm and Garden.
- Beneficiaries of \$13,000 to purchase raised beds, soil, tools and a shed.

Boone County

Agriculture and Environment

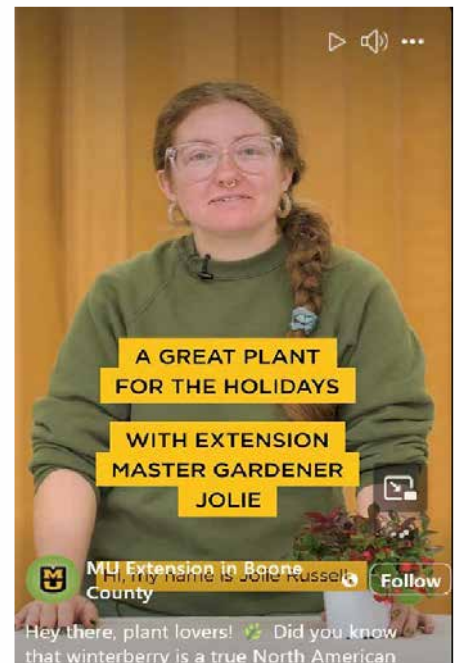
Local Impact



7th Annual Butterfly Festival with an attendance of 1,861 people.



Demonstration Garden at Jefferson Farm and Garden which donated 1,318 pounds of produce. In 2025, this garden will become the All-American Selection Display Garden.

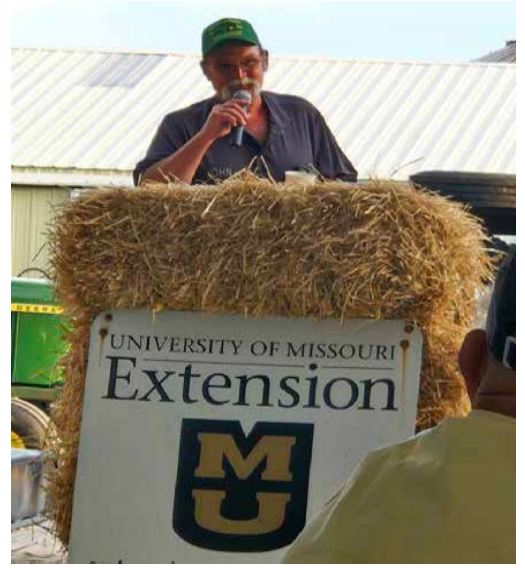


Heart of Missouri Master Gardener “reels” on social media.



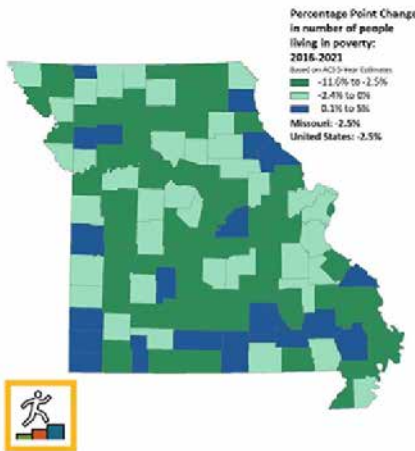
Heart of Missouri Master Gardeners prepping for the transplants and seeds to arrive for the All-American Select Display Garden.

2024 Town & Country - Lorentzen Farm





MU EXTENSION **Serves MISSOURI and Delivers MIZZOU** through credible statewide programs **Business and Community**



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.

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.

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being



MU EXTENSION **Serves MISSOURI and Delivers MIZZOU** through credible statewide programs **Business and Community**



Tish Johnson teaching "Navigating Difference"



Hosting the state Master Naturalist Conference in Boone County



Extension Business and Community faculty volunteering at the Food Bank

Legend



Agricultural Growth
& Stewardship



Economic
Opportunity



Educational
Access &
Excellence



Health
& Well-Being

Boone County

Business and Community



Neighborhood Leadership Academy is an annual multi-session program offered statewide (mostly online) with regional cohorts.

In 2024, there were 45 participants in the hybrid NLA, divided into 6 regional cohorts – the “Show Me” cohort included participants from mid-Missouri. From the full class, there were 11 that were awarded mini-grants up to \$2,500 to jump start their community projects; 2 of whom were from the Show Me cohort.

Graduates received a Certificate of Completion, and those who completed all requirements received a Chancellor’s Certificate from the University of Missouri-St. Louis.



2024 Neighborhood Leadership Academy graduate from Boone County, Syreta Toson

Syreta is the founder and executive director of a new nonprofit, “A Home for Her,” that assists women affected by domestic violence and those returning home from incarceration. She also works as a motivational speaker and hosts a podcast, “Syreta Talks.”

CONNECTING ENTREPRENEURIAL COMMUNITIES



Entrepreneurial communities are neighborhoods, cities, and counties that continuously work to foster economic development by supporting local entrepreneurs. They strategically build and grow networks, cultures, resources and policies that encourage invention, innovation, and business success.

The annual Connecting Entrepreneurial Communities Conference is hosted annual in a rural Missouri community, showcasing their local businesses and other assets to a broad and diverse audience from across Missouri and neighboring states.

The 2024 CEC Conference was held in Fulton with over 120 attendees.

MU Extension Business and Communities Contacts Statewide*, 2024

- Educational sessions: 1,140
- Direct contacts: 40,514
 - *Direct contacts are an interaction with an exchange of educational information*
- Indirect contacts: 27,834
 - *Indirect contacts refers to the distribution of information and resources, including news articles, community events, and mass communications.*

*County level data not available

Local Impact

Farmers' Markets are a Primary Source of Price Data

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 2024. Five MU Extension Specialists collected data while providing production, marketing, and financial resources to producers around the state. The data is available seasonally on MDA's website and helps new and experienced producers determine market prices for their products. There was a total of 59 different markets visited in 2024 with 2295 prices collected.

I made 16 market visits to 13 different markets in Northeast and Central Missouri. These markets were in Kirksville, Unionville, Brookfield, Milan, La Plata, Louisiana, Hannibal, Palmyra, Mexico, Center, Booneville, and Columbia. Vendors: Adair-17; Audrain-13; Boone-32; Callaway-6; Chariton-1; Cole-16; Cooper-32; Howard-6; Lewis-1; Lincoln-5; Linn-9; Macon-13; Marion-5; Moniteau-9; Monroe-1; Montgomery-2; Pike-3; Putnam-16; Ralls-12; Randolph-5; Saline-2; Schuyler-5; Shelby-2; Sullivan-8; Warren-1; Iowa-2; and Illinois-2)

Boone County

Business and Community

Local Impact

Farmers
Market



Beautiful
Flowers



Jams &
Jellies



Fresh
Picked

Fresh
Meat



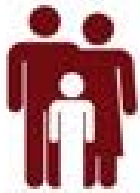
Fruit &
Veggies



Ripe
Apples



Plants
and
Starters



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



Cooking Matters

Make quick, tasty, and affordable meals everyone will enjoy.

Learn valuable tips for stretching your food dollars and how to prepare a recipe and sample easy, low-cost, nutritious and delicious dishes.

"We prepared barley jambalaya in class and one participant mentioned she had never tried barley before. She tried the jambalaya and really enjoyed it. A few days later she excitedly said she made the recipe at home and her whole family enjoyed it!"

Cooking Matters facilitator about a class participant



Stay Strong, Stay Healthy teaches older adults basic exercises to boost strength, balance and overall daily functionality. Participants also gain insights into nutrition and wellness for healthy aging and active living.

After eight weeks, Stay Strong, Stay Healthy participants significantly IMPROVED their STRENGTH, BALANCE and SLEEP QUALITY.



Home Food Preservation

Preserve the season's bounty - deliciously and safely.

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

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

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



Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Profiles and Stories



Liz Harrison

Image above: Liz Harrison, MU Extension, instructs virtual participants in performing a seating leg extension exercise from their homes.

Image bottom right: A participant washes and de-stems kale for use in a Greens with Carrots recipe during a harvesting and storing produce course.

Four hands-on home food preservation courses were offered in 2024 in Boone County. Additionally, 4 one-time presentations were offered. Lessons on how to harvest and store produce, freeze and dehydrate fruits and vegetables, safely make pickled products and salsas, and steam and water bath can were provided to 70 educational contacts.

Stay Strong, Stay Healthy



In 2024, three virtual Stay Strong, Stay Healthy – Level 1 courses were provided in the Northeast Region. Over half of the participants were from Boone County. 32 total participants received 287 educational contact hours.

Economic impact: 14 participants completed at least 12 of 16 sessions x \$1,024 = \$14,336 in estimated annual medical cost savings

Participants reported

- "I can tell that my core is stronger. I feel better."
- "The exercises are always doable, and instructions are always given if modification is needed."
- "Even though we were on Zoom, I learned to recognize others and look for them at class."



Boone County

Community and Professional Health Education

Profiles and Stories



Image above: A participant made a yogurt parfait and homemade granola as part of the Cooking Matters course.

In 2024, five Cooking Matters series courses were provided in Boone County to **42** youth and adults. This SNAP-Education program was funded through the Family Nutrition Education Program at the University of Missouri Extension. In total, 84 educational contact hours were provided.

Additional nutrition education was provided through one-time presentations throughout the county. Six presentations provided 573 educational contact hours.

Participants reported

- "I've never cut mushrooms before. I would give this a 10 out of 10. I like this!"
- "I really like this (Shakshuka) recipe and think I could make it again." – youth participant
- "I liked that [my child] came to the classes with me, learned some things [they] liked, voiced things [they] didn't like, and tried something new." - adult participant



Liz Harrison, Field Specialist in Nutrition and Health Education, completed the Physical Activity and Public Health intensive practitioner's course in South Carolina in September 2024. She looks forward to putting the knowledge gained into practice in our communities and helping make it easier to incorporate health decisions in our daily activities. Physical activity interventions can assist in quality of life and in preventing and managing chronic health conditions.



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



PROSPER is a research-supported approach that promotes positive youth development and strong families through lifeskills education that increase protective factors and reduces risky behaviors among teens. Through a campus-community partnership, PROSPER Teams are created to support the implementation of two evidence-based programs with middle school students and their families.

"They have the old saying it takes a village to raise a child, the more the community comes together the better off the children are going to be in that community."

Peggy Saphian PROSPER Model Participant In Fredericktown, MO



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.



Resilience is the capacity to adapt when faced with adversity. **WeCanPROSPER Resilience Training** is a 2.5 hour training for participants to evaluate their personal resilience, tap into resources and create an action plan to enhance their resilience. Upon completing the training, participants can attend a facilitator session, enabling them to deliver the content within their communities and strengthen resilience within their networks.

100% of participants indicate that the skills and techniques they learned will help them become MORE RESILIENT.

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Boone County

Continuing Education

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 one online school. The schools were designed for those who prepare taxes including enrolled agents, tax preparers, CPAs, individuals, and attorneys.

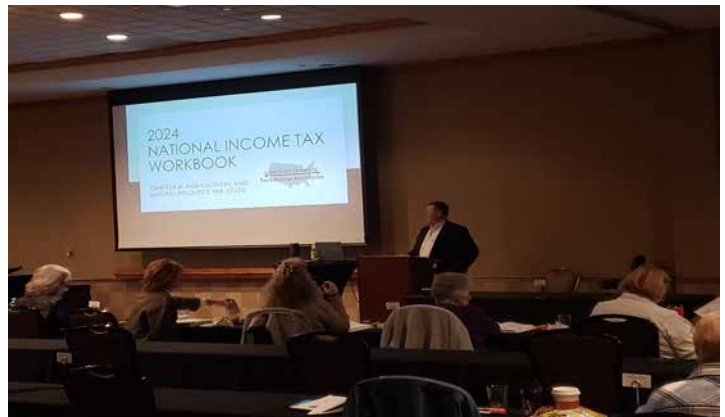
The training included updates on legislation, rulings and cases, individual taxpayer issues, agricultural and natural resources topics, ethics, trusts and estates, agriculture and natural resource tax issues, business tax issues, business entity tax issues, IRS issues, related party issues, real estate rental activity issues, limited liability company issues, and international tax 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 3,776 hours.

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

The evaluations had many positive comments and helpful suggestions. Planning is underway to offer trainings in 2025. 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 2024 school attendance totaled three hundred fifty people. The participants were from throughout Missouri.



Boone County

Continuing Education

Profiles and Stories

Agriculture Lender Seminar

Mary Sobba

Seventy-two lenders from 20 Missouri counties and Illinois attended an ag lender seminar in Mexico. Lenders learned about crop and livestock outlook, agriculture policy, rental rates & land values, MU budgets, wind and solar leasing, input costs and enterprise budgets, Missouri farm business management summary and Missouri Agricultural and Small Business Development Authority (MASBDA) programs.

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 agribusinesses through enhanced understanding of enterprise budgets, market expectations, and other decision influencing factors affecting families' and businesses' financial health. Lenders in attendance manage farm loans totaling \$155,250,000.

(Audrain-8; Boone-6; Callaway-4; Clark-7; Cooper-1; Gasconade-2; Howard-1; Knox-1; Lincoln-6; Macon-2; Marion-6; Monroe-9; Montgomery-4; Pike-2; Randolph-1; Schuyler-2; Scotland-3; Shelby-4; Warren-1; and Illinois-3)





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



Mental Health First Aid equips people to recognize and respond to signs of mental illness and substance use challenges.

Youth Mental Health First Aid is primarily designed for adults who regularly interact with young people (ages 12-17) facing mental health or addition challenges while the adult version focuses on adults aged 18 and older. Participants learn how to offer initial assistance and guide individuals toward the care they need.

In Missouri, approximately 1 MILLION ADULTS and 72,000 ADOLESCENTS suffer from MENTAL HEALTH ISSUES.*

*Missouri Department of Mental Health 2020 Status Report



Building Strong Families

Studies show that people with strong family bonds tend to have lower stress levels. Building Strong Families helps families deal with disagreements, manage stress and show their love for one another.



Policy, systems, and environmental (PSE) changes encourage residents to improve community health by making healthy choices easier and more accessible. Residents design strategies around local needs, assets, and interests.

HELPING HANDS FOOD PANTRY leaders decided pantry clients needed access to healthier foods. Review of food procurement and display practices led to a new policy allocating **\$1,000** of pantry discretionary spending for **LOW-FAT DAIRY OR FRESH PRODUCE.**

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Boone County

Health and Human Sciences

Local Impact

In 2024, a single Building Strong Families session helped a father reconnect with his teenage son after months of conflict. This is just one of the 3,257 lives impacted across Missouri through programs addressing mental health, youth resilience, and family communication, generating an economic impact of over \$682,232. From Saline County youth learning resilience at summer camp to Boone County families strengthening self-esteem, these programs create lasting positive change in Missouri communities. By fostering mental wellness, strengthening families, and empowering youth, these programs create long-term benefits for Missouri communities. Continued support ensures these efforts grow, transforming even more lives in the year ahead.

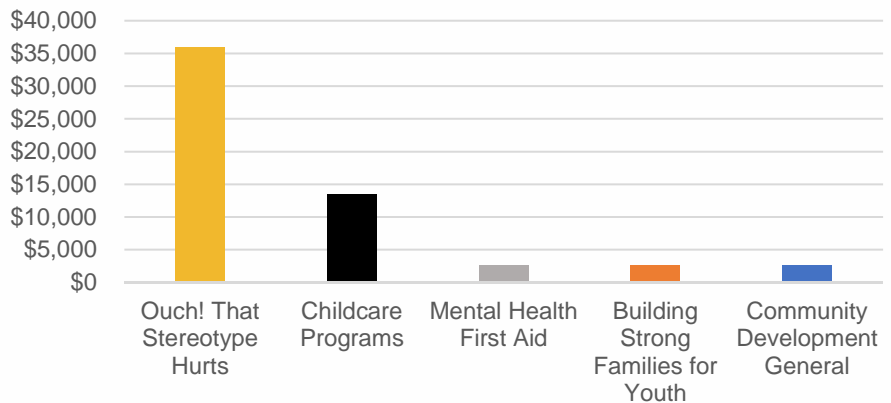


58%

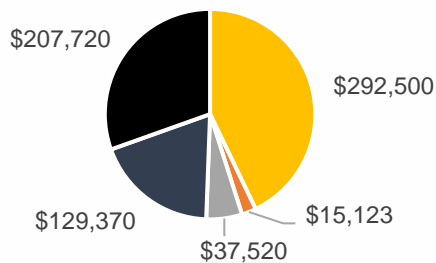
of ag community members accessing teletherapy in 2024 were from Boone, Cooper, Howard, Moniteau, and Morgan counties. Free One-On-One Counseling Build coping skills with confidential counseling from a trusted source who knows ag.

573-882-4677

Economic Impact for Boone County

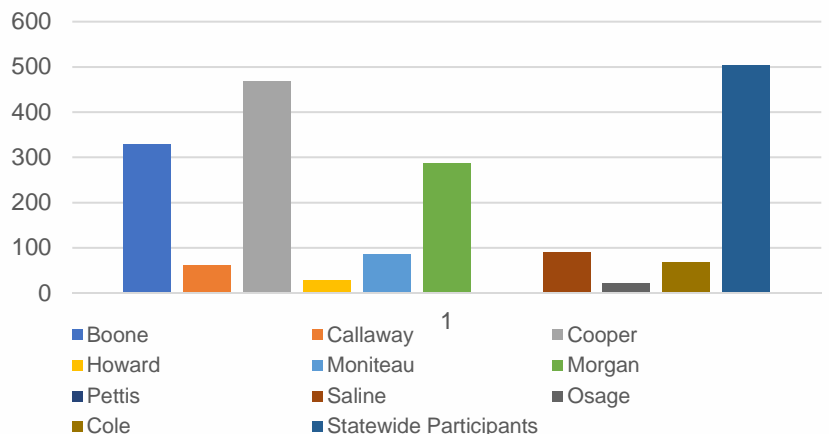


Economic Impact by Program 2024



- Building Strong Families
- Matter of Balance
- Ouch! That Stereotype Hurts
- Childcare
- MHFA (Mental Health First Aid)

Participants By County 2024



Boone County

Health and Human Sciences

Profiles and Stories

Supporting Families Through Education: Building Strong Families

Tina Edholm delivered the **Building Strong Families** program to **564 participants** statewide, focusing on improving parenting skills. A memorable activity used paper dolls to explore how life experiences, such as bullying or neglect, can harm a child's self-esteem. Participants brainstormed ways to repair self-esteem, such as giving praise and setting achievable goals, symbolized by taping the doll back together.

"This program taught me how to communicate with my teenage son. For the first time in months, we had a calm and meaningful conversation. – *anonymous Building Strong Families Howard County 2024*



"I didn't know I had so many good things about me. This activity made me feel proud of myself."
– *third-grader YMCA, Kids and Self-Esteem 2024*

Empowering Youth Through Resilience

Across Missouri, **713 youth** developed leadership and life skills through programs like Heit's Point Summer Camp and YMCA activities. A camp counselor noted, "*The kids learned how to work together and express their emotions constructively. It's amazing to see their growth.*" These programs not only teach valuable skills but also foster resilience and teamwork, preparing youth for future success.



Promoting Mental Wellness

By equipping 190 participants with skills to recognize and respond to mental health crises, **Mental Health First Aid (MHFA)** strengthened workplaces and community support systems across Missouri. One participant shared, "*This training gave me the confidence to help someone in need.*" These efforts created a ripple effect of resilience and well-being, with an estimated economic impact of **\$32,300**, fostering healthier, more connected communities.

"This training gave me the tools to support a colleague during a mental health emergency. I feel more confident in my ability to help."
– *anonymous MHFA participant, Callaway County, 2024*



**A MATTER OF
BALANCE**

MANAGING CONCERNS ABOUT FALLS

"I didn't realize how much fear of falling was holding me back. Now, I feel ready to enjoy activities I used to avoid."

– *anonymous participant, MOB 2024*

For older adults, maintaining independence is life-changing. Through A Matter of Balance, participants gained practical tools to reduce fall risks, build strength, and improve confidence. This program not only enhances quality of life but also generates an estimated economic impact of \$37,520 by reducing fall-related medical costs

Boone County

Health and Human Sciences

Profiles and Stories

SNAP Ed Annual Report 2024

The Supplemental Nutrition Assistance Program Education (SNAP-Education or SNAP-Ed) brought \$11,145,237 in federal funds to Missouri. The funds support engagement with 74,864 Supplemental Nutrition Assistance Program (SNAP) recipients and eligible citizens of Missouri who learned about being active and healthy eating on a budget. This year we had 1,164,143 indirect educational contacts through newsletters, health fairs, food pantries, and the Show Me Nutrition helpline.

343,230 direct and indirect contacts were made in Boone County.

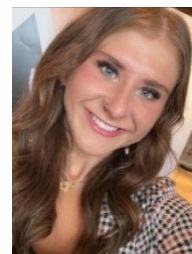
Participants in SNAP-Ed learn the importance of making healthier meals and snack choices, eating breakfast more often, are more willing to try new foods, increase their physical activity, and make healthier food choices. Those who practice healthy eating and are physically active are more likely to contribute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

Nutrition Program Associates Serving Boone County



Sandra Zapata –based in Boone County Extension Office



Kelly Rich, Alli Freyer and Emily Blaue – based in the Family Impact Center

Boone County

Health and Human Sciences

Profiles and Stories

Program locations in Boone County:

Schools	Agencies
Blue Ridge Elem.	Armory Sports
Cedar Ridge Elem.	Boone County Family Resources
Rock Bridge Elem.	Boone County Juvenile Justice Center
Eliot Battle Elem.	Burrell-Phoenix Clinic
Fairview Elem.	CMCA-Foster Grandparents
Head Start Bear Creek	Fun City
Centralia Head Start	Tiger Pantry
Shepard Elem.	Job Point
Jefferson Middle School	McCambridge
Smithton Middle School	Family Impact Center
Locust Street Elem.	Paquin Towers
Mary Paxton Keeley Elem.	Language Tree
Parkade Elem.	True North
Shepard Elem.	Woodhaven
West Blvd Elem.	United Cerebral Palsy Heartland
Worley Head start	Central Food Pantry

Success Stories reported by Kelly Rich:

I just completed a Kids in the Kitchen series with Armory Sports Center. During the series recipes were done in class and then the recipes were sent home.

- At the beginning of class, I always do a review and ask the children if any of them did the recipes that were sent home the prior week with their families. One of the little boys said his family did the Iron protein balls and the peach yogurt smoothie, but they used mango instead. He said his family loved them!

I have been teaching the 'Getting Healthy Through Gardening' class at Job Point from April-Aug. 2024. They have had a garden site there for the past fifteen years however, this is the first year someone from MU Extension has been involved with the gardens. Job Point is a job training site/organization that works with high-risk youth/adults. I completed nine gardening classes with them.

Boone County

Health and Human Sciences

Profiles and Stories

- Our garden was a great success in many ways. The students worked very hard in the gardens and relayed that they learned a lot and enjoyed watching the vegetables grow from week to week. They were also very willing to try fresh vegetables out of the garden, such as, cucumbers, lettuce, kohlrabi ect..I also liked how they worked as a team and got along well when working together in the gardens.

The garden produce was used for their onsite lunch program, sent home with families, and what was left over was sent home with staff.

Our garden produced a total of 87.4 lbs. of produce! The lead teacher from Job Point told me in all the years that they have had this garden, that this was by far the best garden they have ever had! I told him it was definitely a collaborative effort between the staff, the students and myself!



Success Stories reported by Sandra Zapata:

I was teaching First grade at Fairview Elementary School. I taught the Show Me Nutrition curriculum.

- I received an email from a first-grade teacher from Fairview elementary:
- “I wanted to say, “THANK YOU” for the time you gave us for nutrition! The kids absolutely LOVED it and learned so much from you! I even received some positive feedback from families! They shared with me how much their child enjoyed their classes with you and LOVED the food tasting! The children would come home and tell them all about their activities with such great enthusiasm and excitement! They truly took a great day away from the lessons and wished it had lasted longer!

Thanks for all you do for our students, Tiffany”

Boone County

Health and Human Sciences

Profiles and Stories

I was teaching kindergarten at Rock Bridge Elementary School. I utilized Show Me Nutrition curriculum.

- This is the first time that I receive an email through MU Extension Web thanking me for the impact I have made with the nutrition classes.

I am Zaina's mom. She is a kindergarten student in Ms. Robbins class at Rockbridge Elementary School. I just want to thank you so very much for your work with them. You have helped us with Zaina . It has been a struggle with food but for some reason she is adjusting well to your program and trying the new things you offer. It had opened up a door for us to work with her and let her gain confidence in eating again. She has multiple food and environmental allergies since she was a baby, and it affected her so much that she retracted from trying food. She just stuck to 2 or 3 main things and ate them every day. Thank you again.

Success Stories reported by Alli Freyer:

I was doing SNAP Outreach at The Help Center in Mexico Mo; at my table I laid out a variety of reinforcements for participants to choose one item each. There was a woman who came in who had just experienced a house fire and lost everything. We talked for a while about what she was going through, and she couldn't decide which one reinforcement kitchen item she needed most. I decided to give her a Tiger bag and let her take one of each item I had brought. She began to tear up and gave me a hug, she thanked me for restocking her kitchen supplies so she would be able to cook for her family again soon. It was one of the most heartwarming moments of my job yet, and I think about her often.

I have been teaching Show Me Nutrition Food Group Express with four 2nd grade classes, we were on our last lesson and one of the teachers came over to me and told me she had spoken with one of the students' parents during parent teacher conference, and they were asking about the nutrition lessons, because their child had begun requesting new food at home. This made them very happy, and they were able to finally able to get their child to start eating broccoli and humas following our food tastings. I went over to this student following the conversation with the teacher to tell her how happy I was that she was eating some of the foods we tried at home. She was so happy to tell me more, and beamed as she told me her mom says she now has a "sophisticated palette" for a second grader.

Boone County

Health and Human Sciences

Profiles and Stories

Success Stories reported by Emily Blaue:

Shepard Elementary

- As a child, French Toast was always my favorite breakfast food. My parents always knew that by the time my little feet hit the floor each morning, I had a piece of wheat French toast on my mind. That being said, when a 2nd grade student relayed to me, that she had never eaten French Toast before during a Show Me Nutrition class, I was reminded yet again, of the true diversity of human childhood. The 2nd grade student had just moved to the area from the country of Pakistan and was truly excited to take part in our lesson about Grains and of course, making the French Toast. As she took the first bite of her self-made slice, her eyes instantly lit up and a huge smile painted her face. I was lucky enough to have time after class to hear her exclaim that she would absolutely take this recipe home to her parents and make it for her siblings. The next week of class, the 2nd grader could not contain her excitement, as she told me she had made French Toast with wheat bread and low sugar syrup for her family's weekend breakfast. This was truly the first time I had gotten firsthand experience of transferring knowledge about healthy grains as well as a budget friendly, delicious recipe from a 2nd grade student to her family at home. I was so happy to hear this, and even happier to know that in a way, I got to give her family a French Toast smile too.

Pictures from Boone County Programming:



Boone County

Health and Human Sciences

Profiles and Stories

Jeremiah Terrell, M.Ed.
Field Specialist in Human Development & Family Science
terrellj@missouri.edu



Fourth Quarter 2024

Adair, Audrain, Chariton, Clark, Knox,
Lewis, Linn, Macon, Marion, Monroe, Pike,
Putnam, Ralls, Randolph, Schuyler,
Scotland, Shelby, & Sullivan Counties

- Participated in The Gift of Aging Conference in Hannibal, MO
- Completed a three-session Building Strong Families program with Hannibal Clinic in Hannibal, MO
- Participated in Extension & Engagement Week in Columbia, MO
- Participated on a hiring committee for Field Specialist in Human Development & Family Science in Union, MO
- Completed a four-session Taking Care of You program with Northeast Correctional Center in Bowling Green, MO
- Completed a twelve-session Making Money Count program with Homeschool Co-op in Moberly, MO
- Participated in meeting with Shelby County Commissioners in Shelbyville, MO
- Completed a six-session Building Strong Families program with 2nd Circuit Treatment Court in Kirksville, MO
- Completed three Focus on Kids programs in Bowling Green, MO
- Completed one Focus on Kids program in Moberly, MO
- Participated in program promotion meeting with 45th Circuit Treatment Court in Bowling Green, MO
- Completed a three-session Making Money Count program with Moberly Correctional Center in Moberly, MO

Provided programming in
multiple counties in the
northeast region of the state
Partnered with 19 different
community agencies for
program delivery
Over 422 direct contacts with
participants

Program Participant Quote

“Understanding how the communication
process works has opened my eyes to
how I connect with my kids.”
-Building Strong Families participant

Partner Agency Quote

“We have a waiting list of participants for
MU Extension programming.”
-Northeast Correctional Center staff

Upcoming Events

Making Money Count in Kirksville, MO
Building Strong Families in Macon, MO
Focus on Kids in Bowling Green, MO
Focus on Kids in Troy, MO
Making Money Count in Brookfield, MO
Focus on Kids in Moberly, MO

Action Items for Council

Identifying and connecting organizations for
programming throughout the county