



UNIVERSITY OF MISSOURI EXTENSION

Cooper County

2023 Annual Report



**SERVE
MISSOURI.**

**DELIVER
MIZZOU.**

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 **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.

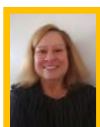
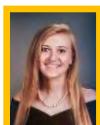
Sincerely,

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

Who we are

Faculty & staff housed in Cooper County

- **Todd Lorenz**
Field Specialist in Agronomy
- **Tina Edholm**
Field Specialist in Human Development
- **Casey Adkins**
Nutrition Program Associate
- **Caroline Herigon**
4-H Youth Program Associate
- **Darlene Kraus**
Office Manager / Bookkeeper



Faculty housed in other counties

- **Elaine Anderson**
Extension Engagement Specialist
- **Gene Schmitz**
Field Specialist in Livestock
- **Kathi Mecham**
Field Specialist in Horticulture
- **Joni Harper**
Field Specialist in Natural Resources
- **Landon Bax**
Field Specialist in 4-H Youth Development
- **Alex Freeburger**
Field Specialist in Nutrition and Health



Council members

- **Kaitlin Flick**, Chair (District 1)
- **Kirt Lewis**, Vice Chair (District 2)
- **Bryan Larm**, Treasurer (District 1)
- **Shelby Twenter**, Secretary (District 2)
- **Anecita Alvizo** (District 1)
- **Olivia Felten** (Youth Representative)
- **Rosemary Fleharty** (Farm Bureau)
- **Mickayla Holliday** (District 2)
- **Danny Larm** (County Commission)
- **Clayton Norbury** (District 1)
- **Audrey Phelps** (District 1)
- **Jason Shadwick** (MFA)
- **Allison Trabue** (District 1)
- **Steve Young** (City of Boonville)

County commissioners

- **George Monk**
Presiding Commissioner
- **Charlie Melkersman**
Eastern District Commissioner
- **Danny Larm**
Western District Commissioner



Budget and more

Appropriations budget

Income	
County Appropriations	76,500.00
Total Income	76,500.00
Expenses	
Salaries/Benefits	56,036.26
Travel	2,899.90
Phone Service	1,388.99
Office Supplies/Service	1,930.92
Insurance	1,982.00
Election Expense	1,112.89
Furniture/Equipment	2,606.10
Other Center Operations	8,542.94
Total Expenses	76,500.00

THE COOPER COUNTY EXTENSION COUNCIL AND 4-H CLUBS WAS CHOSEN AS ONE OF THE TOP TEN ACTS OF NEIGHBORING IN 2023



MU Extension is a unique funding partnership.

Extension funding is a three-way partnership of federal, state and county government. Federal and state money, through the University of Missouri system, pay professional staff salaries, training costs, computers and communication equipment. County funds support the local office, secretarial and youth assistant salaries, staff mileage and council expenses.

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



Local Support

Did you know you can donate directly to Cooper 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.

Cooper County



UM System Footprint in the county in 2023



FY23 county students

191 students

- 137 Undergraduates
- 54 Graduate and professional students
- 139 Full-time students
- 52 Part-time students
- 42 Pell grant recipients (aid year 2023)



County employees and retirees

483 people employed by UM

- 205 Campuses
- 257 MU Health Care
- 21 UM System

161 UM retirees and beneficiaries

UM salary and retirement income: \$31.8 million

UM state tax revenue: \$1.0 million

UM federal tax revenue: \$5.0 million



County alumni

Selected school alumni

- 8 Medicine
- 55 Nursing
- 94 Health Professions
- 2 Dentistry
- 15 Pharmacy
- 1 Optometry
- 10 Veterinary Medicine
- 252 Agriculture
- 67 Engineering
- 21 Law

Alumni teaching K-12

- 61 teachers
- 28.4% of all district teachers
- 6 principals and administrators
- 30.0% of all district principals and administrators



County breakdown

MU

- 161 students
- 923 alumni
- 205 employees

UMKC

- 13 students
- 49 alumni
- 0 employees

Missouri S&T

- 13 students
- 23 alumni
- 0 employees

UMSL

- 4 students
- 13 alumni
- 0 employees



County population: 17,397



County services provided

Health care (FY23)

- 9,121 in-state patients seen at MU Health Care, with \$3.1 million of uncompensated care
- 2 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 2,130 visits to 1,294 patients having ZIP codes associated with the county

Extension (2022)

- 5,028 Total educational contacts from MU Extension to residents of the county, including:
- 3,946 contacts related to productive farming, better gardening, and managing natural resources
- 1,082 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development



Construction projects

- \$66,483 remitted to 3 county vendors, for 3 projects



County properties and offices

MU Extension in: Cooper County

Cooper 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





MU EXTENSION **Serves MISSOURI and Delivers MIZZOU** through credible programs **Missouri 4-H**



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 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.



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.



Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being



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

Missouri 4-H for ages 8 – 18



Legend



Agricultural Growth
& Stewardship



Economic
Opportunity



Educational
Access &
Excellence



Health
& Well-Being

Cooper County

Missouri 4-H

Local Impact

Cooper County 4-H has provided youth an outlet for learning, personal growth, and adult mentorship opportunities for many years. Through the efforts of the six community clubs, 4-H members have been able to plan and implement community service projects, create community partnerships, and promote the importance of youth leadership.

4-H programs are grounded in the belief that youth learn best by doing. Through hands-on projects in areas 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.

Regardless of how youth participate, all 4-H programs include mentoring and career readiness as core elements.

Providing activities like 4-H Day Camp, MU Good Neighbor Week 4-H Pet Supply Drive, a National 4-H Week Banner Walk, Teen Council 4-H Fun Night, and Volunteer Tool Kit Night, helps us continue to grow and improve 4-H for youth in Cooper County. Allowing youth to learn through each experience they try will better prepare them for future personal success and adaptability.

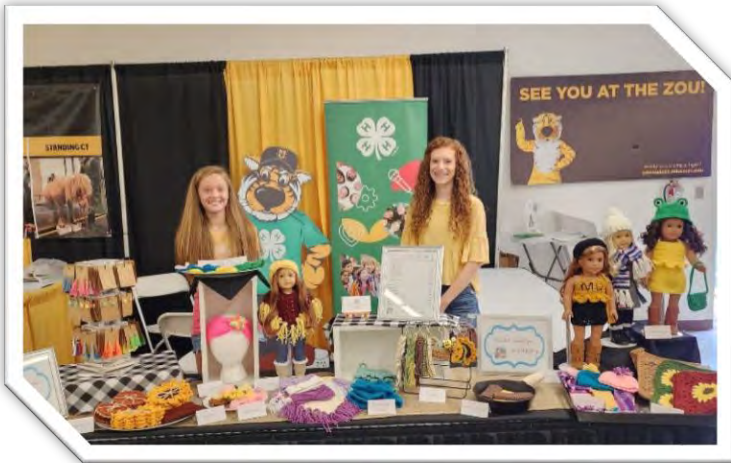
Our 221 4-H members enrolled in 2023 were active and engaged both through county and statewide opportunities. From 4-H Zoo Apprenticeship Day, State 4-H Sportfishing SLAM, 4-H Livestock Judging, State 4-H Fashion Revue, Teen Conference, State Congress, State 4-H Poultry Day, and State 4-H Public Speaking, Cooper County 4-H members shined with citizenship and leadership exploration.



Cooper County

Missouri 4-H

Profiles and Stories



From Cooper County, we are proud to share over 100 members exhibited 4-H Building Exhibits and showed livestock at the Missouri State Fairgrounds. Several other activities our members represented us in were the Show Me Wares booths (pictured), Best of Show 4-H Exhibits, and State 4-H Demonstrations.



During National 4-H Week, each of the six Cooper County Clubs were encouraged to promote this celebration through club contributions, in conjunction with county activities. Prairie Home Helping Hands 4-H Club members helped create a 4-H shadow box in the community school (picture). Family Fun 4-H Club also hosted a public service information night at a community restaurant. Members shared their 4-H experiences with customers.

The promotion of service learning and civic engagement play a vital role in 4-H programs. Cooper County 4-H was able to provide youth the opportunity to work as a team for the benefit of the Second Chance Animal Shelter. Members arrived at the Extension office to help craft fleece tie blankets for the animals in need.

Approximately 400 items were donated to the shelter, with 4-H members having crafted 24 fleece blankets.





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



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.



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 Master Gardener program

enables people of all ages to get in-depth horticultural training and then apply what they've learned to improve their communities and educate others about gardening.



In 2022, almost 4,000 Missouri Master Gardeners completed over 133,000 VOLUNTEER HOURS throughout the state.

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Cooper County

Agriculture and Environment

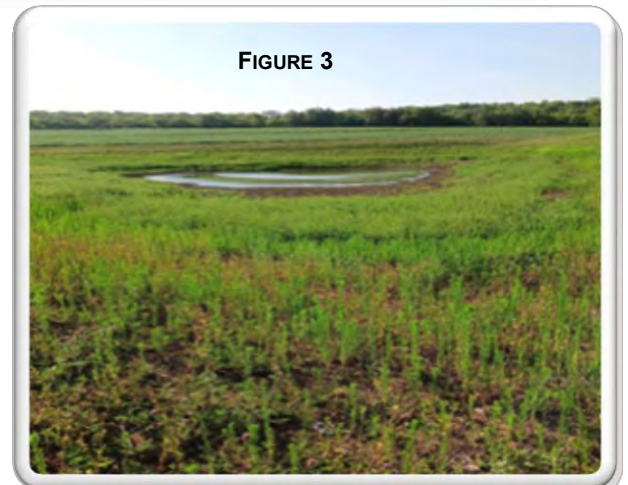
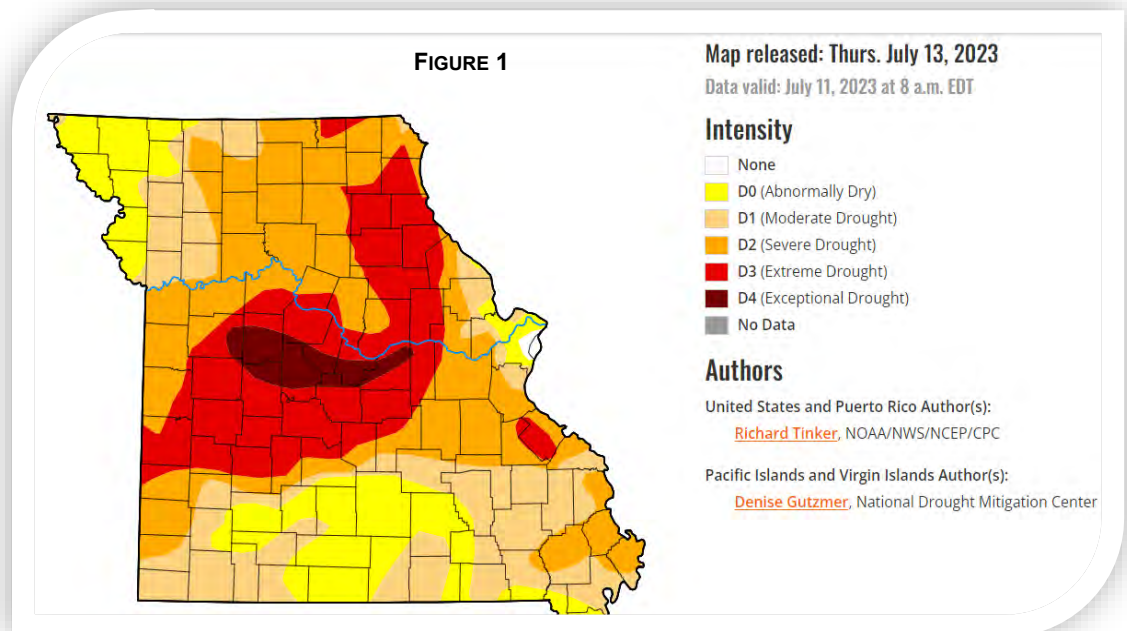
Profiles and Stories

Todd Lorenz, Field Specialist in Agronomy

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 2022 weather extremes where both livestock and row crop production sustained challenges for the entire year continued throughout the 2023 growing season. Forage production was down, and livestock producers were still feeding hay into May as a result. Many were already feeding hay by July and looking to purchase additional anywhere they could.

Many forage/livestock producers rely on baling hay in the spring followed by grazing throughout the remainder of the year. Producers reported that hay production was down 60-80% and corresponding reduction in pasture capabilities. Water sources for livestock were extremely stressed as well. By mid-July, the USDA Drought Monitor finally recognized much of central Missouri in an exceptional drought (figure 1).

Livestock producers were faced with the challenge of not having enough forage to get through the winter and thus liquidated some of the herd. After already culling significantly with the 2022 drought, producers were often faced with liquidating some of their genetics that they had been building. Many producers were both baling and green chopping drought-stricken corn to replace forage losses of 2023, especially in central Missouri. Drought stricken corn provides the possibility of high nitrate level that can be detrimental to livestock (Figure 2). Our offices provided producers nitrate quick tests to help determine the viability of the corn as a forage. In many cases, we diverted potentially harmful situations for producers intending to feed livestock without proper handling of the forage. Additionally, water supplies were severely limited in this drought and some producers were forced to haul water (Figure 3).



Cooper County

Agriculture and Environment

Profiles and Stories

With all those challenges, while still well below average, the row crop yields turned out better than many producers' early predictions. The rainfall total was extremely spotty and hit or miss. It takes a great caretaker to survive the ever-changing complexities that production agriculture provides to these stewards of the land.

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 pest and pesticide management but will also learn appropriate techniques of using that information to build efficient integrated pest management systems. 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. Those who chose to fill out a survey at the Private Pesticide Applicator Trainings in counties that I serve represented over 125,000 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 63 producers from Cooper County who attended the Pesticide Applicator Program this year.

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



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, wasted money, physical injury and environmental degradation from soil erosion or misuse of pesticides. 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 216 soil samples from Cooper County producers submitted through our laboratory this year.



AREA FARM SAFETY DAY FOR THE YOUTH ON ATV/UTV SAFETY

COOPER, BENTON, MORGAN, AND MONITEAU COUNTIES



Cooper County

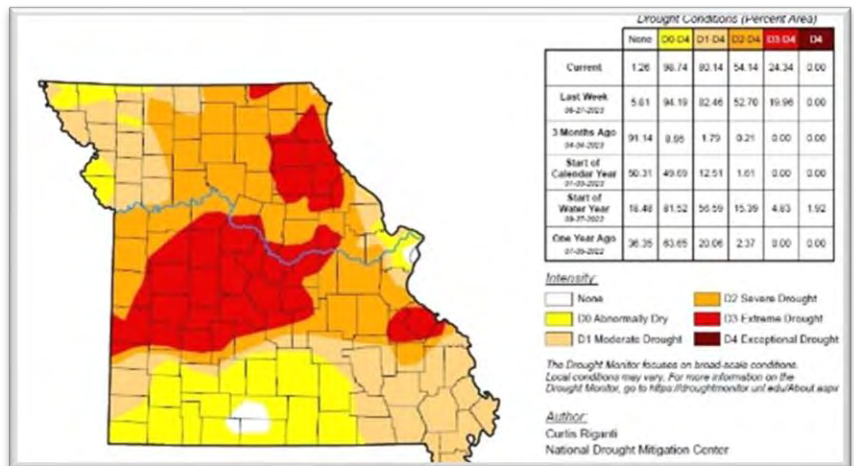
Agriculture and Environment

Profiles and Stories

Gene Schmitz, MU Extension Field Specialist in Livestock

Assigned Counties: Benton, Cooper, Hickory, Miller, Moniteau, Morgan, and Pettis. Additional counties served via direct contacts or through various programs: Bates, Boone, Polk, Greene, Johnson, Cedar, Osage, Henry, Howard, Wright, Livingston, Cole, Holt, Vernon, St. Clair, Saline, and St. Genevieve.

A major drought continued during 2023, resulting in limited forage availability for many livestock producers. Concerns about nitrate levels in forages, prussic acid levels in forages, alternative forages, and winter feeding options were topics that were addressed to help producers cope with drought conditions and limited hay supplies. A major drought continued during 2023, resulting in limited forage availability for many livestock producers. Concerns about nitrate levels in forages, prussic acid levels in forages, alternative forages, and winter feeding options were topics that were addressed to help producers cope with drought conditions and limited hay supplies.



Over 400 individual contacts were made in the areas. The Alliance for Grassland Renewal is an organization comprised of universities, governmental agencies, private companies, and forage producers. The mission of the Alliance for Grassland Renewal is to reduce or eliminate the negative effects of toxic tall fescue on the livestock industry through education and outreach, industry led quality control standards, and incentives, while pursuing new technologies and techniques. I was involved in teaching during the following educational efforts:

1. Face-to-face renovation workshops in Mt. Vernon, MO and Huntsville, AL.
2. Virtual training for Extension agents and other forage educators with 107 individuals from across the Fescue Belt participating. Following the training, participants received access to a short presentation they can use at local meetings when requested to provide a program.
3. The renovation school was adapted to a special projects class for undergraduate and graduate students in Ukraine. Fifty-two students from three universities (Podillia State University, Podillia Institute of Fodder and Agriculture, and Uman National University of Horticulture) enrolled in this special projects class. I continued participating in a project to study internal parasite loads and efficacy of dewormers in cattle. Fecal samples from 12 herds on seven separate farms in Pettis and Benton counties were collected before and after deworming. Results are still being evaluated.



4-H youth showing market animals at local fairs and the state fair are required to attend Show-Me-Quality Assurance training. I provided training for 99 youth from six counties during 2023.

Cooper County

Agriculture and Environment

Profiles and Stories

Kathi Mecham, Field Specialist in Horticulture


Covering Counties in Northwest, Northeast and West Central Regions

Master Gardener Program

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

Master Pollinator Steward

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



**TASTE TESTING
ELDERBERRY JUICE WITH
A MISSOURI GROWER AT
THE CONFERENCE**

Great Plains Growers Conference

A small fruit and vegetable growers conference was held in St. Joseph. For over 25 years MU Extension specialists have teamed with five other states to bring participants the most up-to-date research and practical knowledge from experienced growers. Participants and exhibitors return every year to see old friends and make new ones. There were over 250 attendees in 2023. Topics include:

- Trees and Small Fruits
- Organic Production
- Business Development
- Cut-flower Production
- High Tunnels
- Pest Management

Horticulture Insects and Disease Identification

Through pictures, discussion and site visits, I answer the question, ‘what’s wrong with this plant/?’ throughout the year.



UPPER LEFT:
FIREBLIGHT ON
PEAR TREE



UPPER RIGHT:
APHIDS ON A
MILKWEED PLANT



LOWER LEFT:
TOMATO WITH
HERBICIDE DAMAGE

LOWER RIGHT:
MONARCH
CATERPILLAR
SUNNING ITSELF
ON A COMMON
MILKWEED PLANT



Statewide Horticulture Programs

- **Horticulture Town Hall**
MU Extension specialists address lawn, garden, disease and insect questions during the free hour-long virtual sessions every week. Listeners submit questions and hear brief sessions on timely gardening topics.
- **Garden Spade Newsletter**
Over 1,000 residents receive the monthly horticulture newsletter. MU specialists contribute timely articles addressing topics pertaining to the home gardener.
- **Missouri Extension Master Gardener Training**
The course was offered in Cass, Johnson and Lafayette counties. Graduating interns learned about soils, insects, vegetable and fruit production, lawn care, and more. They will become active in local chapters and contribute to the program’s mission, “Teaching Other to Grow”.



Cooper County

Agriculture and Environment

Missouri Master Gardener Program

Boonslick Master Gardeners - Cooper County MU Extension

The Master Gardener program promotes and raises public awareness of the University of Missouri Extension as a source of unbiased, research-based gardening information. Through activities such as MU Extension hotlines or answer services, workshops, speaker's bureaus, garden show booths, and demonstration projects, Master Gardeners provide gardening information to thousands of Missourians each year.

To become trained as a Master Gardener an individual must complete a 30-hour core training course. Core training is offered both in person and online. The Master Gardener trainee is then required to give 30 hours of volunteer service back to the community in approved MU Extension activities.

THE BOONSLICK MASTER GARDENER CHAPTER RECEIVED A GRANT FOR THEIR CHILDREN'S LEARNING GARDEN FROM WALMART #820

THESE FUNDS WERE USED TO HELP SUPPORT THEIR 2023 GROWING SEASON

**FRONT ROW LEFT TO RIGHT: CAROL COX, CHERI JONES, SALA DRAKE
MIDDLE ROW L TO R: JESSICA MOORE, LINDA GRISSUM, DORA ROWLES, SUSAN TWIDWELL
BACK ROW L TO R: JACKIE SIECKMAN, EDDIE HUDSON PAUL WOOD, JACKIE HICKAM**



FLOWER BED AT THE COOPER COUNTY MU EXTENSION OFFICE MAINTAINED BY THE BOONSLICK MASTER GARDENERS



Calaboose Garden

On March 15 the Master Gardeners helped clean up Calaboose Gardens.

They raked leaves, trimmed trees, and picked up limbs that had accumulated over the winter. All the bulbs that were planted last fall were peaking through the ground.





Cooper County

Agriculture and Environment

Missouri Master Gardener Program

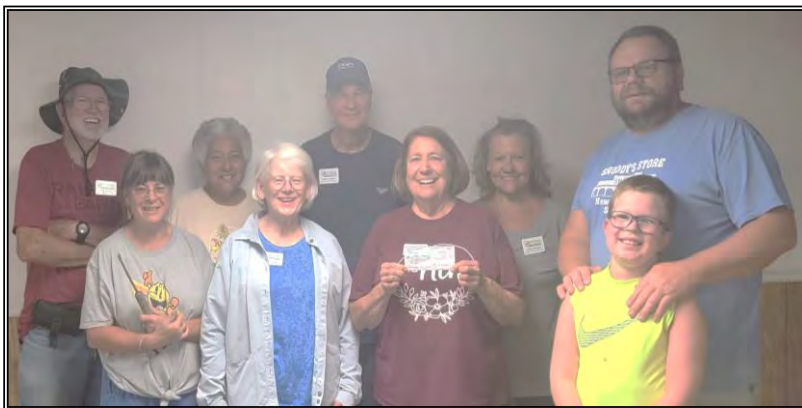
Annual Fairy Garden Event

On April 15 the Boonslick Master Gardeners hosted their annual "Build Your Own Fairy Garden" event in the garden department in Walmart.

Eight Master Gardeners helped children choose a planter, plants, and fairy garden statues and toys. The event was held from 11 a.m. to 1 p.m. with 38 children building fairy gardens. Walmart was our co-sponsor. They provided the soil while the Master Gardeners provided everything else. This is a very big event for the Boonslick Master Gardeners that they look forward to every year.



On June 20 the Boonville Lion's Club presented the Boonslick Master Gardener Chapter a check for \$500 in support of the Children's Learning Garden program.



Thank you, Boonville Lion's Club, for your continued support of the Children's Learning Garden.

FRONT ROW LEFT TO RIGHT: SALA DRAKE, CAROL COX, JACKIE HICKAM, MASON BURNETT

SECOND ROW LEFT TO RIGHT: PAUL WOODS, DORA ROWLES, EDDIE HUDSON, LINDA GRISSUM AND PRESENTING THE CHECK LION'S CLUB MEMBER SCOTT BURNETT

Boonville Farmer's Market Plant Sale

On May 13 the Boonslick Master Gardeners held a plant sale at the Boonville Farmer's Market. In addition, Master Gardener Sala Drake gave a demonstration on how to sharpen your garden tools. All proceeds from the plant sale went towards their Children's Learning Garden program.



Cooper County

Agriculture and Environment



Missouri Master Gardener Program

Heritage Days Kid Zone

The Boonslick Master Gardeners had a booth at the Kid's Zone on the Kemper Campus for Heritage Days on June 24th. Master Gardeners helped kids make their own caterpillars out of swim noodles, pipe cleaners, googly eyes and glue. They also passed out seed packets for the kids to plant. Master Gardeners Jackie Hickam, Sala Drake, Dora Rowles, Melinda Oswald, and Eddie Hudson participated in the event.



Farmer's Market Kid's Day

The Boonslick Master Gardeners set up at the Farmer's Market Kid's Day event on August 5th. Master Gardeners Jackie Hickam, Linda Grissum, Janet Carpenter Smith, Dora Rowles, Susan Twidwell and Eddie Hudson participated in helping kids make caterpillars out of swim noodles, pipe cleaners, and goggly eyes. Jackie gave a demonstration on how to divide your perennials. We also passed out free seed packets that were donated to us.

On May 9th the Master Gardeners held their first Children's Learning Garden session for 2023.

They had 28 students sign up with 21 attending the first evening. This is for students grades kindergarten through fifth grade from area schools. The evening started with the children planting a flower in a pot for Mother's Day. From there we moved to the garden where the children helped plant potatoes, tomatoes, onions, peas, pole beans, and peppers. It was a very busy first session.





Cooper County

Agriculture and Environment

Missouri Master Gardener Program

May 16 Children's Learning Garden: The children made their own gardens by cutting out pictures of flowers and vegetables from seed catalogs and pasting on paper. We also planted the Three Sisters garden using corn, pole beans and squash. Onions, basil, radishes, sunflowers and gourds were also planted. It was a very fun and busy evening.



May 23 Children's Learning Garden: The kids made potato figures as their craft. They also learned about plant parts. The evening concluded with the children planting elephant ears and watering the garden.



May 30 Children's Learning Garden: The kids learned about soil, sun and water and how important each one is to the health of the plant. Master Gardener Sala read a book on Green Gardening. In the garden we planted more basil and radishes. We ended the evening with the kids watering the garden.





Cooper County

Agriculture and Environment

Missouri Master Gardener Program

June 6 Children's Learning Garden: The kids made garden markers for their own garden. We also weeded and watered the garden and placed more straw on our potatoes.



June 13 Children's Learning Garden: The children learned how to make compost using everyday material from around their house. It was a great presentation by Carol. The children really liked this craft.



June 20 Children's Learning Garden: The kids learned about recycling and then made their own fairy garden from recycled items. It was a fun filled evening. In the garden we picked cucumbers, radishes, peppers, and zucchini. The kids always get to take the produce home.





Cooper County

Agriculture and Environment

Missouri Master Gardener Program

June 27 Children's Learning Garden: The kids learned about soil erosion. Master Gardener Paul gave a great demonstration. The harvest in the garden was the biggest so far this year. We picked peas, radishes, cucumbers and zucchini. The parents divided all the produce amongst themselves.



July 11 Children's Learning Garden: The kids had the biggest harvest so far this year at the garden.



July 18 Children's Learning Garden: The kids learned about nutrition. They played vegetable bingo and rode a bike that had a blender attached to it that made smoothies. We also had another large harvest from the garden.





Cooper County

Agriculture and Environment

Missouri Master Gardener Program

July 25 Children's Learning Garden: The kids learned about canning and dehydrating food from the garden in our classroom session. Ms. Jackie and staff provided canned pickles, peach and apple butter, salsa, raisins, and dried bananas. Ms. Linda read a book on canning. We ended the evening harvesting onions, tomatoes, cucumbers, squash, peppers, radishes, and green beans. Another huge harvest. The kids got to split up the produce to take home.



August 1 Children's Learning Garden: The kids made caterpillars out of swim noodles, pipe cleaners, and googly eyes for their craft. We dug potatoes in the garden which is always a fun time. The potatoes in the straw produced the most. Our harvest was very large again. The kids had so much fun picking all the produce and then dividing it up to take home.



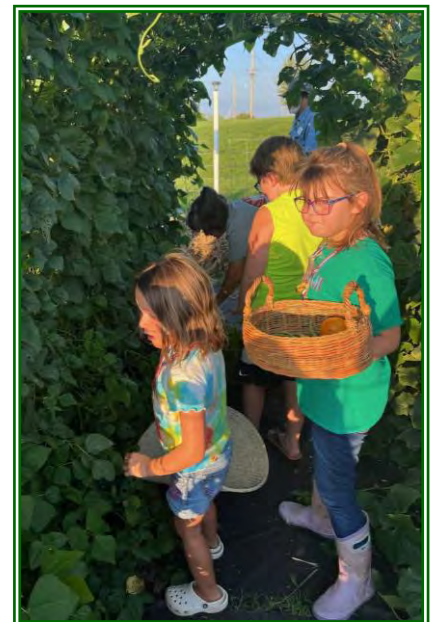


Cooper County

Agriculture and Environment

Missouri Master Gardener Program

Our last session of the 2023 Children's Learning Garden was held on August 8. Ms. Linda gave a wonderful presentation on flower arranging. Afterwards the kids got to make their own bouquets from the zinnias in our garden. We had another great harvest as well. Graduation ceremonies were held as the 2023 growing session came to an end.





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



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

The youth version of the program is designed to support adolescents ages 12-17 facing mental health or addiction challenges, while the adult version focuses on adults age 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



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.



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

Cooper County

Health and Human Sciences

Profiles and Stories



Tina Edholm, Field Specialist in Human Development

Through MU Extension's Farm and Ranch Stress programs and five different field-tested workshops, rural participants are equipped with tools to improve their mental health, are connected to valuable mental health resources, and participants gain access to free one-on-one telepsychology sessions.

Tina Edholm taught **Mental Health First Aid** 15 times to 229 participants from 47 counties in Missouri.. She attended multiple community events to share 988 resources and resiliency information.

Teen Mental Health First Aid (tMHFA)

Offered across six 45-minute sessions to 10th graders during Health at Iberia High School during Spring 2022 and 2023. Course outcomes included:

- **18 out of 52** teens requested a mental health check-in from a mental health professional.
- "More people experience mental health challenges than you think. There's nothing to be ashamed of when seeking help." - tMHFA participant, 2023

These results were presented as a poster at Extension and Engagement Week. Tina will be offering tMHFA at Pilot Grove C-4 School District (Cooper County) as well as Iberia High School (Miller County) during the Spring 2024 semester.



Mental/Behavioral Health & Suicide Prevention		
	MHFA Youth and Adult	MHFA Teen
People Served	229	51
Value of Mental & Behavioral Health Programs	\$170	\$170
Total Value of Mental & Behavioral Health Programs	\$38,930	\$8,670



Cooper County

Health and Human Sciences

Profiles and Stories

Childcare Team Highlights: A Year of Impact!

In 2023, our Human Development and Family Science childcare team trained 397 providers, delivering 794 clock hours across Missouri through engaging virtual sessions. "The environment felt very welcoming, and it was exciting," said one participant. Another mentioned, "I thought it was a great training session and very interesting and inclusive." Tina's dedication shone as she engaged with 305 participants on their certification journey across Boone, Callaway, Cole, and beyond.



Matter of Balance

In 2023, the Matter of Balance program, a crucial element of the University of Missouri Extension's commitment to healthy aging, achieved significant milestones under Tina's guidance. She conducted three courses in Boone and Saline counties, with 29 participants completing the program. Through goal-setting, fall risk reduction, and basic exercises, participants experienced fewer falls, enhancing their ability to maintain independent lives in the familiarity of their homes. This not only contributes to the active engagement of seniors in work and community life but also markedly reduces the burden on our local healthcare system.

Building Stronger Families in Missouri

Human Development and Family Science Specialists virtually extended parenting education across the state in 2023. The team successfully served 91 parents, accumulating a total of 740 hours, directly impacting over 181 Missouri children.

The impact extended beyond knowledge as participants actively applied their learnings:

- Communication Skills: 100% worked to improve their communication skills to be more constructive and positive.
- Relationship Building: 59% made intentional choices to build or repair relationships.
- Family Stress Reduction: 50% made intentional choices that reduced family stress.

Tina Edholm played a vital role by teaching or moderating nine virtual sessions and two eight-hour in-person sessions. In 2023, 22 participants from Cooper, Callaway, and Howard counties attended, earning a total of 160 hours of parenting education.

Boost Your Brain and Memory

The program identifies healthy practices that can help you remember things better, be more organized, pay closer attention, and reduce your stress. Boost Your Brain and Memory was offered at the Cooper County Extension office. Eight participants completed the course. Comments from the course included the following:

- "Very positive group - all wanted to achieve and learn additional positive experiences." - Anonymous BYBM participant, Cooper County, 2023
- "This was an excellent course! Well-presented and full of useful ideas and information. Also very much enjoyed this instructor like everyone else who practiced too." - Anonymous BYBM participant, Cooper County, 2023

Cooper County

Health and Human Sciences

Profiles and Stories

Alex Freeburger, Field Specialist in Nutrition and Health

Chronic Disease Self-Management (CDSM)

This program offers evidence-based information to help individuals boost their self-confidence in managing their own symptoms, improving quality of life, and reducing healthcare costs. The program tools have been shown to be effective for individuals dealing with chronic conditions such as, but not limited to, arthritis, diabetes, and depression. I recently became certified to teach this program and will be working with other specialists, or partner with the Area Agency on Aging (AAA) to promote and provide this program in the different counties I serve (Benton, Cooper, Moniteau, Morgan, and Pettis).

Cooking Matters

A program that teaches shopping strategies to save money, make healthier food choices, and to learn how to make affordable and delicious meals at home. This program can do with many populations, and not just seniors. Several programs within cooking matters are specified for people who are SNAP-Ed eligible. Since the counties I serve have a higher poverty rate, these programs will help the individuals or families to save money on their food as well as be more efficient in the kitchen and reducing the desire to eat out.

Stay Strong, Stay Healthy (SSSH)

A strength training class for older adults with a variety of exercises to improve strength, balance, flexibility, and coordination. I have taught this class in Cooper County. Though a smaller group, the participants stuck with the program until the end. We perform pre and post assessments to see if the participants improved or maintained. Majority of the participants improved, and the remainder participants maintained. This class will benefit many people in the counties I serve, and I aim to offer classes to those counties so people can have an opportunity to improve their overall health and increase their independence.

Economic Indicators:

- 4 participants x \$1,024 = \$4,096 in estimated a annual direct healthcare costs savings

Feedback & Participation outcomes:

- "I learned how to do different kinds of exercise and I feel better."
- "This class made me stronger."
- "I improved my strength and balance."

Farmer's Markets

During the later Summer and early Fall of 2023, I attended several Farmer's Markets in Boonville MO. The primary purpose was to offer free pressure canner testing, as well as additional information about canning, preserving, and general information about Extension. I have had people ask questions about canning, or helped test their pressure canners, to make sure the gauges are accurate, allowing for safe and effective canning.

Educational sessions

- 16 direct sessions
- 2 Farmer's Market events

Educational contacts

- 4 from direct education
- Engaged with 50 ± 10 individuals at the Farmers Market

SNAP-Ed Public Value Statement 2023

The Supplemental Nutrition Assistance Program Education (SNAP-Education or SNAP-Ed) brought \$10,874,798 in federal funds to Missouri. During FY2023, Missouri's SNAP-Ed program reached over 78,000 Missourians through direct classroom education. Each person participated in an average of 6 hours of education totaling over 15,000 hours. In addition, an additional 760,135 persons participated in indirect education. Direct and indirect education resulted in over 1.8 million total contacts with Missourians. A total of 658 participants were from Cooper 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.

Cooper County

Health and Human Sciences

Profiles and Stories

EFNEP Public Value Statement 2023

The Expanded Food and Nutrition Education Program (EFNEP) brought \$1,626,730 federal funds to Missouri. These funds were used to enroll 526 limited-resource families in nutrition education and meal preparation classes, representing 1,926 family members. Additionally, 1,980 youth were enrolled in EFNEP classes. Seventeen of these youth and adult participants reside in Cooper County. Participants in EFNEP learn the importance of making healthier meals and snack choices, eating breakfast more often, trying new foods, increasing their physical activity, and making 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.

In addition to the numbers, Nutrition Program Associate, Casey Adkins shared this success story demonstrating local impact: "In May I taught a session at the Morgan County R-2 Ag Safety Day organized by our Morgan County Extension Office. I taught 15 classes of 3rd, 4th and 5th graders a 15 minute lesson on food safety with an interactive presentation from the Eating from the Garden Curriculum on the importance of washing produce before you eat it, even if you aren't going to eat the outside peel or rind. Student volunteers from each class were asked to cut a banana covered in Glo Germs in half, then additional volunteers peeled and sliced each half. Bananas were then viewed under black light underneath a cardboard box so that students could see how the germs spread from the peel to the part of the banana that would typically be eaten.

Two months after the Ag Safety Day event, I was teaching a Kids in the Kitchen class for a summer program for elementary aged students in Morgan County. We were preparing the Breakfast Banana Split recipe. As one of the students was getting ready to peel and slice her portion of banana, she asked me if the bananas had been washed. She then proceeded to tell me that she took a class at Ag Safety Day where they did an experiment and learned that germs from the peel can contaminate the part of the banana you eat. She said she had never realized that you need to wash bananas before eating them, but now she always does. I told her that I was the one who taught that class (she hadn't recognized me since I was wearing a mask) and reassured her that the bananas had been washed by classmates while we were setting up. It turned out that several of the students in the class remembered the same presentation, including one of the students who helped wash the bananas and took an extra long time to make sure that all potential contaminants we discussed during that lesson were thoroughly washed off."

Schools

- Laura Speed Elliott Middle School
- Clubhouse Head Start

Agencies

- C & R Supermarket
- Boonslick Regional Library
- Neighbors Helping Neighbors
- Cooper County Community Action Agency
- Boonslick Heartland YMCA



CASEY ADKINS REMINDS HANNAH COLE ELEMENTARY SCHOOL STUDENTS TO HAVE THEIR LISTENING EARS ON

Cooper County

Local Community Recognition

Local Impact

2023 Missouri 4-H Hall of Fame

Wilfred “Jerry” and Margaret Monk of Cooper County were inducted into the 2023 Missouri 4-H Hall on August 12 at State Fair Community College in Sedalia, MO. Jerry and Margaret dedicated many hours of service and energy to our local 4-H programs. Both Jerry and Margaret passed in 2012, but their memory lives on in the kindness and life skills they taught to local 4-Hers and their children. Dr. Marla Tobin, Missouri 4-H Foundation Trustee, presented the award to Jerry and Margaret’s son George Monk and their daughter Sarah Friedrich.



LEFT TO RIGHT:
GEORGE MONK, SARAH FRIEDRICH, DR. MARLA TOBIN

2023 Cooper County Century Farm Recipients

Current Owner: Michael & Sarah Janchyshyn
Original Owner: James Janchyshyn, Great Grandfather

Current Owner: Barbara Odneal
Original Owner: Thomas A. & Augusta R. Odneal

Current Owner: Jacob Hayward / Corissa Hayward / Schwartz Farm Trust
Original Owner: Joseph Henry Schwartz, Great Great Grandfather to Jacob Hayward

Current Owner: Ranell S. Sawford
Original Owner: William Warner Sawford, Great Grandfather to Current Owners



LEFT TO RIGHT:

- CHAD HIGGINS, INTERIM VICE CHANCELLOR FOR MU EXTENSION AND ENGAGEMENT, AND INTERIM CHIEF ENGAGEMENT OFFICER, UM SYSTEM
- FARM FAMILY HONOREES: PAIGE DAVIS, DEANA DAVIS, DANNY DAVIS AND GRACIE IMHOFF
- ROB KALLENBACH, MU ASSOCIATE DEAN OF EXTENSION AND SENIOR PROGRAM DIRECTOR OF AGRICULTURE AND ENVIRONMENT

2023 Cooper County State Fair Farm Family

The Danny and Deana Imhoff family of Bunceton were among the families honored during the 66th annual Missouri Farm Family Day, August 14, at the Missouri State Fair.

The Imhoff family was selected as the Cooper County Missouri Farm Family by University of Missouri Extension in Cooper County and the local Farm Bureau. The family includes Gracie Imhoff and Paige Davis.

Each year the fair sets aside a day to recognize farm families from across the state that are active in their communities, involved in agriculture, and/or participate in local outreach and extension programs such as 4-H or FFA. The annual event is sponsored by five partner agencies: the Missouri Farm Bureau; the Missouri Department of Agriculture; the Missouri State Fair Commissioners; the MU College of Agriculture, Food and Natural Resources; and MU Extension.



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