BENTON COUNTY

UNIVERSITY OF MISSOURI

EXTENSION COUNCIL

ANNUAL REPORT



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From the Benton County Extension Council:

2016 presented many new opportunities for MU Extension specialists to interact with Benton County citizens. Specialists serving Benton County provided individual consultations and specialized programming in the areas of Agriculture and Natural Resources, 4-H, Human Environmental Sciences, Community Development, and Business and Industry. In addition to interaction with regional specialists, many Benton County citizens were involved with statewide educational programs through MU's Continuing Education programs.

During 2016, the Benton County Extension Center fielded 932 phone calls and office visits from citizens seeking our assistance. Local specialists held seminars and classes throughout the year dealing with such wide-reaching topics as cover crops, managed grazing systems, food preservation, and nutrition education presented in the county's three school districts. Additionally, information was provided through county newspapers and local radio stations. Specialists also participated on video newscasts on Warsaw BCE-TV sponsored by the Benton County Enterprise newspaper.

As we do every year, we would like to thank all of the volunteers, organizations, businesses, and local leaders for their continued support of MU Extension programming efforts in Benton County. With your help, we have been able to generate local programming geared towards what matters most in the community. Whether it is the leadership and friendships forged through 4-H, the financial strength gained from informed business and personal financial decisions, or the beautiful gardens crafted by local Master Gardeners, MU Extension programming helps nurture and support the entire community, not just those directly involved with the individual programs.

Looking forward, we plan to continue offering relevant programs that will improve the knowledge and lives of the residents of Benton County throughout the years to come.

Cindy Harris Benton County Extension Council Chair Sandi Schmitt Benton County Extension Council Secretary Gene Schmitz Benton County County Program Director

VICE CHANCELLOR'S OFFICE



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January 5, 2017

Dear County Commissioners and Friends of MU Extension:

The past year was a busy one for University of Missouri Extension. As a long-time extension professional and newcomer to Missouri, I have found the support from people like you to be remarkable. Missouri is a special place with a promising future.

Through the efforts of faculty, staff and amazing volunteers, MU Extension connects millions of Missourians with knowledge they put into action in their daily lives. Using a range of learning experiences, we reach people of all ages and backgrounds, in every corner of the state.

In response to direct input received from local councils and the unique nature of each county, extension programs vary slightly across the state. This strength of local flexibility and public engagement enables county-based Mizzou faculty to provide local learning experiences that improve lives and community vitality. For example:

MU Extension business specialists helped local Missouri businesses achieve sales increases of \$186 million while creating or retaining 7,766 jobs.

Helping assure access to health care in local communities, MU Nursing Outreach made it possible for 2,094 nurses keep their skills up to date.

Our 4-H youth development specialists and other extension team members worked with volunteers and community leaders to reach 269,000 youths ages 5 to 18 across the state.

Anticipating the needs of Missouri's aging farm population, extension faculty developed workshops that target estate planning, succession and retirement planning specific to farmers.

These are just a few examples of how Mizzou's commitment to extension and engagement benefitted Missourians this past year.

In the interest of better serving Missourians, we are conducting a statewide needs assessment. It will include extensive input from local communities and stakeholders. It will result in stronger alignment between extension programs and local needs.

I encourage you to read the attached annual report from your county office to gain an understanding of how MU Extension has worked this past year to serve your community.

Your support of MU Extension and our efforts in your community is greatly appreciated. As always, I welcome your input on how the University of Missouri can better serve the people.

Sincerely,

Marshall Stewart, Ed.D. Vice Chancellor for Extension

Warshall Dewast

University of Missouri, Lincoln University, U.S. Department of Agriculture and Local Extension Councils Cooperating

Agriculture and Natural Resources (ANR)







Gene Schmitz, Livestock Specialist Brent Carpenter, Ag Business Specialist Travis Harper, Agronomy Specialist

2016 Benton County Ag Programming Highlights

Backyard Poultry Production

Pesticide Applicator Training

Soil Health and Cover Crop Workshop

Benton County Cattlemen's Association: Leasing, Beef Cattle Management Update

Show-Me-Select Replacement Heifer Development Program

Tri-County Steer Carcass Futurity

Hickory County Cattlemen's Bus Tour

Regional Grazing School



Travis Harper discussing soil testing during the 2016 Benton County Regional Grazing School.





Home Horticulture: County residents seek help from MU Extension to identify plants, insects, and request assistance on obtaining and understanding soil test information for lawns and gardens. This helps ensure correct pesticide and fertilizer use which keeps unwanted contaminants out of surface water.





Over 350 direct contacts with Benton County residents were made by the Ag Extension faculty based in the Benton County Extension Center.

Over 230 additional direct contacts with Benton County residents were made by other MU Extension faculty serving Benton County.

Benton County residents received information on MU Extension programming through KAYQ radio in Warsaw, and news releases in the Benton County Enterprise, Cole Camp Courier, and Lincoln New Era. Additional information was received through our participation in monthly BCE-TV programming.

Missouri Century Farms

The Missouri Century Farm program dates back to 1976 and seeks to recognize and celebrate the families and farms who have survived the test of time and been in operation for 100 years or more. Sponsored by MU Extension, the MU College of Agriculture, Food, and Natural Resources, and the Missouri Farm Bureau, the program continues to honor Missouri's agriculture history and farmers. Two farms were recognized in Benton County in 2016. For Missouri and the community, the Century Farm program is an important venue to promote and preserve the states cultural and economic past for future generations.

Soil Testing Services

Soil testing services offered in coordination with the University of Missouri Soil and Plant Testing Lab helped farmers and gardeners gain valuable information regarding the fertility needs of their land.

In 2016, 64 samples flowed through the Benton County office, testing the fertility and nutrient composition of cropland, lawns, gardens, and poultry litter.

What impact does this have on the participants?

- Proper soil testing helps farmers make effective use of fertilizer to maximize their financial returns.
- Accurate application of fertilizers to soil helps improve soil fertility and reduce the environmental impact of over fertilization.
- Manure and compost testing helps users understand the nutrient composition to aid in optimum use while protecting local water resources.

What impact does this have on the county and Missouri?

By supporting soil testing services in Benton County and Missouri, local citizens are able to better understand the needs of their land and apply amendments to their soil in a judicious and financially responsible way. In applying the correct amount of fertilizer, compost, or manure to their land, users help improve the health of their soil while limiting the negative environmental impacts of over fertilization resulting in healthier crops, trees, and gardens.



Private Pesticide Applicator Training (PPAT)

In 2016, **Travis Harper** provided training and updates for area producers needing to get or renew their private pesticide applicator license.

- By supporting the PPAT program, producers gain skills that lead to improved efficiencies of production, profitability, and sustainability in their farming operations.
- This benefits citizens by improving environmental
- quality through the timelyapplication and improved
- utilization of pesticides incritical watersheds which
- thereby protects and enhancesthe natural resources and water
- quality of Missouri.

Business Development Program (BDP)

Jackie Rasmussen, Business Development & International Trade Specialist



For the 17 counties that comprise the West Central Region, MU Extension Business Development Program counselors provided start-up and management counseling, training and other assistance to 2,347 individuals and companies.

Individuals received assistance in topics ranging from:

Starting a Business
Business & Strategic Planning
Marketing
Management
Doing Business with the Government
Understanding Financial Statements
International Trade

As entrepreneurs and innovators, Missouri's small businesses are becoming a more diverse group that continues to make the state's economy productive. There are approximately 500,000 small businesses in Missouri. Nearly 98 percent of all businesses with employees are categorized as small businesses. In assisting the owners and managers of those businesses, MU Extension contributes to the county's economic development through growth in jobs, sales, innovation, technology development and commercialization.

Across the state of Missouri, the total impact for all businesses assisted by the MO Business Development Program was:

279 new businesses
1,751 new jobs
1,811 jobs retained
\$157,306,766 in increased sales
\$944,855 in government contracts
\$110,460,065 in loans and investments in business
\$205,000 in Research Grant proposals
2,723 clients/companies receiving at total of 22,453 hours of business counseling

As a result of assistance provided by the MU Extension Business Development program businesses in the WC Region in FY2016 generated the following economic impact:

Started 16 new businesses
Created 110 new jobs
Generated sales increases of \$13,222,114
Received government contract awards of \$18,556,219
Secured new investment (loans or owner equity) of \$4,808,256

Businesses participating in counseling or training sessions learned:

Effective tips and techniques to successfully start, manage or grow their businesses

Additional resources and business assistance services that exist that can be accessed to support business development & growth – such as the Missouri Small Business & Technology Development Centers, Missouri Procurement Technical Assistance Centers, the Mid-America Trade Adjustment Center and Workforce Programs.



Human Environmental Sciences (HES)



Tammy Culpepper, Nutrition Program Assistant Cary Creach, FNEP Regional Project Director

Melissa Cotton, Nutrition and Health Education Specialist



In addition to the numbers, local success stories demonstrate program impact.

I teach a program called "Eating from the Garden" in 4th grade classes at Lincoln Elem. School. We plant a lot of different vegetables in their gardens at the school. We had planted sweet potatoes but only got a few to grow, but the teacher I do the programs with has a large garden at home and had plenty of sweet potatoes to bring in for the class to try. She had some I personally had never seen - she had purple sweet potatoes. So we baked the potatoes, both orange and purple, and let the students try both. Many students were surprised that they liked them. One student in particular who is extremely picky about everything we try in the garden surprised me and himself because he actually ate the whole thing. The teacher in that class told me his mom was shocked because he asked for Thanksgiving if they could have sweet potatoes. She said we normally don't but I'm so happy to have him ask for a vegetable that we will be having sweet potatoes this year.

In summary, it has been a successful year in Benton County for FNEP.

University of Missouri Extension (UME) Family Nutrition Education Programs (FNEP) reached 4,333 low-income participants with nutrition education in Benton County during 2016. FNEP provides information on nutrition, food safety, and physical activity for lifelong health and fitness.

Nutrition education for youths provides information in kid-friendly terms and lessons with hands-on activities. Activities include opportunities for taste-testing healthy foods and practicing skills that lead to good health. Education for adults includes nutrition, food safety, physical activity, and food resource management.

During 2016, 2,407 youth and 1,926 adults were served through schools, community groups, and agencies. The following is a list of the locations where participants were served:

Schools:

Warsaw Head Start (WCMCAA)
Cole Camp Elementary
Cole Camp Middle School
Lincoln Elementary
Warsaw North Elementary
Warsaw South Elementary

Agencies:

Children's Palace Benton County Food Pantry Benton County Food Stamp Office Benton County West Central Missouri Community Action Agency (WCMCAA)



Preschool class at Lincoln R2 School

Harvesting tomatoes and peppers from their garden.

I was recently teaching our adult curriculum "Eat Smart Be Active". I had one older lady that was just shocked about how much of the dairy group she still needed. She said she was lucky if she got one serving a day from the dairy group but thought that was really good. We discussed ways to get more dairy in her diet and why. I did not see her for several weeks but at the next lesson she told me she talked to her doctor about this "calcium issue" (her words). She said her doctor pointed out to her that he had been telling her the same thing for years but was glad she finally listened to someone. He gave her some options but told her he was glad she was taking it seriously now. I don't know who her doctor is but was glad he supported our information to her as well.

Family Nutrition Education Program (FNEP)

Evaluation data collected across the entire state reflects the positive impacts that occur in every county with FNEP. Within FNEP are two key programs, each with its own system for evaluating impact: the Family Nutrition Program (FNP) and the Expanded Food and Nutrition Education Program (EFNEP). For youths who participated in FNP, results summarized for the state revealed the following positive impacts: 1) Two thousand, five hundred eight (2,508) teachers gave us feedback. 2) 52 percent have participated in FNP for three or more years. 3) 98 percent (2,461 teachers) reported one or more changes in students after FNP.

Student changes reported by teachers			
Student changes	Percent of teachers who observed each type of student change	Percent of teachers whose students talked about this change	
More aware of nutrition	90%	89%	
Make healthier meal and/or snack choices	67%	80%	
Eat breakfast more often	50%	55%	
More willing to try new foods	80%	80%	
Improved hand washing	83%	79%	
Improved food safety other than hand washing	39%	43%	
Increased physical activity	65%	69%	

FNEP

Teachers' Changes (self-reported)				
Behavioral change	Percent of teachers who made each type of change	Percent of teachers already practicing the behavior	Percent of teachers who model or talk about the behavior in front of students	
More aware of nutrition	51%	48%	95%	
Make healthier meal and/or snack choices	50%	45%	93%	
Eat breakfast more often	36%	55%	82%	
More willing to try new foods	44%	49%	90%	
Improved hand washing	32%	67%	93%	
Improved food safety other than hand washing	34%	60%	77%	
Increased physical activity	39%	45%	87%	
Make/offer healthier food choices for students	52%	38%		

^{*}Evaluation data was collected on students who participated in a variety of curricula from Pre-Kindergarten through Grade 12.

Adults who participated in FNP also made significant improvements in each area addressed.

Dietary Quality and Physical Activity

Indicator	Percent of respondents reporting improvement
Think about healthy food choices when deciding what to feed your family	56%
Use the "Nutrition Facts" label to make food choices	71%
Consume something within 2 hours of waking	53%
Consume the equivalent of 3 cups of milk, yogurt, and cheese each day	47%
Eat more than one kind of vegetable each day	57%
Eat more than one kind of fruit each day	58%
Exercise for a total of 30 minutes each day	43%

Food Safety

Indicator	Percent of respondents reporting improvement	
Let meat and dairy foods sit out for more than 2 hours		
	61%	
Thaw frozen foods at room temperature		
	75%	

Food Resource Management

Indicator Percent of respondents reporting impre	
Plan meals ahead of time	
	68%
Compare prices before bought food	
	53%
Shop with a grocery list	
	59%

Melissa Cotton, Nutrition Specialist

- → Melissa Cotton presented two programs with Tammy Culpepper at the Cole Camp Senior Center. They discussed various types of sweeteners and sodium intake during those sessions.
- Two food preservation programs at Our Farm Store in Edwards, MO were marketed. Food preservation teaches participants how to safely preserve foods through canning, dehydration, and freezing processes.
- A Cooking Matters at the Store at Newman's Country Mart in Warsaw, MO also was marketed. Cooking Matters at the Store is a guided grocery store tour where participants learn about reading nutrition labels, stretching the food budget, comparing unit prices, and making healthy choices when purchasing food for their families.

Michele Kroll, Community Development Specialist

Stronger Economies Together (SET VI)

Stronger Economies Together (SET VI) is an economic strategic planning process to assist regions with ways to create, attract, and retain jobs in rural counties. In-depth data is tailored to the region (describing its current and emerging clusters, comparative economic advantages, and detailed demographic and socio-economic information and tools) to uncover local assets and resources with the help of Extension educators.

The Kaysinger Basin Regional Planning Commission that was established in 1968 is made up of seven counties(Bates, Benton, Cedar, Henry, Hickory, St. Clair and Vernon) in west central Missouri. The region received a SET (round VI) grant in November through USDA Rural Development and University of Missouri Extension to receive step-by-step coaching to guide the design and implementation of a practical and viable regional economic development plan.

Since many rural businesses must now contend with enterprises located across the globe, survival is difficult without linking resources into a more comprehensive economic development plan that builds on the region's unique economic strengths and opportunities. The SET program is intended to help strengthen the capacity of communities/counties in rural America to work together in developing and implementing an economic development blueprint for their multi-county region, one that strategically builds on the current and/or emerging comparative economic advantages of the region.

Data for Decision Makers 17 Counties 65 participants

County profile data and sales tax revenue and receipt data was provided for 17 county commissioners in the WC Extension region along with a packet of resources. A program was given to explain where data can be found and how it can be interpreted at the commissioner's showcase held in December. In addition, personal visits to Camden and Benton counties have been made discussing additional data on sales tax analysis, transfer funds and county comparisons.

Helping local officials and economic development boards connect to data and its meaning can help tell a story or trend overtime. It gives factual, non-biased information to help officials make hard decisions for their communities when budgets are tight and needs are great.



Benton County 4-H



Kay Sparks, 4-H Youth Development Specialist

Pets

Poultry

Photography

Benton 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 aerospace and arts to veterinary science and sport fishing. Through club meetings, camps, and educational trips, Benton County 4-H offers life-long learning opportunities.

Benton County 4-H Projects for the 2015-2016 4-H year:

Aerospace Electricity

Amphibians and Reptiles Entrepreneurship

Filmpaking

Archery Filmmaking Power of the Wind
Arts and Crafts First Aid Public Speaking
Reef Floriculture Rabbits

BeefFloricultureRabbitsBicycleFood PreservationRoboticsBowlingFoodsScrapbookingBreadsForagesSelf-Determined projects

Bucket Calf Gardening Sewing
Cake Decorating Geospatial Sheep
Grains Shooting

Cat Care Grains Shooting Sports
Child Development Horse Riding Sports Fishing

Computer Programming
Computers

Horseless Horse and Horse Knowledge
Hunting and Outdoor Skills

Step Up to Leadership
Swine

Computers Hunting and Outdoor Skills Swine
Country Cured Bacon International Foods Theatre Arts
Country Cured Hams Keeping Fit Veterinary Science

Crochet Knitting Welding

Dairy and Meat Goats Move Across Missouri Wildlife Conservation

Dairy and Meat Goats Move Across Missouri Wildlife Conser Dog Outdoor (Hiking and Camping) Woodworking

2016 4-H in Benton County

Benton County 4-H is a community of 71 4-H members and 31 trained volunteers with five clubs building life skills, engaging in science, and contributing to their community. One of every five Missourians between the ages of 5 and 18 participated in a MU Extension 4-H Youth Development program in 2016.

4-H youth are more connected to college campuses and faculty than their friends. MU Extension 4-H connects 8,700 young people to University of Missouri campuses. Being on campus is a predictor of youth going onto higher education (Hoover, 2006). 4-H youth are nearly twice as likely to expect to go on to college (Lerner and Lerner, 2011).

Youth who earn their bachelor's degree increase annual earnings by \$2 million over their lifetime (NACUBO, 2012). If 50% of Benton County members participating in 4-H events on the MU Campus go on to earning their bachelors, 4-H would help young people in Benton County earn \$71 million more of lifetime earnings.

4-H youth are equipped with the knowledge, skills, attitudes, and health for the 21st century workforce. Missouri 4-H members spend more of their leisure time than peers engaged in projects of interest anchored in science (Khan, 1989). It is no wonder, 4-H members are three times more likely to go in to science related careers than similar peers (Lerner and Lerner, 2008).

Missouri 4-H is growing future scientists. Our nation needs young people prepared to live and work in a world that no one can imagine – a world where there will be jobs that do not yet exist, a world that will be using technology that has not been invented, a world solving problems that have not yet been identified. In Benton County, 26 4-H members were engaged in science related projects and experiences.

Regional, State, and Local 4-H Attendance

Benton County Fair—391 entries, 71 Youth
Benton County Demonstrations—6 Youth
4-H Camp—11 Youth, 4 Counselors

Teen Conference—5 Youth State Contests—7 Youth

Missouri State Fair Exhibitors—14 Youth with 19 exhibits

Youth Development Embryology Program

Embryology

The 4-H embryology program is a classroom supplement designed to provide youth with a hands-on science learning experience by watching pre-incubated eggs hatch over the course of a few days under their care.

During 2016, 119 students from 7 classrooms participated in embryology resulting in 714 hours of learning.

What impact does this have on the participants?

- Students learn about where their food comes from while gaining knowledge of life cycles and embryo and reproductive development.
- By using experimental learning and hands on activities in the classroom, teachers are able to build classrooms geared towards developing student's scientific and observational learning skills.
- Participants developed the social skills necessary to care for and nurture another living being by helping turn and care for the chicks both before and after they hatch alongside their teacher.

What impact does this have on the county and Missouri?

4-H science programming seeks to cultivate an appreciation of the sciences and life early on in Missouri youth. Aligned with state standards, embryology reaches hundreds of students yearly who are able to pass on their knowledge of nutrition and science to their parents thus encouraging a more educated community. A more educated and science literate populace in turn benefits the demands of today's technological and science driven economy.



Comment from teacher:

"It is a fun way to teach every subject. It is very exciting for my students to experience the hatching of a new life."



Focus on Kids

Focus on Kids (FOK) helped five participants from Benton County learn how to better support their children through the divorce and separation process in 2016.

What impact does this have on the county and Missouri?

When you support the Focus on Kids program, the county and state benefit as parents are better able to meet the social and emotional demands of their children. A healthy home environment nurtures children who are more successful in school and are less likely to engage in risky behaviors.

Volunteers create, support, and are part of the 4-H community. Missouri 4-H volunteers responding to a survey report they contribute on average 100 hours per year. Valuing their time at \$21.31 per hour, based on average Missouri incomes, the contribution of Benton County 4-H volunteers was worth more than \$66,061. in 2016! More importantly, these adults serve as mentors for our youth helping them transition into healthy adulthood which is priceless.



The Benton County 4-H/FFA Royalty

King: Cody McNelly Queen:

Samantha Koenke

Wyatt Zimmerschied Princess:

Sierra Koenke

Family Financial Education

Dedra Thomas, Family Financial Education Specialist

University of Missouri Extension's Family Financial Education is the key to enhancing financial literacy. Programs focus on helping families master control of their financial resources, increase their skill in financial decision making, and expand their capacity to set and achieve financial goals.

Educational information and programs are available on the following family financial education topics:

- Credit Repair/Management
- Debt Management
- Budgeting/Savings
- Banking Services
- Predatory Lending
- Healthcare Initiative
- Consumer Education/Buying Skills
- Post-Retirement Planning
- Identity Theft/Consumer Protection
- Decision Making Skills

What impact does this have on the county and Missouri?

When people have control over their finances, they make a positive economic contribution to society as a whole. A community that has individuals and families saving and investing their money, using credit wisely, and avoiding money traps, means that more people live a sustainable life and are able to build wealth on a more consistent basis.



Master Gardener

"Helping others learn to grow" is the mission of the Missouri Master Gardeners. Members work tirelessly giving their own time to help beautify their communities and disseminate unbiased, research based gardening information to the general public.

Our monarch habitat garden now has 60 milkweed plants and many nectar plants, as well. Warsaw Mayor, Eddie Simons, has made a "Monarch Proclamation", to assist the monarch, and other pollinators in their fight for survival.



Local residents chosen as State Fair Farm Family for Benton County

Jim and Julie Bahrenburg and family of Cole Camp were among the 114 families honored during the Missouri Farm Family Day, August 15, 2016 at the Missouri State Fair. The Bahrenburgs were selected as the Benton County Missouri State Fair Farm Family by the Benton County Extension Council and the local Farm Bureau. Each year, the fair sets aside a day to recognize farm families from across the state who are active in their community, involved in agriculture, and participate in local outreach and extension programs such as 4-H and FFA.

The annual event was sponsored by Missouri Department of Agriculture, Missouri Farm Bureau, Missouri State Fair, University of Missouri College of Agriculture, Food and Natural Resources, and University of Missouri Extension.



Hi Lonesome Chapter

The Missouri Master NaturalistTM program is a community-based natural resource education and volunteer service program for adults sponsored by Missouri Department of Conservation and University of Missouri Extension.

The Hi Lonesome Chapter of the Missouri Master Naturalists is based in Cole Camp. Residents of Benton, Pettis, Hickory, and Moniteau counties make up this chapter.

Visit the http://extension.missouri.edu/masternaturalist/colecamp/ website for more information on their activities.



The Hi Lonesome Master Naturalist Chapter club members have increased opportunities for citizens and tourists to enjoy the natural ecosystems of Benton County and enhanced preservation of plants and animals found on natural prairies in Benton County.



The barn owl is consider threatened in Missouri due to loss of nesting habitat. Last year, our group placed nine owl nesting boxes in Pettis and Benton counties and had three broods fledged. With the placement of 13 more boxes in 2016, we hope to improve the number in Missouri.

Other MU Extension Programs and Continuing Education

Office of Continuing Medical Education and Physician Lifelong Learning (CME/PLL)

CME/PLL serves both MU Extension and the MU School of Medicine by educating physicians and other health care professionals and enhancing the standard of health care to improve the health of the people of Missouri and beyond through health education, wellness promotion and health care quality improvement/performance improvement initiatives. Additionally, CME/PLL facilitates and manages health care quality improvement projects for the University of Missouri Health Care system and the MU School of Medicine Springfield clinical campus. In FY 2016, CME/PLL offered 1,879 noncredit programs, courses and educational activities with 31,779 participants. One person from Benton County attended these programs, courses, and activities. Visit http://medicine.missouri.edu/cme/about for more information.

Fire and Rescue Training Institute (MU FRTI)

MU Extension's Fire and Rescue Training Institute (MU FRTI) provides comprehensive continuing professional education and training to Missouri's fire service and emergency response personnel. The institute has a direct impact on the well-being and protection of Missouri's 29,000 firefighters and the 6 million citizens they serve. Courses prepare firefighters for medical emergencies, hazardous materials response and disaster preparedness and mitigation, as well as fires. In FY2016, MU FRTI trained firefighters representing all 114 Missouri counties for a total enrollment of 13,828 fire and emergency responders. Student enrollment numbers rose by 6 percent in FY 2016 as compared to the previous fiscal year. MU FRTI served 1,360 fire departments, organizations or agencies in FY 2016. Seventy-one people from Benton County attended this training. Visit http://www.mufrti.org for more information.

Law Enforcement Training Institute (LETI)

LETI brings state-of-the-art, certified, professional training to law enforcement officers and continuing professional education to a wide spectrum of other criminal justice and public safety professionals. For more than 60 years, the institute has been the state's leader in providing vital training and education services to Missouri's 17,000 in-service personnel and police recruits annually. Working with national, state and local agencies from 31 states, LETI provided basic and advanced animal cruelty investigations training. LETI also conducted 17 armed intruder/personal safety presentations to extension personnel and council members. LETI led several presentations to civic organizations, churches and businesses throughout the state on a variety of topics, including personal safety and armed intruder response. Five people from Benton County attended this training. Visit http://leti.missouri.edu for more information.



MU Conference Office

The MU Conference Office provides high-quality, professional, full-service meeting management for a variety of noncredit educational programs, such as conferences, workshops, seminars and symposia. Whether a meeting is hosted on campus, in out-state Missouri or anywhere in the world, the office's professional staff provides assistance to create the best learning environment for participants. In FY 2016, 12,215 Missourians registered to attend MU Extension conferences for teacher education in math, science and writing; crop management, and agricultural lending, as well as statewide youth leadership programs. — FCCLA and 4-H. **Eighty-eight people from Benton County attended these conferences.** Visit http://muconf.missouri.edu for more information.

Osher Lifelong Learning Institute (OLLI)

The Osher Lifelong Learning Institute (Osher@Mizzou) appeals to the curious and intellectual world of adults 50 and better. Classes are taught by retired faculty, authors, artists and world travelers. Courses cover subjects such as religion and politics, poetry and folklore, arguments before the Supreme Court, writing your memoirs, and the 2017 solar eclipse. In addition to the broad array of classes, Osher hosts social activities and provides service opportunities for members. As the retiree population is projected to double in the next 15 years, Osher is poised to stimulate and engage the minds of seniors. Visit http://osher.missouri.edu for more information.

Veterinary Medical Extension and Continuing Education (VMECE)

Veterinary Medical Extension and Continuing Education (VMECE) focuses on issues that have widespread impact on Missouri veterinarians and livestock owners. Factors such as disease risks, rising input costs and increasing regulations all impact the livelihood of farming operations. The primary goal of VMECE is to provide up-to-date information and consultation to veterinarians and livestock owners so they are better prepared to address these challenges. For FY2016, VMECE provided continuing education for veterinarians seeking continuing education credit to renew their veterinary licenses. Team members also presented information about production-related topics or animal disease at more than 70 meetings across the state. Visit http://cvm.missouri.edu/cont-education.htm for more information.

MTI

The Missouri Training Institute provides continuing education, custom-designed training programs and consulting services for business and industry, public and nonprofit organizations and educational institutions. Training programs include subjects such as human resource management, supervision, management, leadership, team building and other business-related topics. The institute's consulting services include curriculum design, human resources, strategic planning, board development and facilitating meetings and retreats. In FY 2016, 11,997 people enrolled in the institute's 421 programs. Thirteen people from Benton County enrolled in these programs. Visit http://mti.missouri.edu for more information.

MU Nursing Outreach

Keeping Missouri nurses up to date with the knowledge and skills they need to effectively provide care and fully participate in the state's health care efforts is a primary goal for Nursing Outreach. In FY 2016, Nursing Outreach helped 2,094 health care professionals participate in its programs and reached another 881 nurses through co-sponsored multidisciplinary programs. Nursing Outreach serves a predominantly rural health care audience with high-quality, affordable continuing education programs using face-to-face, web-based and online delivery methods. A full 92 percent of Nursing Outreach's Missouri participants reside outside the metropolitan St. Louis and Kansas City areas. One person from Benton County attended this program. Visit http://nursingoutreach.missouri.edu for more information.

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Benton County, Missouri

The County at a Glance



■ Population: 18,961

- □ UM Students: 44
- UM Alumni: 223
- □ UM Employees: 9
- UM Salary & Retirement Income: \$391,305
- □ UM State Tax Revenue: \$10.416
- □ UM Federal Tax Revenue: \$43,737

UM Students from the County in 2016

- 44 students
 - ≥ 31 MU
 - 9 UMKC
 - 3 Missouri S&T
 - ▶ 1 UMSL.
 - 30 Undergraduates
 - 14 Graduates
 - 31 -Full-time students
 - 13 Part-time students

UM Employees and Retirees Residing in the County in 2016

- 9 people employed by UM
 - > 7-MU
 - 1 UM Health Care
 - 1 UM System
- 10 UM Retirees and Beneficiaries

UM Alumni Residing in the County in 2016

- 223 alumni
 - > 156 MU
 - ➢ 46 UMKC
 - 12 Missouri S&T
 - > 9 UMSL
- 89 Selected School Alumni
 - 2 Medicine
 - 8 Nursing
 - 3 Health Professions
 - 4 Dentistry
 - > 6 Pharmacy
 - 11 Veterinary Medicine
 - 25 Agriculture
 - 24 Engineering
 - 6 Law

UM Services Received in the County in 2016

- 1,554 patients seen at UM Health Care, with \$806,421 of uncompensated care.
- 29 patients seen at the UMKC School of Dentistry with an average of \$54 per patient in uncompensated care.
- 14,739 contacts with MU Extension through MU Extension events held in district counties.

UM Alumni Teaching K-12 in the County in 2016

- 13 teachers
- 7% of all county teachers

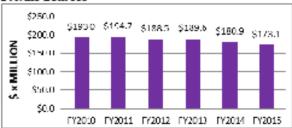
UM Footprint in the County
Benton County MU Extension Center

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Benton County, Missouri

UM Research Expenditures Funded by Federal and Private Sources



Between FY2010 and FY2015, UM brought in more than \$1.1 billion in federal and private research funds.

Economic Development Highlights

- With \$3.2 billion in total revenue, UM would have been the 14th largest publicly held Missouri-headquartered company in the state in 2016.
- With approximately 32,000 employees in the state, UM was Missouri's 2nd largest employer in 2016.
- In 2014, UM's \$147.7 million in federal research expenditures represented 94.5% of these expenditures at Missouri public universities.
- In 2015, UM's \$34.9 million in National Science Foundation (NSF) awards represented 84% of all NSF awards made to Missouri public universities.
- UM earned \$16.4 million in licensing income in 2016.
- UM received 184 new invention disclosures in 2016.
- 3 startups were created around UM technologies in 2016.
- UM was issued 39 U.S. patents and filed 63 new U.S. patent applications in 2016.

Electronic Services to the State in 2016

- The Missouri Research & Education Network (MOREnet) provided internet connectivity and technical services to members that include:
 - 59 higher education institutions with more than 238,000 students.
 - 521 K-12 schools serving more than 838,000 students and 75,000 faculty.
 - 121 public libraries connecting 322 library buildings that serve 5.32 million Missourians.
 - Serving the State Office of Administration, several municipalities and various other eligible organizations.
- MOREnet procured over \$20 million worth of telecommunications services from companies doing business in Missouri.

Financial Aid Provided to UM Students in 2016

- \$916.7 million provided to 58,251 total students
 - \$476.3 million (28,288 students) MU
 - > \$193.7 million (11,144 students) UMKC
 - \$114.1 million (7,722 students) Missouri S&T
 - \$132.6 million (11,097 students) UMSL

Education Highlights

- UM enrolled 44.8% of first-time undergraduates attending four-year public institutions in Fall 2014.
- UM awarded 43.2% of the 1,480 Research/Scholarship Doctor's degrees earned in Missouri in 2013-2014.
- UM awarded 25.7% of the 3,252 Professional Practice Doctor's degrees earned in Missouri in 2013-2014.
- UM awarded 55.1% of the 31,016 bachelor's or higher degrees awarded by Missouri's four-year public institutions in Academic Year 2013-2014.

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 2016, based on the best available data.

Data Sources include: Missouri Office of Administration • UM IR • Office of Social and Economic Data Analysis (OSEDA) • Center for Applied Research and Environmental 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

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Benton County Extension Leadership

Denitor County	Volunteers,			
2016 Benton Cour Finance Summary Income:	•	Benton County Extension Council Members	Extension Facu Staff Based in I County	
Governmental Appropriations	21,580	Officers	Gene Schmitz Livestock Specialist	
Misc. Income	40	Cindy Harris, Chairman Tina Ives, Vice-Chairman Sandi Schmitt, Secretary	and County Program Director	
Reserve Funds	2,477	Rodney Meyer, Treasurer	660-438-5012	
Total Income	<u>\$ 24,097</u>	Elected	Tammy Culpepper Nutrition Program	
Expense		Brenda Arnett Rod Brethower Cindy Harris	Associate 660-438-5012	
Personnel—Salaries	\$15,291	Joel Helland Tina Ives Jim Kramer	Debbie Wilken office Support 660-438-5012	
Payroll Expenses	1,170	Rodney Meyer Sandi Schmitt	000-436-3012	
Travel	3,200	Frances Shockley Marlo Zeitler		
Telephone—local	1,143	Appointed		
Telephone—tolls	263	Tom Black, Benton County Cattlemen		
Advertising	87	Steve Daleske, Benton County Commission		
Supplies/Services	2,676			
Insurance	100	Evonne Lang, Benton County Farm Bureau		
Miscellaneous	167	Paula Spring, City of Warsaw		
Repairs/Maintenance	0			
Capital Repairs	0			

Volunteers, Faculty and Staff

Benton

ulty and Additional Faculty and **Staff Serving Benton** County

Wayne Prewitt

West Central Missouri Regional Director 660-383-1633

Brent Carpenter

Agriculture Business Specialist 660-827-0591

Cary Creach

FNEP West Central Region Project Director 660-383-1633

Travis Harper

Agronomy Specialist 660-885-5556

Kent Shannon

Natural Resource **Engineering Specialist** 573-445-9792

Kay Sparks

4-H Youth Development Program Specialist 660-827-0591

Melissa Cotton

Nutrition and Health **Education Specialist** 660-827-0591

Dedra R. Thomas

Family Financial Education Specialist 660-747-3193

Sarah M. Traub

Human Development & Family Science Specialist 660-882-5661

Michele M. Kroll

Community Development Specialist 573-346-2644

Mission

\$ 24,097

Using science-based knowledge, University of Missouri Extension engages people to understand change, solve problems, and make informed decisions.

University of Missouri Extension does not discriminate on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, marital or family status, or status as a Vietnam era veteran in employment or in any program activity.

Total Expense

University of Missouri Extension Center Benton County 1623 Commercial Street P O Box 969 Warsaw MO 65355 Office: 660-438-5012 Email: bentonco@missouri.edu Visit our web site http://extension.missouri.edu/Benton

