



UNIVERSITY OF MISSOURI EXTENSION

Randolph County

2020 ANNUAL REPORT





Office of Extension
and Engagement
University of Missouri

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

108 Whitten Hall
Columbia, MO 65211

PHONE 573-882-2394

EMAIL stewartmars@missouri.edu

December 1, 2020

Dear county commissioners and friends of MU Extension,

Few of us have experienced a year quite like 2020. The COVID-19 pandemic has brought each of us so many unforeseen professional and personal challenges. Yet, as difficult as the last months have been, they have also called us at University of Missouri Extension and Engagement to think about our work differently and find new ways to serve and respond to Missouri's needs.

We are working harder and more innovatively to develop local and statewide partnerships and collaborations that help us improve lives, communities and businesses across the state. Through our four UM System universities, we are working to expand our state's broadband access and support statewide efforts to prepare our workforce for 21st century opportunities. This work is key to keeping Missouri's economy competitive and helping people and communities in every part of our state thrive.

We continue to expand and develop tools like the All Things Missouri web portal (<https://allthingsmissouri.org>) that provide a wealth of data local leaders can use to pinpoint county and community needs and plan for coordinated solutions. New COVID-19 tracking tools, for instance, help county health departments accurately assess the local impact of the virus and coordinate targeted responses. A new Missouri Food Finder tool (<https://mofoodfinder.org>) matches consumers with growers and producers to create a market for locally grown foods. The UM System Community Connect web portal (<https://community.umsystem.edu>) showcases the many resources, services and faculty programs available to the community through each of the four universities in the UM System. Please explore and use these tools. Tell us how we can improve them to better serve you.

Whether online or in person, we are committed to working with you to deliver knowledge, resources and programs that best meet your communities' interests and needs. I hope you see the impact of that work in this year's county annual report — just as you see your own hand, as key stakeholders, in making this work possible.

We greatly appreciate your support of MU Extension as partners within your community. As always, I welcome your input on how the University of Missouri can better serve you as we look forward to a brighter year ahead.

Sincerely,

Marshall Stewart, Ed.D.
Vice Chancellor for Extension and Engagement

Who We Are

Faculty and Staff Serving Randolph County



2020 Council Members

Amber Baughman (Chair), Brandon Krapfl (Vice Chair), Scott Winkler (Secretary), Andrea McKeown (Treasurer), John Truesdell (Presiding Commissioner), Maria Moyer (elected), Troy Link (elected), Travis Mitchell (elected), Betty Mayo (FCE), Shirley Slusing (Master Gardeners), Rachel Grime (elected), Barb Riley (EXCEL), Jenny Cummings (elected), Matt Douglas (City of Moberly), Linda Bondy (elected).

Our Extension Council:

The Randolph County Extension Council, comprised of elected and appointed citizens, is a full partner with Missouri's land-grant universities to deliver high-quality education and research-based information that helps people solve real-world problems and take advantage of opportunities. Our council consists of 9 elected positions and 6 appointed members. The appointed members are from the Randolph County Farm Bureau, Randolph County Commissioners, City of Moberly, EXCEL, Master Gardeners, FCE, and 4-H.

Council members;

- ◆ Work with Extension specialists to provide the county educational programs
- ◆ Manage finances of local Extension operations
- ◆ Provide personnel to carry out Extension activities
- ◆ Elect and organize the local Extension Council

The Randolph County Extension Council, backed with the educational resources of the University of Missouri, provides services, programs and classes on a wide range of topics from traditional agriculture and gardening to business development, child care and volunteer engagement, among others.

The Council also engages in many civic and community activities. The Randolph County Extension Council is always ready to improve our community and help the residents of our county.

We would like to thank everyone who has been supportive of MU Extension in 2020. We look forward to an exciting 2021!

Fundraising

Cornhole Fundraiser Tournament in Clark

The Randolph County Extension council held a cornhole tournament in Clark on October 10th at Sayre's park. It was very well attended and helped raise money for the council. Those that attended mentioned that they would like for us to hold one at that location every year.



MU Extension is a unique funding partnership.

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

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



Local Support

Did you know you can donate directly to Randolph County Extension with a gift to be used immediately or as an endowment contribution for long term efforts. Monies put into the endowment are left forever to earn interest with the county office benefiting each year. You can also direct your donation to a specific program such as 4-H or Master Gardeners.



Economic Opportunity

Agronomy Report-Druba Dhukal, Field Specialist in Agronomy

Private Pesticide Applicator Training

This training educates crop producers for safe handling and application of restricted use pesticides. Participants learned about pest identification, economic thresholds and injury levels, emergency planning procedure and the environmental ramification of improper pesticide application. This help to protect and enhance natural resources and water quality in Randolph county and the state of Missouri.

Soil, Plant and Water Sample Test, On-site Farm Visit

Extension office receives soil, plant and water samples from local people and send to soil testing lab. Field specialist in agronomy receives the test report and provide recommendation and interpretation to the clients. Specialists also visit crop, pasture, fruit and vegetable production farms to identify or diagnose the issues and provide research-based management options to the client. Timely diagnosis of issues in the farm helps farmers to save their crops, increase farmer's knowledge and awareness to adopt good agricultural practices (GAP). This helps to increase net farm income by increasing crop productivity and reducing production cost. The increased local economy in Randolph county contributes to the better Missouri state's economy.

Weekly Plant Diagnostic Clinic in field at Clark

During crop growing season, on Friday mornings at the Clark Produce Auction, University of Missouri Extension agronomist Dhruba Dhakal sets up a table, plant posters and a MU Extension sign for a weekly plant diagnostic clinic in field.

Most of the producers from that area bring their plant tissue sample to the clinic when they come to auction, if they have any issues with their crops. From there I try to diagnose the issue at the clinic. Sometimes I have to take pictures and take plant tissue to the plant diagnostic lab, though.

When needed, I rely on help from MU Extension state and regional horticulturists to diagnose farmers' produce questions. For the most part, I try to have a turnaround time of no more than one week for a diagnosis and a list of solutions.

This program helped the local horticultural crop producers to diagnose crop issues on time and manage/control which helped to increase the crop productivity, improve produce quality and increase the net farm income.



Virtual Programs in 2020

Due to COVID-19, most of the MU Extension programs were virtual in 2020. Some of the virtual programs we organized in 2020 were:

- Fall Pasture management workshop
- Garlic production workshop
- Tis the season for holiday plants- talk program
- Forage-livestock weekly townhall
- Horticulture weekly townhall

Monthly County News

Prepared Randolph county monthly news - highlighted the MU extension ag events. Also provided the research based scientific information on field and

forage crop production.

Radio Talks and Newsletter Articles

Prepared radio talks and sent to local radio station about extension ag programs and information related to field and forage crop production in Missouri. Also published few newsletter articles in local newspaper about extension ag programs and information related to field and forage crop production.



Educational Access & Excellence

4-H Clubs, Lyann Ritter, 4-H Specialist

4-H clubs

4-H participants = 168

Seven County 4-H clubs offer long-term educational experiences in which members learn life skills such as decision making, public speaking and working with others. Members learn by doing under the guidance of adult volunteers, who teach projects ranging from computers science and arts to animal science and healthy living. Clubs also involve youth in community service, camping and educational trips.

4-H school programs

4-H participants = 111

County 4-H school programs such as; embryology, Coding, and many STEM

activities are educational experiences that supplement learning in the classroom. Teachers, 4-H volunteers or 4-H staff lead these activities. The most popular 4-H school program in Randolph County is Embryology

Volunteers

4-H members were supported by 89 youth and adult volunteers

Time valued at \$242,000.00.

Volunteers are the core of the 4-H Program. They help to create, support and deliver educational programs and experiences. Missouri 4-H volunteers report contributing on average 100 hours per year to the program. Valuing their time at \$27.20 per hour (Independent Sector, 2019.)

Randolph County in the Midst of COVID-19

Videos

Many videos were delivered via zoom and live stream this past year due to the COVID restrictions and quarantine.

Embryology Program from incubation to hatching and audiences were able to watch the chicks grow

Volunteer Appreciation Zoom

Recognition Day Power Point Presentation was created to replace in person ceremony

Clover Kids Camp in a bag was a big hit Participation was high during the virtual State Shooting Sports Competition

Virtual trainings

Club Meetings

Project Meetings

Club Officer Trainings

Mail

Mail was more popular during the quarantine

Shooting Sports information

Volunteer thank you cards

Major Events Awards

Fun games were played and awards were mailed out as prizes

Online camp or fairs

Many virtual fairs took place via Facebook

Camp in a bag was successful in Randolph County



Educational Access & Excellence

Horticulture- Jennifer Schutter, Horticulture Specialist

Master Gardeners

In 2020, Randolph County Master Gardeners completed 461.25 hours of service and continuing education. Of this, 364 were service hours to their communities with a value of \$9,900.80 using the value of \$27.20 for 2020 per volunteer hour from the Independent Sector. Master Gardeners are required to complete 6 hours per year of continuing education, which totaled 97.25 hours for the Randolph County Master Gardeners. Despite the Coronavirus Pandemic this year, Master Gardeners were involved in many projects including creating and setting up a display table with gardening information at the Little Dixie Library; consulting with the City of Moberly on rain gardens; guest on the KWIX radio greenhouse show; providing online gardening advice; clean-up and maintenance in the railroad garden, and clean-up and maintenance of flower beds at Rothwell Park in Moberly; consultations with the public about gardening and much more.

Missouri Grown-mushroom production workshop

On November 5, a Randolph county resident attended a mushroom production workshop in

Winigan, Missouri, where they learned production methods for three types of edible mushrooms. Each participant inoculated three logs to take home.

Drip Irrigation Tour

On August 20th, 34 people attended a drip irrigation tour at Titus Creek Flower Farm near LaPlata in northern Macon county. They learned how to install a drip system and the advantages of using one to increase profits. Two Randolph county residents attended the tour.

Garden Talk Newsletter

Thirty-six people from Randolph County receive the Garden Talk newsletter each month informing them of timely gardening tips and other important gardening information. The newsletter also includes upcoming horticulture programs and activities.





Educational Access & Excellence

Human Development and Family Science- Jeremiah Terrell, HES Specialist

PROGRAM: BUILDING STRONG FAMILIES

The Building Strong Families: Challenges and Choices program helps families find their strengths, build on those strengths, and learn skills to create stronger families, improve relationships, and increase positive communication. This program had 126 contacts in Randolph County and was done in partnership with Randolph County Caring Community Partnership and Primrose Hill Adult & Teen Challenge.

Participants reported the following after attending:

I learned how to take more time with each individual child.

I realized that each member of my family has a role and responsibility and bring value to the family.

I learned about how to manage my stress level and how to have a family council.

I will organize my bills, and I will spend more time with my family.

PROGRAM: FOCUS ON KIDS

A 2.5 hour class, ordered by state statute, for all divorcing parents with kids still at home. The program reviews the five predictors of positive outcomes for children when their parents' divorce. Through class discussion and viewing video vignettes, parents are reminded of the importance of keeping their children out of the conflict. This program had 27 contacts in Randolph County and was done in partnership with the Randolph County Circuit Court.

Participants learn that:

Avoiding conflict in front of the child improves the child's outcomes.

Open & frequent communication between parents **must** be maintained.

Children need to know: both parents love them & will remain in their lives and that the divorce isn't

the child's fault.

Importance of listening to their children.

PROGRAM: TAKING CARE OF YOU

Taking Care of You is a multi-session program offering practical strategies and experiences to help deal with the stress in life. Managing life's challenges in a healthy way allows you to take better care of yourself and your overall health.

Each week, different topics explored through small group discussion, self-reflection and activities.

Activities of the program are aimed at increasing mindfulness, positive emotions, optimism, resiliency to stress, coping skills, and self care of one's mind, body and spirit.

A rigorous program evaluation showed decreased stress levels and improved lifestyle behaviors.

As a result of the program, participants:

Cultivate positive emotions and resiliency to stress

Discover opportunities in life's challenges

Develop improved responses to stress in terms of their thoughts, emotions and behaviors

Take better care of one's health — body, mind and spirit

This program had 45 contacts in Randolph County and was done in partnership with Douglass Community Services, Show Me Healthy Relationships Program, and Primrose Hill Adult & Teen Challenge.



Educational Access & Excellence

Agriculture and Environment- Jason Morris, Agriculture Business Specialist

Missouri's Fence Law is very misunderstood for a couple of reasons. One, there are two laws in the state and people confuse which law is in their county. Second, landowners that purchase land do not get told nor investigate the law so need to be educated when an issue arises. Seventy-six (76) persons throughout the state attended in person or by zoom in 2020 on the law and how it impacts them as landowners. Additionally, more than 100 questions are received each year on fence and boundary issues throughout the state. Over 90% of attendees recommend this program to others every year. Some of the attendees learn where to find additional resources (MU Extension), what law is in place where their land is located and that there are 2 fence laws in Missouri depending on where the land is located. Several plan to meet with their neighbors to discuss this law within the next 12 months. Plans for the program at multiple sites with social distancing or via zoom are already being planned for 2021.

Farm leases are a popular topic given current cash rent levels and volatile crop prices. Landlords and tenants need to understand the terms and expectations to develop a satisfactory agreement for both parties. There are many issues both farm landlords and tenants need to be aware of and this program addresses these issues. Topics that were covered include class current cash rents in Missouri and trends, which items to discuss and include in a lease, terminating a farm lease – when and how to do it legally, recreational (hunting) leases.

Custom rates cover the cost of machinery, fuel, labor and, occasionally, a product such as lime or bale wrap. The USDA reports that machinery values and labor costs have increased by about 5 percent and 11 percent, respectively, since our last custom rate survey in 2016. Diesel prices have increased by 20 percent in the last three years. This increase in the costs of inputs into custom activities suggest that custom rates should have increased over the past several years.

As in past years, this guide reports the average rate, and the low, mid and high rates reported by

those providing responses. When few responses are averaged, a single response can move the average a lot. Because of the low response rate and the undue influence, a single response may have on the average, this year two new columns are reported for all custom activities: second lowest response and second highest response. By comparing the two lowest and the two highest responses, users can see if perhaps the extreme responses were not representative of the next closest responses. In this situation, the extremes may have unduly influenced the average reported. The lowest and highest responses also give the user an idea of how variable the rates charged for field activities might be.

The Missouri Beef Quality Assurance Program is designed to meet the quality improvement and preconditioning needs of producers, feeders and consumers, and to comply with government food safety policies. Participation in the program increases producer accountability for quality and safety of the product they sell. The final outcome is increased consumer confidence. The Beef Quality Assurance Program proposes an aggressive plan to assert control over Missouri beef products and regain favorable economic status for state beef producers.



Educational Access & Excellence

Calving Clinic-Randolph

Objective: "To provide hands-on learning for cattle producers to help assist with calving."

Topics included parturition (normal and abnormal), calf positions, methods of assistance, neonatal care, colostrum and supplements. Hands-on learning opportunities include chain placement, calf position manipulation, esophageal tube feeding, and body condition scoring.

- ❖ More than 470 participants have participated representing over 20,000 head of breeding beef females, and 125 sheep and goat breeding females
- ❖ Based on the 2019 budget, a 550-pound calf (male and female) will bring an average of \$750. Extrapolating this data to the herd numbers for participants, the potential exists to have a \$1 million additional economic impact per year if every participant saved one calf per year



It's a family affair... Barbara Nelson brought the whole family to the Randolph County Calving Clinic. A multigeneration farm learning and working together to improve calving success. Families that learn together, stay together.

Traction for extraction is applied using calving straps or obstetrical chains. Chains must be placed using a double half hitch on the leg, giving two points of pressure. This decreases the incidence of broken calf legs.



"I got this!" Miss Gwenna Ritter wants to be a veterinarian when she grows up. She was determined to learn and experience all she could during the clinic. A stool was needed for her to be able to reach in the calving phantom. Although she needs to do a little more growing, she is well on her way to success.

Every newborn calf needs colostrum. It is important as the first feed to condition the digestive tract and to give the calf resistance to disease. Disease resistance is provided by the presence of immunoglobulins in the first milk of the dam and the ability of the calf to absorb these antibodies during the early hours of its life.

Program Outcomes & Impacts

- ❖ 100 percent of respondents "agreed" or "strongly agreed" they learned something which would increase their calving success and would recommend this clinic to others
- ❖ 100 percent of respondents "agreed" or "strongly agreed" the hands-on portion was beneficial
- ❖ The following is the percentage of participants who learned three or more informational tidbits for each topic:
 - ❖ Possible presentations of calves: 75 percent
 - ❖ Application of traction: 50 percent
 - ❖ Care for newborn calves: 67 percent
 - ❖ Determination of when to call a veterinarian: 50 percent



Health & Well-being

Tai Chi for Arthritis and Fall prevention

Even though the program was cut a little short due to COVID-19, we were able to get the most out of a program that taught participants how the slow, steady, purposeful movements combined with breathing and mental awareness, can help a body gain strength, balance and flexibility. The continued practice will help participants combat pain from arthritis and reduce the amount of falls we see in older adults.

Diabetes Self-Management

This program allows participants to talk have conversations with others who are working through Diabetes while learning how better to manage it themselves or help with others. We cover things like exercise, nutrition, sleep, medications, goal planning, cooking, and relaxation as actions to take while managing diabetes.

A Matter of Balance

This class shows participants how to prepare their house, talk to family, friends, and doctors, and exercises that are key in fall prevention. The outcome is to improve balance and remove the fear of falling.

Technology 101

In an attempt to ease the community's reservations about using technology when the world seems to be shifting towards it, we offered a one time open class that introduced people to University resources for programming such as Zoom and CVENT.

The continued practice will help participants combat pain from arthritis and reduce the amount of falls we see in older adults.

149 Contacts

Each class met twice a week for 8 weeks showing practice and repetition are key in behavior change

The goal is to prepare anyone with the tools they will need to manage diabetes in a healthy way.

48 Contacts

Each class met once a week for 6 weeks to cover all the helpful information.

Once you remove the fear of falling and have the strength to prevent it, you free your life up.

24 Contacts

Each class met once a week for 8 weeks



Health & Well-being

Community Outreach

Although programming was tough, we were able to make great things happen in the community!



Candace was able to present a video series through Little Dixie Regional Libraries that entitled "Health Myths with MU Extension"

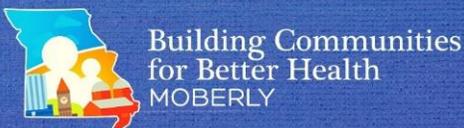


We held the Summer Extension Celebration at Tannehill Park with fun activities such as doing a simple exercise to earn a healthy treat!



All through September, Nutrition and Health set up with the Agronomist at the Amish produce auction to help with crop and canning needs.

We were able to award tobacco free businesses with signs to promote health in the community and help the Library get a wellness room set up for employee use through the Building Communities for Better Health coalition and Mini-Grants.



Randolph County



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

UM System Statewide Footprint

Economic and Community Development Highlights

- In 2019, Business Development Specialists worked with small businesses and entrepreneurs statewide to create or retain 20,283 jobs.



For every dollar invested from 2015 to 2017, the MU Extension Business Development Program has returned \$120 in economic impact for its clients by increasing sales more than \$1.19 billion. For a total impact of \$2.7 billion, the program has generated more than 29,000 jobs and attracted nearly \$347 million in capital investments and \$1.17 billion in government contracts.

- Between FY14 and FY19, UM System brought Missouri more than \$1.09 billion in federal and private research funds, funded primarily from outside the state but spent within the state.



In FY20, UM System was issued 42 patents and filed 41 new U.S. patent applications.

- In FY20, UM System construction projects resulted in a total investment in the state of \$113.4 million.



In FY20, Missouri Telehealth Network brought the expertise of University of Missouri Health Care physicians to underserved areas—45,057 visits from 35,640 patients from all 114 Missouri counties and the City of St. Louis

Education and Training Provided



72,581 police, fire fighters, and medical professionals attending continuing education (2018)



Agriculture and natural resource programs served 138,921 farmers and related businesses (2019)



300,807 youth and stakeholder educational contacts in 4-H clubs, schools, camps and other programs (2019)

Education Highlights

FY20 Financial Aid Awards

In FY20, 69.6% of the UM System's 81,459 students received financial aid totaling \$930.4 million

MU		UMKC	
27,877	\$482.3M	11,320	\$198.7M
students receiving financial aid	financial aid awarded	students receiving financial aid	financial aid awarded
Missouri S&T		UMSL	
7,704	\$130.4M	9,824	\$119M
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 57 higher education institutions (255,000 students), 490 K-12 school districts (860,000 students) and 122 public libraries (serving nearly 3 million Missourians) in 2019

- UM System awarded 50.5% of the 31,708 Bachelor's or higher degrees awarded by Missouri four-year public institutions in 2019-20.
- UM System awarded 41.1% of the 1,815 research doctorates and 27.8% of the 3,234 professional doctorates awarded by Missouri public and not-for-profit private institutions in 2019-20.
- In 2020, UM System's \$31.5 million in National Science Foundation (NSF) grants represented 88.6% of all NSF grants made to Missouri public colleges and universities.

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 2020, based on the best available and most recent data. Data Sources include: Missouri Office of Administration • UM IR • Office of Social and Economic Data Analysis (OSED) • 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



Randolph County



UM System Footprint in the county in 2020



FY20 county students

130 students

- 110 Undergraduates
- 20 Graduate and professional students
- 87 Full-time students
- 43 Part-time students
- 31 Pell grant recipients (aid year 2020)



County employees and retirees

320 people employed by UM

- 106 Campuses
- 206 UM Health Care
- 8 UM System

118 UM retirees and beneficiaries
 UM salary and retirement income: \$14.9 million
 UM state tax revenue: \$471,175
 UM federal tax revenue: \$2.2 million



County alumni

Selected school alumni

- 4 Medicine
- 52 Nursing
- 35 Health Professions
- 11 Dentistry
- 6 Pharmacy
- 9 Veterinary Medicine
- 87 Agriculture
- 53 Engineering
- 23 Law

Alumni teaching K-12

- 78 teachers
- 23.9% of all district teachers
- 5 principals and administrators
- 26.3% of all district principals and administrators



County breakdown

<p>MU</p> <ul style="list-style-type: none"> • 114 students • 691 alumni • 103 employees
<p>UMKC</p> <ul style="list-style-type: none"> • 8 students • 40 alumni • 2 employees
<p>Missouri S&T</p> <ul style="list-style-type: none"> • 6 students • 21 alumni • 0 employees
<p>UMSL</p> <ul style="list-style-type: none"> • 2 students • 17 alumni • 1 employee



County properties and offices

MU Extension in: Randolph County



County population: 24,945



County services provided

Health care (FY20)

- 9,429 in-state patients seen at UM Health Care, with \$3.6 million of uncompensated care
- 2 in-state patients seen at UMSL Center for Eye Care with a statewide average of \$75.55 per patient in uncompensated care
- 4 in-state patients seen at UMKC School of Dentistry with a statewide average of \$56.94 per patient in uncompensated care
- University of Missouri Health Care's Missouri Telehealth Network recorded 1,711 visits to 1,429 patients having ZIP codes associated with the county

Extension (FY19)

- 66,411 Total educational contacts from MU Extension to residents of district counties, including:
- 84 contacts related to productive farming, better gardening, and managing natural resources
- 66,123 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development
- 204 contacts related to starting businesses, developing community leaders, or renewing the local economy