

**University
of
Missouri
Extension**

RELEVANT, RELIABLE AND RESPONSIVE

UNIVERSITY OF MISSOURI
MU Extension

**2016
Callaway
County
Annual
Report**

February 1, 2017



2016 Programs of Distinction

Introduction	
Letter from Council.....	3
Letter from Interim Vice President and Director	4
Human Environmental Sciences	
Family Financial Education	5
Family Nutrition Education Program (EFNEP).....	6
Nutrition Education.....	7
Human Development	8
Positive Youth Development	
4-H.....	9
Agriculture	
Livestock Education	10
Agriculture Business Education	18
Economic Recovery and Jobs	
Business Development	20
MU Extension Continuing Education	21
Callaway County Extension Local Services	23

January 2017

Callaway County Commission
Courthouse
Fulton, MO 65251

Dear Commissioners:

Thank you for continuing to make University of Missouri Extension relevant, reliable and responsive in providing educational programs for the citizens of Callaway County. This annual report outlines the success MU Extension has had in Callaway County in 2016.

The success of University of Missouri Extension in Callaway County depends upon the dedication and support of members of the Callaway County Extension Council. The Council assists staff with planning and implementing programs by communicating the interests and concerns of local citizens. Programming efforts require the best of our partnerships in the state to maximize and apply our resources where the greatest impact can be made.

We want to extend a special thank you to the Callaway County Commission for their continued support of the Callaway County Extension Center.

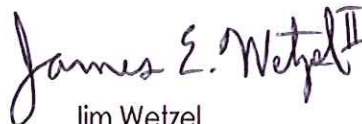
We would also like to thank all of our volunteers, partners and stakeholders who continue to support our efforts in Callaway and in MU Extension.

When you support the University of Missouri Extension, Callaway County benefits as well as the State of Missouri.

Sincerely yours,



Shelley Bryant
Council Secretary



Jim Wetzel
Council Chair



Vivian Anderson
County Program Director

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

University of Missouri Extension does not discriminate on the basis of race, color, national origin, sex, sexual orientation, religion, age, disability or status as a Vietnam-era veteran in employment or programs.

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

Family Financial Education

Vivian Anderson
 Family Financial Education Specialist
 County Program Director



Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>Over 200 Callaway County participants which included:</p> <ul style="list-style-type: none"> ~ Adults experiencing financial stress or crisis ~ Adults in poverty ~ Community leaders ~ Volunteers ~ Local citizens 	<p>~ 400 hours of learning</p>	<p>Evaluation of the various workshops show participants learned:</p> <ul style="list-style-type: none"> ~ strategies to replace financial stress and worry with positive action solutions ~ how having savings in the bank is life changing ~ paying off debt is a form of savings and builds net worth ~ how to check their credit report ~ how to transfer non-titled property ~ about financial education offerings in Callaway County by visiting the financial education website 	<p>~ 85 percent of the participants had written financial goals by the conclusion of their work</p> <p>~ 100 percent found learning about financial management with Extension to be a positive experience and would recommend it to others</p> <p>Participants reduced their financial stress and took positive actions like:</p> <ul style="list-style-type: none"> • Communicated with lenders • Selected lenders carefully • Worked to build net worth • Transferred non-titled property • Paid off debt • Increased their savings for retirement and other critical goals • Made financial decisions less on the basis of fear or greed and with quality, correct information 	<p>The U. S. Treasury Secretary, Tim Geithner, says financial education is essential, not only to the financial security of people in our communities, but also to the economic health of our nation as a whole. "Ensuring that people have the skills they need to make wise financial choices will help us build a strong foundation for our nation's economic future"</p> <p>When you support financial education in Callaway County, participants learn quality financial strategies that result in increased success in reaching financial goals, stronger credit reports and better-informed consumer purchasing decisions. This helps lower costs for public assistance programs, reduce debt discharged in bankruptcy and results in more productive employees. It has become increasingly clear in recent years that individual financial decisions collectively affect the local and state economy</p>



Visit Callaway County's financial education website: www.extension.missouri.edu/callaway and www.missourifamilies.org – "You'll find solutions for better living!" Like us on Facebook at MU Extension Center of Callaway County.

Family Nutrition Education Program



Heather Eoff
Nutrition Program Assistant



Teresa DeFord Petefish
Regional FNP
Coordinator, East Central



Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>University of Missouri Extension Family Nutrition Education Programs (FNEP) reached 2,274 low-income participants served through schools, community groups and agencies</p> <p>Locations where participants were served: Adventures in Learning, Auxvasse Elementary, CMCA Head Start, New Bloomfield Elementary and South Callaway Elementary</p> <p>Agencies served included: Fulton Senior Center, SERVE, Fulton Soup Kitchen and YMCA of Callaway County</p>	<p>~ 4,518 hours of learning</p>	<p>~ Youth participated in nutrition education information presented in kid-friendly terms and lessons with hands-on activities. Activities included opportunities for taste-testing healthy foods and practicing skills that lead to good health</p> <p>~ Adults received education on nutrition, food safety, physical activity and food resource management</p> <div style="background-color: #FFD700; padding: 5px;"> <p><i>After teaching at a daycare in Millersburg, the teacher told me that one of the moms wanted to thank me because I was able to get her child to eat healthful foods. The mother told me that her son would come home and say his teacher told him he should try everything on his plate because my taste buds change. The little boy is only four but has a picture of MyPlate at home and he encourages his family to eat new and healthy foods!</i></p> </div>	<p>~ Evaluation data collected across the entire state reflected the positive impacts which occur in every county with FNEP such as:</p> <ul style="list-style-type: none"> • Participants in FNEP become more aware of nutrition, make healthier meal and snack choices, eat breakfast more often, are more willing to try new foods, increase their physical activity and, in general, make healthier food choices • Respondents reported improvement in making healthier choices when deciding what to feed their family (56%); use the nutrition facts on labels to make food choices (67%); and eat more than one kind of fruit a day (57%) 	<p>FNEP provides information on nutrition food safety and physical activity for lifelong health and fitness</p> <p>Those who practice healthy eating and activity behaviors are more likely to enjoy a high quality of life as an adult and into senior years</p> <p>A healthy labor force is critical to attracting and keeping jobs in Missouri. In addition, this important programming effort serves to reduce health care costs over the participant's lifetime, saving taxpayers money in reduced public health care benefits and insurance premiums</p>



Nutrition Education

Stay Strong Stay Healthy and Cooking Matters



Chris Merritt
Nutrition Specialist

Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
~ 16 Callaway learners	~ 32 hours of learning	<p>~ Stay Strong participants learned the benefit of regular activity and specifically strength training for adults. These benefits include: improved muscle strength, improved bone strength, improved range of motion and improved balance</p> <p>~ Cooking Matters participants learned how to make healthy meals on a budget, how to shop smarter, how to use nutrition information to make healthier choices, and how to cook delicious and affordable meals</p>	<p>~ For the Cooking Matters program, 100 percent reported improved knowledge, skills or understanding of maintaining a healthier dietary intake; and 71 percent reported using skills and recipes learned to improve their nutrition</p> <p>~ Further, 85 percent reported using skills and knowledge to shop healthier and reduce food costs</p> <p>~ For the Stay Strong Stay Healthy program, participants reported a variety of positive changes in their lives. These changes often include: improved balance, improved leg strength and endurance, better ability to handle steps, sleeping better, fewer leg cramps and stronger arms</p>	<p>Learning good food purchasing practices helps Callaway County because families are better able to use their dollars more wisely, which in turn decreases their dependence on local food banks and other local agencies</p> <p>When you support MU Extension's Stay Strong, Stay Healthy program, participants will increase their physical activity and may improve strength, balance and flexibility, resulting in reduced risk for falls, better overall health and greater independence. These health benefits decrease the likelihood of a participant entering a nursing home, which costs on average \$24,455 per year in Missouri. The money saved benefits the community by keeping more discretionary income in circulation locally. It also keeps people actively, independently contributing to society longer</p>



Human Development

Focus on Kids



Kathy Dothage
Human Development Specialist

Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
~ 105 parents from Callaway County	~ 630 hours of learning	<p>~ Objectives and goals of the session include:</p> <ul style="list-style-type: none"> • Convey the importance of sustained, supportive, and nurturing involvement by both parents • Provide information on children's and adolescents' developmental needs, abilities and common reactions to divorce • Suggest specific things to do (e.g., supporting other parent's involvement) and not to do (e.g., criticizing other parent in front of children) • Provide information on community resources 	<p>~ At the end of the session evaluation, the majority of participants found the class worthwhile and helpful</p> <p>~ Quotes from participants included: "Very helpful towards understanding the dive.", "Great educator.", "I think every parent should do this!"</p>	<p>This program was developed not only to fulfill the mandate that any person in court for divorce, motion to modify a decree, or custody/paternity with children 18 years of age and under must participate in a parenting class, but also to reduce the number of parents that need to return to court for motions to modify their original decree. This saves money and time for the parents, the courts and therefore the community. With increased knowledge parents will also be more cooperative and therefore reduce the stress on their children and themselves. With reduced stress children and parents are more productive in school, work and home</p> <p>Parents learn how to nurture and support their children during and after separation and divorce, which leads to more children being raised in a healthy low-conflict environment, which benefits other community members by reducing the need for community health services for children</p>

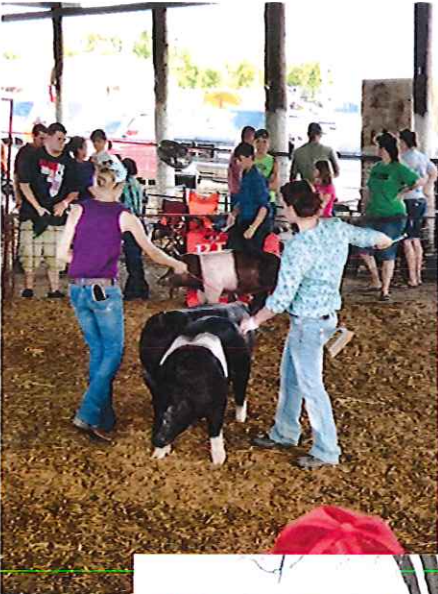


Callaway County 4-H

Sarah Rohrbach
Youth Program Assistant



Jenny Flatt
4-H Youth Specialist



Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>~ 176 4-H members in Callaway County</p> <p>~ 322 youth participating in school enrichment programs</p> <p>~ 95 trained youth and adult volunteers</p> <p>~ 8 Clubs in Callaway County</p>  	<p>~ One of every five Missourians between the ages of five and 18 participated in a MU Extension 4-H Youth Development program in 2016</p> <p>~ The time value of volunteers in Callaway County equates to \$40,489</p>	<p>~ Clubs offer long-term educational experiences in which members learn life skills, such as decision making, public speaking and working with others</p> <p>~ Members learn by doing under the guidance of adult volunteers, who teach projects ranging from aerospace and arts to shooting sports and sport fishing</p> <p>~ Clubs were also engaged in leadership and service experiences in their communities</p>	<p>~ 4-H brings youth and adults together to learn everyday skills with hands-on learning. Activities from animal and plant sciences to robotics, teach 4-H members problem-solving skills which make a positive impact upon their community</p> <p>4-H helps youth:</p> <ul style="list-style-type: none"> • Meet the diverse challenges of today's world • Build self-confidence • Learn responsibility • Make positive decisions 	<p>~ 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. It is no wonder 4-H members are three times more likely to go into science-related careers than similar peers.</p> <p>~ 4-H Youth are more connected to college campuses and faculty than their friends. Being on campus is a predictor of youth going into higher education. 4-H youth are nearly twice as likely to expect to go onto college.</p> <p>~ Missouri 4-H is growing future scientists. Young people in 4-H are three times more likely to be interested and pursue science-based careers than their non-4-H peers.</p>

Youth who earn their bachelor's degree increase annual earnings by \$2 million over their lifetime. If 50 percent of the Callaway County members participating in 4-H events on the MU Campus earn their Bachelor's Degree, 4-H would help these young people to earn \$30 million more of lifetime earnings.

Livestock Education

Show-Me-Quality Assurance

Heather Conrow
Livestock Specialist



Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>~ Total attendance for Show-Me-Quality Assurance training programs was; 262, representing 14 counties</p> <p>~ In Callaway County, 47 learners participated in Show-Me-Quality Assurance training</p> <p>~ Participants also included learners from</p> <p>Audrain (22) Boone (3) Cole (41) Gasconade (7) Howard (1) Lafayette (13) Maries (31) Miller (28) Osage (12) Pettis (3) Phelps (10) Ripley (22) and Saline (22) Counties</p>	<p>~ A total of 786 hours of learning</p> <p>~ Hours of learning by county:</p> <p>Audrain: 66 Boone: 9 Callaway: 141 Cole: 123 Gasconade: 21 Howard: 3 Lafayette: 39 Maries: 93 Miller: 84 Osage: 36 Pettis: 9 Phelps: 30 Ripley: 66 Saline: 66</p>	<p>~ Participants learned what quality assurance is and why it is important to the consumer and producer</p> <p>~ Participants learned how youth market projects fit into the food supply and youth participant's part in assuring a safe food product</p> <p>~ Participants learned what the basic needs of all animals are and how to provide for them</p> <p>~ Participants learned ways of approaching animals safely and how to handle them properly</p> <p>~ Participants learned why it is important to producers to avoid damage to tissue and where the higher value cuts of meat are located</p> <p>~ Participants learned why it is important to identify individual animals and the different types for each species</p> <p>~ Participants learned what biosecurity is and the importance of maintaining records</p> <p>~ Participants learned the importance of ethics and how youth livestock projects develop those traits</p>	<p>~ Youth participants are better equipped with the knowledge needed to produce a safe food product</p> <p>~ Youth participants provide a positive representation to the public regarding animal welfare</p> <p>~ Youth produce a safe, high quality meat product</p>	<p>~ The public is becoming further and further removed from the farm and knowledge of agricultural practices</p> <p>~ Youth livestock exhibitors present to people who are not well acquainted with agriculture and where their food originates. In some cases, providing the only contact the public has with agriculture through the fair setting</p> <p>~ This program has allowed the industry to maintain open markets for show animals to be processed</p> <p>~ Overall, the number of positive drug residue tests in show animals has decreased</p>

Livestock Education

Missouri's Fence Law Program

Heather Conrow
Livestock Specialist



Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>~ Total attendance for the Missouri's Fence Law Program was 31 participants; representing 3 counties</p> <p>~ In Callaway County, 27 learners participated in the Missouri's Fence Law Program</p> <p>~ Participants also included learners from Audrain (2) and Osage (2) Counties</p>	<p>~ A total of 46.5 hours of learning</p> <p>~ Hours of learning by county: Callaway: 40.5 Audrain: 3 Osage: 3</p>	<p>~ Participants learned about the two different fence laws in place in Missouri and what county has which law.</p> <p>~ Participants also learned:</p> <ul style="list-style-type: none"> • Requirements of the landowner under each law • Which portion of a boundary fence each landowner must maintain • Where they can find additional resources and assistance on the fence law in effect in their county 	<p>~ 33 percent of respondents said they would review the actual state statute and printed material on the law and its provisions</p> <p>~ 13 percent of respondents said they plan to discuss the fence law with at least 1 of their neighbors in the next year</p> <p>~ 13 percent of respondents said they will maintain/build a portion of their fence differently as a result of attending this program</p> <p>~ 40 percent of respondents said they plan on continuing things as they currently are</p>	<p>~ In Missouri, livestock sales account for 50 percent of all agriculture products sold</p> <p>~ Knowing which fence law is in effect in the respective county and then following that law helps lower conflicts between landowners</p> <p>~ This knowledge reduces litigation costs. Figuring an average of \$150 per hour for an attorney, this program can potentially save Missouri landowners \$45,900 in legal fees</p> <p>~ When you support University of Missouri Extension programs, such as Missouri Fence Law Program, producers can lower fencing costs of personal fences, in addition to, decrease litigation fees. This in turn can benefit the profitability of their operations, which benefits the county as well as the state of Missouri</p>




Livestock Education

Pearls of Production -- Swine Breakout Session

Heather Conrow
Livestock Specialist



Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take	How Does This Work Make Callaway County and Missouri Better?
<p>~ Total attendance for the Pearls of Production Conference Swine Breakout Session was 8 participants; representing 4 counties</p> <p>~ Participants included learners from: Iron (1) Jefferson (2) Randolph (1) and St. Francois (4) Counties</p>	<p>~ A total of 32 hours of learning</p> <p>~ Hours of learning by county: Iron: 4 Jefferson: 8 Randolph: 4 St. Francois: 16</p>	<p>~ Other breakout sessions with hands-on activities included Beef, Forages, and Small Ruminants</p> <p>~ Swine section topics included: Vaccine Use, Deworming, Needle Choice, Oral Fluid Collection, Giving Injections, Diagnostic Sampling, Anatomy, Herd Health Plan, Pregnancy Diagnosis, and Pork Quality Assurance & Veterinary Feed Directive</p>	<p>~ 100 percent of participants said they would recommend this conference to others</p> <p>~ Based on the extensive program exit survey, the following were the point increases (on a scale from 1 to 5) of understanding for the following areas of focus for the breakout session</p> <ul style="list-style-type: none"> • Vaccine Use: 1.500 • Deworming: 1.167 • Needle Choice: 0.833 • Oral Fluid Collection: 2.667 • Giving Injections: 1.000 • Diagnostic Sampling: 2.333 • Anatomy: 1.000 • Herd Health Plan: 1.400 • Pregnancy Diagnosis: 1.400 • Pork Quality Assurance & Veterinary Feed Directive: 0.666 	<p>~ Programs like this are increasingly relevant in the modern livestock production market. Women are increasingly playing larger roles in livestock production as nearly half of our country's women-operated farms are specialized in livestock production</p> <p>~ When you support University of Missouri Extension livestock programs for female producers, women are more empowered to help on livestock operations and more able to make research-based decisions on a day-to-day basis. Women can then advocate for the agriculture industry as a more informed members of the industry</p>
				

Livestock Education

92nd Annual Soils Crops & Livestock Producers Conference

Heather Conrow
Livestock Specialist



Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>~ Total reported attendance for the 92nd Annual Soils Crops & Livestock Producers Conference was 37 participants and 28 vendors; representing 4 counties</p> <p>~ In Callaway County, 31 learners participated and 28 vendors</p> <p>~ Participants also included learners from Audrain (3) Boone (1) and Miller (2) Counties</p>	<p>~ A total of 260 hours of learning</p> <p>~ Hours of learning by county: Callaway: 236 Audrain: 12 Boone: 4 Miller: 8</p>	<p>~ Participants learned about relevant information from representatives in the agriculture industry and through University of Missouri Extension</p> <p>~ Updates were given by the USDA and the NRCS</p> <p>~ The Central Missouri Meat and Sausage Company presented a live meat cutting demonstration of a ½ hog</p> <p>~ Participants learned where different cuts of meat originate from on the carcass and how the carcass is processed</p>	<p>~ 72 percent of respondents "agreed" or "strongly agreed" they learned something that would increase their profitability</p> <p>~ 45 percent of respondents "agreed" or "strongly agreed" they would make management changes because of the conference</p> <p>~ 97 percent of respondents "agreed" or "strongly agreed" they would recommend the conference to others</p> <p>~ A total of 406 informational tidbits were learned by participants from the 20 vendors and speakers as indicated by participants</p>	<p>~ In Callaway County, crop sales account for 40 percent of all agriculture products sold, and livestock sales account for 60 percent of all agriculture products sold</p> <p>~ In Callaway County, cropland accounts for 51 percent of land use and pastureland accounts for 24 percent of land use</p> <p>~ Callaway County has over 45,000 hogs and pigs, 38,000 cattle and calves, 3,000 layers, and 1,300 sheep and lambs</p> <p>~ When you support University of Missouri Extension programs, such as the 92nd Annual Soils Crops & Livestock Producers Conference, producers are provided the opportunity to gain knowledge and hands on experience with tools and technologies which may increase the profitability of their operations. This in turn benefits the county as well as the state of Missouri</p>

Livestock Education

Pearls of Production – General Session

Heather Conrow
Livestock Specialist



Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>~ Total attendance for the Pearls of Production Conference was 43 participants; representing 18 counties</p> <p>~ In Callaway County, 2 learners participated in the Pearls of Production Conference</p> <p>~ Participants also included learners from Bollinger (1) Boone (5) Camden (1) Cape Girardeau (8) Cole (3) Iron (1) Jackson (1) Jefferson (2) Johnson (2) Madison (1) Moniteau (1) Pettis (1) Randolph (1) Shelby (1) St. Charles (2) St. Francois (3) and St. Louis (1) Counties in Missouri</p> <p>5 participants did not indicate county</p>	<p>~ A total of 236.5 hours of learning</p> <p>~ Hours of learning by county: Bollinger: 5.5 Boone: 27.5 Camden: 5.5 Cape Girardeau: 44 Cole: 16.5 Iron: 5.5 Jackson: 5.5 Jefferson: 11 Johnson: 11 Madison: 5.5 Moniteau: 5.5 Pettis: 5.5 Randolph: 5.5 Shelby: 5.5 St. Charles: 11 St. Francois: 16.5 St. Louis: 5.5</p>	<p>~ Participants learned about relevant topics to female agriculturists from female presenters in the agriculture industry</p> <p>~ Topics included: ATV Safety & Maintenance, Farm to Institution, Farm Safety for Women, and Farm Succession Planning</p> <p>~ The keynote speaker was Erin Brenneman, farmer and farrowing manager at Brenneman Pork</p> <p>~ Breakout sessions with hands-on activities included Beef, Forages, Small Ruminants, and Swine</p>	<p>~ 100 percent of participants said they would recommend this conference to others</p> <p>~ Based on the extensive program exit survey, the following were the point increases (on a scale from 1 to 5) of understanding for the following areas of focus for the program</p> <ul style="list-style-type: none"> • ATV Safety & Maintenance: 0.827 • Farm to Institution: 1.46 • Farm Safety for Women: 1.547 • Farm Succession Planning: 1.781 <p>~ Feedback such as “excellent opportunity to learn about a variety of topics”; “great way to learn new ways/innovation in ag”; “great networking”; “the information provided in 1 ½ days is phenomenal”; “best women in ag conference I have ever attended”; and “we can come together to impact our industry”, were reported</p>	<p>~ Programs like this are increasingly relevant in the modern livestock production market. Women are increasingly playing larger roles in livestock production as nearly half of our country's women-operated farms are specialized in livestock production</p> <p>~ When you support University of Missouri Extension livestock programs for female producers, women are more empowered to help on livestock operations and more able to make research-based decisions on a day-to-day basis. Women can then advocate for the agriculture industry as a more informed members of the industry</p>



November 4 – 5, 2016

University of Missouri | Columbia, MO

Livestock Education

East Central Missouri Cattlemen's Bus Tour

Heather Conrow
Livestock Specialist



Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>~ Total attendance for the East Central Missouri Cattlemen's Bus Tour was 20 participants; representing 6 counties</p> <p>~ In Callaway County, 3 learners participated in the East Central Missouri Cattlemen's Bus Tour</p> <p>~ Participants also included learners from Dent (7) Gasconade (6) Phelps (2) and Warren (2) Counties</p>	<p>~ A total of 700 hours of learning</p> <p>~ Hours of learning by county: Callaway: 105 Dent: 245 Gasconade: 210 Phelps: 70 Warren: 70</p>	<p>~ Musgrave Angus: cattle developed primarily on fescue and selection based on functional cattle which have fleshing ability, eye appeal and are bred to excel in many environments</p> <p>~University of Illinois Orr Beef Research Center: research results on beef cattle nutrition, management, reproduction, genetics, and grazing</p> <p>~Tyson Fresh Meats Beef Packing Facility: showed all aspects of the large scale beef packing facility</p> <p>~ John Deere Harvester Works: a behind the scenes look at one of the most modern and efficient factories in the world</p> <p>~ John Deere Pavilion: the history of John Deere , as well as, the technological innovation of today's agricultural, industrial and forestry equipment</p> <p>~ Drebes Farm: beef replacement heifer development in a modified mono-slope facility</p> <p>~ Linnenbringer Farms: a diversified crop and livestock farm with direct marketing of custom beef</p>	<p>~ 90 percent of respondents "agreed" or "strongly agreed" they learned something which will increase the profitability of their operation</p> <p>~ 45 percent of respondents "agree" or "strongly agreed" they would make management changes because of the tour</p> <p>~ 100 percent of respondents "agreed" or "strongly agreed" the tour was a valuable source of information</p> <p>~ The following is the percentage of participants who learned three or more informational tidbits for each stop:</p> <ul style="list-style-type: none"> • Musgrave Angus: 72 percent • University of Illinois Orr Beef Research Center: 16 percent • Tyson Fresh Meats Beef Packing Facility: 37 percent • John Deere Harvester Works: 37 percent • Drebes Farm: 63 percent • Linnenbringer Farms: 45 percent 	<p>~ In Missouri, livestock sales account for 50 percent of all agriculture products sold</p> <p>~ When you support University of Missouri Extension programs, such as the East Central Missouri Cattlemen's Bus Tour, producers are provided the opportunity to gain knowledge, which in turn can benefit the profitability of their operations, which benefits the county as well as the state of Missouri</p>

Livestock Education

Mid-Missouri Grazing Conference

Heather Conrow
Livestock Specialist



Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>~ Total reported attendance for the Mid-Missouri Grazing Conference was 116, representing 22 counties in Missouri; and 2, representing 1 county in Illinois</p> <p>~ In Callaway County, 15 learners participated in the Mid-Missouri Grazing Conference</p> <p>~ Participants also included learners from: Audrain (1) Benton (1) Boone (6) Camden (1) Carter (1) Cole (21) Cooper (7) Gasconade (5) Howard (5) Jackson (7) Maries (4) Miller (7) Moniteau (7) Montgomery (1) Morgan (2) Osage (14) Pettis (7) Phelps (1) Putnam (1) Scotland (1) and St. Louis (1) Counties in Missouri</p> <p>~ Participants also included learners from: Adams (2) County in Illinois</p>	<p>~ A total of 318.5 hours of learning</p> <p>~ Hours of learning by county in Missouri: Audrain: 6.5 Benton: 6.5 Boone: 39 Camden: 6.5 Carter: 6.5 Cole: 136.5 Cooper: 45.5 Gasconade: 32.5 Howard: 32.5 Jackson: 45.5 Maries: 26 Miller: 45.5 Moniteau: 45.5 Montgomery: 6.5 Morgan: 13 Osage: 91 Pettis: 45.5 Phelps: 6.5 Putnam: 6.5 Scotland: 6.5 St. Louis: 6.5</p> <p>~ Hours of learning by county in Illinois: Adams: 13</p>	<p>~ Participants learned the importance of estate planning and business succession, reasons to plan for disposition of property at death, the different methods to do so and the advantages and disadvantages of each</p> <p>~ Participants learned options for grazing feeder cattle to finish</p> <p>~ Other topics covered included: High Density Grazing, Lease Agreements, Low-Stress Cattle Handling, Post-harvest Forage Physiology, Hoop Buildings for Beef Cattle, Utilizing Feedlot Performance Information on the Ranch, Managing Wildlife on a Production Farm, Stockpiled Tall Fescue Management, and Grassfed & Conventionally Finished Meat Characteristics</p>	<p>~ The following are the percent of respondents who rated the various topics as "Good" or "Excellent":</p> <ul style="list-style-type: none"> • High Density Grazing: 85 • Lease Agreements: 89 • Low-Stress Cattle Handling: 93 • Post-harvest Forage Physiology: 87 • Hoop Buildings for Beef Cattle: 68 • Utilizing Feedlot Performance Information on the Ranch: 100 • Managing Wildlife on a Production Farm: 89 • Stockpiled Tall Fescue Management: 79 • Grassfed & Conventionally Finished Meat Characteristics: 96 	<p>~ Pastureland accounts for 25 percent of Missouri's land use</p> <p>~ Callaway County has over 38,000 head of cattle and calves and approximately 1,300 head of sheep and lambs</p> <p>~ In Callaway County, livestock sales account for 60 percent of all agriculture products sold</p> <p>~ When you support University of Missouri Extension conferences, such as the Mid-Missouri Grazing Conference, producers are provided the opportunity to gain hands on experience with tools and technologies, which may increase the profitability of their operations. This in turn benefits the county as well as the state of Missouri</p>



Livestock Education

Beef Cattle Artificial Insemination School

Heather Conrow
Livestock Specialist



Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>~ Total attendance for the Beef Cattle Artificial Insemination School was 12 participants; representing 9 counties in Missouri; and 2 participants; representing 2 counties in Iowa</p> <p>~ Participants included learners from Adair (1) Howard (1) Jefferson (2) Macon (1) Moniteau (2) Montgomery (2) Nodaway (1) Ray (1) and Shannon (1) Counties</p> <p>~ Participants also included learners from: Greene (1) and Marion (1) Counties in Iowa</p>	<p>~ A total of 154 hours of learning</p> <p>~ Hours of learning by county in Missouri: Adair: 11 Howard: 11 Jefferson: 22 Macon: 11 Moniteau: 22 Montgomery: 22 Nodaway: 11 Ray: 11 Shannon: 11</p> <p>~ Hours of learning by county in Iowa: Greene: 11 Marion: 11</p>	<p>~ Materials presented showed learners why they should be motivated to effect change in their beef herds, giving them economic motivation to implement an AI program</p> <p>~ Participants were provided the opportunity to learn through hands-on exploration the following: palpation, identification of reproductive tract parts and functions, Heat detection, and insemination techniques</p> <p>~ Participants learned information on the following topics: female reproductive anatomy and physiology, AI techniques, heat detection aids and application, estrus synchronization, semen handling, and CIDR use and placement</p>	<p>~ 26 percent of participants had no experience with AI prior to the school</p> <p>~ Prior to attending this school: 73 percent of participants had someone else breed their cows via AI, while 27% had not used AI at all</p> <p>~ Following the school, 87 percent of participants plan to breed their own cows themselves and 13 percent indicated they would use AI but have someone else breed for them</p> <p>~ There was an 18 percent increase in the number of participants who plan to inseminate more than 75 percent of their heifers and a 13 percent increase in the number of participants who plan to inseminate more than 75 percent of their mature cows</p>	<p>~ Using AI, producers can obtain economic advantages over their non-AI counterparts</p> <p>~ University research has shown a range of \$20-\$100 increase in per head premiums when coupled with alternative (grid basis) marketing</p> <p>~ Through the Show-Me-Select program, AI bred heifers brought \$235 more per head than their naturally bred mates</p> <p>~ Extrapolating this data to the herd numbers for participants who took the school, the potential exists to have a \$150,000 or more additional economic impact per year if the class participants continue to utilize AI in their herds</p> <p>~ When you support University of Missouri Extension programs, such as the Beef Cattle Artificial Insemination School, producers are provided the opportunity to gain knowledge and hands on experience with tools and technologies that may increase the profitability of their operations. This in turn benefits the county as well as the state of Missouri</p>



Agriculture Business Education

Ag Lenders' Seminar

(Also presenting were Darla Campbell, Karisha Devlin and Joe Koenen)

Mary Sobba
Agriculture Business Specialist



Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>~ 11 participants from Callaway County</p> <p>~ A total of 95 lenders attended from 18 Missouri counties, plus Iowa and Illinois at the Kirksville, Hannibal, and Mexico</p>	<p>~ 60.5 hours (5.5 hours x number of county participants)</p> <p>522.5 hours total for all lenders</p>	<p>~ Topics for the seminars held at Kirksville, Hannibal, and Mexico were:</p> <ul style="list-style-type: none"> Ag Site Assessment, Macro Economics, Latest in Land Values and Rental Rates, Crop and Livestock Outlook, Update on Taxes and Other Legal Issues, Livestock Risk Insurance, the Affordable Care Act, and new Extension curriculum <p>~ Lenders received the 2016 Missouri Farm Financial Outlook book which included budgets for all major crop and livestock enterprises in the state</p>	<p>~ Lenders will assist their agricultural customers in using the information and tools they were given.</p> <p>~ Specific actions include using the budgets; crop and Livestock outlook; rental rates and land values; and the tax and agriculture site assessment information</p>	<p>~ The lenders in attendance manage 6,039 loans totaling \$637,960,000. By attending University of Missouri's Agricultural Lenders' seminars, lenders are able to help their clients make better decisions based on risk management tools, budgets, and other resources provided</p> <p>This benefits their portfolio of producers and landowners by a better understanding of enterprise budgets and cash flow affecting families' and businesses' financial health. This is especially important with the downturn in the agricultural economy as both crop and livestock producers face low income, high input costs and challenging marketing decisions</p>

Missouri Tax School

Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>~ 5 Callaway participants</p> <p>~ Participants also came from all over the state</p>	<p>~ 40 hours of learning</p>	<p>~ Training included new tax legislation, business issues, retirement issues, death of a taxpayer, ethics and agricultural topics</p>	<p>~ The trainings were designed for those who prepare taxes including: enrolled agents, tax preparers, CPAs, individuals and attorneys</p>	<p>~The trainings received positive evaluations and planning is underway to offer additional trainings in 2017</p> <p>~ Local county residents benefit when local tax preparers have the opportunity to gain knowledge they can use to benefit their clients</p>

Agriculture Business Education

Farm Financial Stress in Rural Communities

(Also presenting was Mary Sobba and Karisha Devlin)

Joe Koenen
Agriculture Business Specialist



Darla Campbell
Agriculture Business Specialist



Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>~ 11 participants</p> <p>~ A total of 153 people attended at the Kirksville and Mexico sites which were two of seven around the state</p>	<p>~ 27.5 hours (2.5 hours x 11 participants)</p>	<p>~ Topics included:</p> <ul style="list-style-type: none"> • Regional weather impacts • 2015 Prevented planting acres • Lower land values • Dropping farm commodity prices • Local area broad issue impacts 	<p>~ Producers learned current information to help them make better management decisions during tough economic times and influence policy change</p>	<p>~ Producer concerns were heard from around the state, compiled by a team of MU Extension and the Missouri Department of Agriculture. These concerns were further shared with the United States Department of Agriculture</p> <p>~ By networking and collaborating in this manner, more policy change will be influenced for livestock and crop producer.</p>



Business Development



Chris Thompson
Business Development Specialist

Number of County Learners	Total Hours of Collective Workshop Participation in 2016	What Did They Learn?	What Action Did They Take?	How Does This Work Make Callaway County and Missouri Better?
<p>~ 259 Callaway residents and businesses received counseling or coaching</p> <p>~ 34 Callaway residents and businesses attended training events</p>	<p>~ 586 hours of learning and/or counseling</p>	<p>~ Businesses participating in counseling, coaching or training learned:</p> <ul style="list-style-type: none"> • How to start a business • How to develop a business plan • How to understand, analyze and use financial statements to make fact based business decisions • How to more effectively lead and manage their employees • How to use QuickBooks • How to apply for financing • The conditions and demographics in their market area • Other resources available to assist businesses such as the Small Business & Technology Development Centers, Missouri Procurement Technical Assistance Centers, International Trade Center, Trade Adjustment Assistance Center 	<p>~ As a result of assistance provided by the MU Extension Business Development program businesses in Callaway County during FY2016 generated the following economic impact:</p> <ul style="list-style-type: none"> • Created 17 new jobs • Retained 2 jobs • Generated sales increases of \$1,527,200 • Secured new investment (loans or owner equity) totaling \$610,000 • Acquired assets worth \$10,000 • Government contracts valued at \$5,247,788 	<p>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. In assisting these small businesses, MU Extension contributes to the county and state's economic development through growth in jobs, sales, technology development and commercialization</p> <p>Across the state of Missouri, the total impact for all businesses assisted by the MO Business Development Program was:</p> <ul style="list-style-type: none"> • 226 new businesses • 1,751 new jobs • 1,811 jobs retained • \$157,306,766 in increased sales • \$341,603,813 in government contracts • \$110,351,258 in loans and investments in business • \$10,312,296 in export awards • \$944,865 in research grants awarded • 2,723 clients/companies receiving business counseling or coaching • 7,617 business training/conference attendees • 219 new businesses

MU Extension Continuing Education

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. <http://muconf.missouri.edu>. ***This past year, 118 individuals from Callaway County participated in events managed by the conference office.***

MU Fire and Rescue Training Institute (MU FRTI)

In 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. <http://www.mufirti.org>. ***Callaway County 220 individuals enrolled in MU FRTI.***

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. <http://leti.missouri.edu>. ***In Callaway County 30 individuals participated in LETI.***

Missouri Training Institute (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. <http://mti.missouri.edu>. ***In Callaway County 14 individuals enrolled in MTI programs.***

MU Nursing Outreach (MUNO)

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. <http://nursingoutreach.missouri.edu>. ***In Callaway County 22 individuals participated in nursing outreach programs.***

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. <http://medicine.missouri.edu/cme/about>. ***In Callaway County 10 participants enrolled in continuing medical education.***

Osher Lifelong Learning Institute

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. <http://osher.missouri.edu>. ***No participants this past year from Callaway County.***

Labor Education

The MU Extension Labor Education Program works with members and leaders of a variety of workplace-based organizations across Missouri to help them develop skills to contribute to their organizations, act effectively in the workplace, and be informed and active participants in their communities. In FY 2016, the Labor Education Program offered 38 courses and conferences to meet the needs of 1,007 participants. The majority of these participants are elected and appointed leaders of organizations representing the economic interests of more than 20,000 working people in Missouri and surrounding states. <http://labored/missouri.edu>. ***Six participants from Callaway County.***

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. <http://cvm.missouri.edu/cont-education.htm>. ***No participants this past year from Callaway County.***

Callaway County Extension Center Local Services

MU Extension in Callaway County is your one-stop source for practical education on almost anything. We exist to provide unbiased information and educational resources to improve the quality of life and economic well-being of people in Callaway County.

During the past year, the Extension Center handled **2,000 telephone calls** and **1,050 walk-in visitors** to connect people with the information and expertise they needed. Some of the services provided included:

- ~ 50 **soil tests** processed from farm fields, gardens and lawns.
- ~ 35 **private pesticide applicator certifications or recertifications** were administered.
- ~ **More than 15,000 newsletters** mailed or emailed to individuals, families and farmers, including: *Ag Connection, Integrated Pest Management, 4-H, Financial Management and Livestock.*

Additionally, the Extension Center provided meeting room facilities for **215 educational events and meetings** held by Extension faculty and staff, 4-H clubs and community organizations throughout the past year.

The University of Missouri provides in-service education and training, postage for communications, computer equipment, technology support and salaries and benefits for 10 faculty who serve Callaway County, as well as 50 percent of one 4-H youth assistant in Callaway County.



Callaway County Extension Center

5803 County Road 302

Fulton MO 65251

Phone: 573-642-0755

Fax: 573-642-8552

Email: callawayco@missouri.edu

Web: extension.missouri.edu/callaway

Like us on Facebook: MU Extension Center of Callaway County

The University of Missouri Extension and the Callaway County Extension websites make hundreds of fact sheets and research-based information available 24/7 on topics of interest to families, businesses and organizations.

UNIVERSITY OF MISSOURI

 Live. And Learn.

University of Missouri Extension provides equal opportunity to all participants in extension programs and activities, and for all employees and applicants for employment on the basis of their demonstrated ability and competence without discrimination on the basis of their race, color, religion, sex, sexual orientation, national origin, age, disability, or status as a protected veteran.

Financial Report	
Year ending December 31, 2016	
Income:	
Governmental Appropriations	\$ 61,000
Gift/Grants/Contracts	915
Education, Service Fees/Resales	15,176
Total Income	\$77,091
Expenses:	
Salaries/Benefits	47,687
Travel	4,897
Supplies/Services	4567
Rent/Lease Equipment	3,015
Professional /Contractual Services	3,860
Soil Test Expenses	270
Telephone Service	1,828
Insurance/Bond	1,332
Publications for Resale	6,796
Copy Services/Printing	322
Repairs/Maintenance	400
Miscellaneous	519
Total Expenses	\$75,493

MU Extension leverages funds appropriated from federal, state and local governments for locally delivered programs with contracts, grants, fees, gifts, sales and services. In fact, statewide-generated funds exceed appropriations as a percentage of overall revenue. The Callaway County Commission provides salaries and benefits for one full-time administrative assistant, part-time bookkeeper and 50 percent of one 4-H youth assistant, funding for office operations and mileage for regional faculty who conduct educational programs in the county.