UNIVERSITY OF MISSOURI

MU Extension

Marion County 2014 Annual Report

Celebrating the Past and Building for the Future
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January 31, 2015

Greetings:

This annual report of the Marion County University of Missouri Extension Council summarizes educational programs and activities of University of Missouri Extension, part of the University of Missouri System. Most topics are initiated and guided through input to the extension council from citizens and content area groups.

Our goal is to make Marion County a better place to live and work. This objective comes through educational programs and cooperative efforts with community members and organizations. Several methods are used to assist a diverse student body in lifelong learning in the areas of 4-H and youth development, crop and livestock production, business, continuing education, health and wellness, and community emergency management.

We continue to salute our many volunteers, community leaders, and extension council members - past and present – who give their time and talents to support of our mission.

Regards,

Nancy Goellner  
Council Secretary

Glenn Wagner  
Council Chair

Sherry F. Nelson  
County Program Director
Remembrance of Alix Carpenter

This year was a very trying year for the Marion County Extension office with the loss of a co-worker, friend and leader Alix Carpenter. She is loved and missed by many people of Marion County and surrounding area. She served as an agronomy specialist for 15 years in the University of Missouri Extension Northeast Region, with Marion County being her home county. Alix helped farmers with production issues, conducted pesticide applicator training, helped homeowners with horticulture questions, served as coordinator for the Salt River Master Gardeners, and served on Marion County Soil and Water board. Alix was very knowledgeable and loved the work that she did for Marion County. Alix was a dear friend and co-worker. We were all saddened to learn of Alix’s cancer and death shortly after her diagnosis. Alix was 44 years old and is survived by her two loving sons, Augie and Jacob.

A Special note from Salt River Master Gardeners
Written by Randy DeGarmo

The Salt River Master Gardeners recently lost Alix Carpenter to cancer. She was our instructor, leader, mentor, and friend. In her memory, the members as well as her co-workers chipped in more than enough money to purchase a Memorial Tree through the Palmyra Parks and Recreation Department. In addition, there was enough money to pay for a butterfly house with her name on it in a special garden, and whatever is left will be used for special plantings. There is a leaf plaque which will be on display in the Sesquicentennial Building at the Marion County fairgrounds with special engravings. We wanted Alix to be visibly remembered by everyone for her hard work and true friendship. The group also started a special trust fund for her two sons. Alix will not be forgotten.
Dear County Commissioners and Friends of MU Extension:

Over the past year, with a theme of Celebrating the Past and Building for the Future, MU Extension marked a century of service to Missouri. While the celebrations have come to an end, the focus on building for the future is strong. The university’s commitment to the mission of bringing relevant, reliable and responsive education to improve lives and local economies is alive and well.

To maintain our position as a valued and trusted resource for Missourians, MU Extension continues to strengthen existing programs, build relationships and explore new opportunities to benefit Missourians. For example:

In the area of agriculture, the Show-Me Select Heifer Replacement program continues to improve the breeding performance of heifers as it helps participants realize record prices for their efforts. Producers from 103 of Missouri’s 114 counties have enrolled heifers in the program. In a record-setting sale, 168 bred replacement heifers sold for an average of $3,033 at the Fruitland (Missouri) Livestock Auction.

Strengthening communities through art, innovation and creativity, Extension’s Community Arts Program is piloting an initiative in Lexington to help the community enhance its image with art businesses and opportunities that reflect the talent of regional artists and benefit a nine-county tourism alliance. The Community Arts Program is also at work in the St. Louis area, overseeing the Saint Louis Storytelling Festival, which engages approximately 25,000 people each year.

Knowing the value of dialogue with those it serves, MU Extension has made a concerted effort with the Mizzou Alumni Association to introduce MU Chancellor R. Bowen Loftin to extension programs, participants, key stakeholders and alumni from all corners of the state. These tour events, which will continue into 2015, are designed to foster understanding and support that lead to a stronger local extension effort across the state. These are just a few examples of MU Extension’s focus on building for the future and continuing to making an impact in local communities.

I thank you for your support of MU Extension and our efforts in your community. I look forward to our continuing partnership and welcome your ideas for improving our partnership.

Sincerely,

Michael D. Ouart
Vice Provost and Director
<table>
<thead>
<tr>
<th>Number of Marion County Learners</th>
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<th>How Does This Work Make Marion County and Missouri Better?</th>
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<tr>
<td>Fifteen Marion County Producers (Individual consults)</td>
<td>A total of twenty hours spent with Marion County producers</td>
<td>Producers learned: - current cash rental and custom rates - land values - farm management - lease agreements. I also assisted two producers who developed a business plan.</td>
<td>These producers were able to keep records pertinent to their business.</td>
<td>Having economically viable farming operations benefits the local economy and communities.</td>
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<td>Two individuals from Marion County participated in the Beef Producer's Seminar out of a total of thirty people.</td>
<td>Three hours of instruction 90 collective workshop hours</td>
<td>Zac Erwin and Karisha Devlin facilitated this seminar. Guest speakers included Dr. Ron Plain, and Dr. Jared Decker. Dr. Plain, MU Extension agricultural economist, discussed the current trends in beef production, trade, domestic supplies, demand factors, and price and profitability prospects for the coming year. Dr. Decker, geneticist, discussed the how and why of genomic testing, i.e. information these tests provide and how it applies to commercial and purebred beef herds. Evaluation, participants rated the seminar on a (scale of 1 to 5 with 5 being the best.) • Quality of overall seminar – 4.2 • Usefulness of materials presented - 4.1 • Information gained - 4.2 Participants rating of their knowledge before and after the program. My knowledge after Beef Seminar • 81% learned about the price/profitability prospects for 2014 -77% knows more about the current trends in beef production. • 74% know more about beef demand and trade factors. • 77% now know what information genomic testing provides for beef herds. • 77% understand how genomic testing can be useful to commercial and purebred beef herds.</td>
<td>This information aided producers in making decisions regarding marketing and feeding their cattle.</td>
<td>Producers and rural communities benefit from improved profitability of livestock operations, in turn, this contributes to Missouri’s agricultural economic strength.</td>
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### Regional Farm Bill meeting

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<td>Seven participants from Marion County, with 127 total in attendance for the regional farm bill meeting.</td>
<td>Five hours of instruction 635 collective workshop hours</td>
<td>A regional farm bill meeting was held in Macon, MO on November 11. Participants learned about their options under the new farm bill — Agricultural Risk Coverage Individual Coverage (ARC IC), Agricultural Risk Coverage County Program (ARC Co), or Profit Loss Coverage (PLC). They learned the timeline for yield updates, base reallocation, enrollment, and sign-up. The decision tools were demonstrated and access to those tools shared. Attendees also learned what they needed in order to input their information into the decision tools. They also learned who the people and organizations were who could help them through the process.</td>
<td>93% of respondents said they will take action on what they learned. Some will attend another farm bill educational session as the next step. Landowners will update yield data and decide on base acre reallocation. Producers will acquire the necessary form from Farm Service Agency to input their yields into the decision tool. Producers and landowners will utilize the decision tool before enrolling. Producers will enroll in ARC IC, ARC Co, or PLC.</td>
<td>This management decision will affect producers and landowners through 2018. These programs are designed as risk management tools. By understanding how the different options work, producers can establish the level of risk protection that best fits their operation. Which provides producers price or revenue protection from influences beyond their control. This helps producers stay in business — the business of feeding Missourians, feeding the United States, and feeding the world.</td>
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<td>Thirteen Marion County participants.</td>
<td>71.5 hours 550 hours total for all lenders</td>
<td>Topics for two seminars held at Kirksville and Hannibal were:  • Crop &amp; Livestock Outlook  • Farm Bill  • Ag Tax Law Update  • Calculating what you can pay for land rent  • Producers and the Affordable Care Act  • Small Business Administration (SBA) loan guarantees and micro-lending</td>
<td>Lenders will help their agricultural customers to use the information and tools they were given. Specific actions include:  • Using the rent calculator  • Using the Farm Bill decision tool  • Referring people to the Missouri Marketplace  • Using the budgets weekly</td>
<td>The lenders in attendance manage 5217 loans totaling $826,300,000. By attending University of Missouri’s Agricultural Lenders’ seminars, lenders are able to help their clients make better decisions based on the decision tools, budgets, and other resources provided. This benefits their portfolio of producers and landowners by a better understanding of enterprise budgets and cash flow affecting families’ and businesses’ financial health.</td>
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Agronomy and Horticulture

Educational/Diagnostic Services for Farm and Garden Success

Agronomy and Horticulture Specialist
Max Glover

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| Over 400 Marion County participants that include:  
  • Young farmers/young farm wives  
  • Salt River Master Gardeners  
  • Soil test customers  
  • Plant and insect diagnostics customers  
  • Telephone and email requests for publications and questions  
  • Private Pesticide Applicator Training certification recipients  
  • Missouri residents attending the Western IL/NE MO No-till Crop Management Conference in Quincy | Over 700 hours of learning by Marion County residents.  
Over 300 hours of volunteer service by Salt River Master Gardeners | Evaluation of the various programs shows that participants learn:  
  • Basic gardening  
  • Pest identification  
  • How to manage fescue toxicosis  
  • Soil fertility management to increase fertilizer efficiency and protect the environment  
  • Pesticide application laws and best practices to safely and effectively apply pesticides deemed by the US EPA as restricted use in order to increase efficiency, reduce human health risks, and improve drinking water quality and wildlife habitat | • Used proven gardening practices to grow more healthy food.  
• Used the safest and most efficient methods to control the pest identified  
• Implemented best management practices to reduce the toxic effects of endophyte infected tall fescue  
• Managed fertilizer applications to row crop fields to maximize return per acre while minimizing loss of fertilizer to the environment  
• Applied restricted use pesticides using techniques and equipment that minimize human health risks and negative environmental impacts while providing the most effective pest control available | By utilizing research based best practices in their gardens and on their farms citizens of Marion County improve their local economy.  
Regardless of whether research based best practices are used to produce locally grown produce for a farmers market, or corn and soybeans that are marketed globally, there are clear benefits to increasing efficiency, productivity, and safety.  
Current and future generations benefit when research based best practices are used and result in improved productivity and reduced negative environmental impacts. |

2014 Palmyra Master Gardener Training participants seated from left: Pat McGovern, Kathy Perry, Doug Meyers, Lorie Fantz, Michele Graham, and Diana Luebcrecht. Back row from left: Dennis Green, Tonya Collop, Tim Barnes, Bill Anderson, Cindy Holm, James McLeod, and Sean Frankenbach. Sandy Walton participated in the course but was not available at the time of the photo.
## Livestock Education in Marion County

**Beef Improvement**  
**Show-Me-Select Heifer**  
**AI Breeding**  
**Tri-County Steer Carcass Futurity**  
**Beef Bus tour**

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<tr>
<td>Five Marion County beef producers participated in the BCIA program</td>
<td>45 hours per producer per year</td>
<td>Learn importance of keeping performance records by taking weaning and yearling weights and heights on the farm</td>
<td>Data is used when they sell the bulls to other producers such as in the performance Tested Bull sale. Three of the five producers sold bulls in the sale this year. Others sold bulls off the farm.</td>
<td>Six producers from Marion County purchased six bulls in the sale because they could utilize the data provided to see which bull would further improve their herd.</td>
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</table>
| Four beef producers in Marion County were involved in the Show-Me-Select Heifer Program | 80 hours per producer | Learn how to produce high quality, easy calving heifers. Accurately learn the cost of producing a replacement heifer and the value they add to her by going through the SMS program. | • Participants can create a heifer development program for their herd.  
• Sold heifers in the Show-Me-Select Heifer program at a value added sale. They produce more predictable replacement heifers that will be more likely to safely birth a healthy calf and make money for the person who buys them. | Increasing profitability from quality livestock production has a positive impact on the economy of Marion County. Three producers participated in SMS sale. |
| Two Marion County producers participated in the Artificial Insemination (AI) breeding program | Two hours per producer | Producer learn how to  
• use the breeding boxes.  
• how the breeding boxes make AI breeding easier and less stressful on the animal. | The AI conception rate is increased by 5-15 percent due to the lower stress levels on heifers/cows as a result of the design of the breeding boxes. | Increases the productivity of a producer's herd affecting his profitability creating a positive impact on the economy of Marion County. |
| One Marion County producer participated in Tri-County Steer Carcass Futurity workshop | Two hours per producer | Learn importance of keeping records on individual animals and how to improve individuals through carcass data. | Participants receive data on feedlot performance and carcass quality on an individual animal basis to help make informed decisions for coming years. | Increases the profitability of Marion County producers which in turn has a positive impact on Marion County. |
| Thirty Lewis/ Marion County producers participated in the Beef Bus tour | Twelve hours | Learn from individual stops how different productions systems could benefit their operation. | Participants receive information on various production systems with a livestock, agronomy, and mechanical emphasis. | Gives Marion County producers a greater perspective on different production areas. |

Beef producers listen to how “The Andras Kind” Red Angus Sale business was started in Manchester, IL.
## Livestock Education in Marion County

### Show-Me Quality Assurance

#### Livestock Judging

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| Twenty Five Marion County 4-H members and parents participated in Show-Me Quality Assurance certification program | The certification includes a one-hour workshop. Participants must do this three times during their showing career. They must attend twice under the age of 13 and once when they are 14 and older. 75 collective workshop hours | Learned specific information on:  
- Daily care and management  
- Animal identification  
- Reading feed labels  
- Drug withdrawal requirements  
- Bio-security  
- Proper injection sites  
- Carcass quality | Met the requirements for certification required to exhibit meat producing animals.  
Certification allows livestock and poultry project members to be able to complete their project(s)  
Increases the knowledge and awareness of Missouri youth about food quality issues related to animal production. | Increases quality of care and knowledge of livestock produced by youth in Marion County.  
Increased profitability from quality livestock production has a positive impact on the economy of Marion County |
| Eight Marion County 4-H members participated in livestock judging contest | The participants are involved four hours of competition. For a total of 32 collective hours of competition. | Evaluation skills for beef, sheep, goats, and swine | Participants get to utilize and practice decision making skills as well as communication skills. They also learn skills to select animals for their herd development as well as selection of show animals.  
Teams were selected for state contest and 4 4-H members went to state. The Junior team placed 4th in the state contest | Youth utilize skills to increase the quality of their livestock produced in Marion County. This increases the profitability of their herd having an impact on the economy of Marion County |

Junior livestock judging team
Marion County 2014
## Business Education Offered in Marion County

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<tr>
<th>Number of Marion County Learners</th>
<th>Total Hours of Collective Workshop/counseling Participation in 2014</th>
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<tr>
<td>Marion County had twenty one Clients/ Companies that received Business Counseling</td>
<td>6.2 per client 130.2 hours total</td>
<td>Business Development Program Specialists and business counselors with MU Extension, Missouri Small Business &amp; Technology Development Centers (MO SBTDC), counsel people and their companies about: • start-up and management counseling • training and other assistance creating stronger companies.</td>
<td>2 New Jobs 4 Jobs retained 2 New Business Start ups $5,000 Total Capitalization $5,000 Acquired Assets</td>
<td>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 a county’s economic development through growth in jobs, sales, innovation, technology development and commercialization. Creates stronger business which creates stronger communities.</td>
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<td>Marion County had 264 training Event participants.</td>
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<td>Better business decision making and financial management results in stronger businesses and a stable business community.</td>
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<td>Statewide</td>
<td>4,149 Clients Counseled 25,640 Counseling Hours 815 Business Trainings 16,840 Training Participants 2,810 Classroom Hours 238 New Business Creations 1,616 Jobs Retained</td>
<td>2,674 Change in Staff $204,377,649.78 in Loans &amp; Equity $207,464,049.23 in Sales Increases $3,814,347.00 in Research Grants $208,191,996 in Total Capitalization</td>
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<td>Number of Initial Sessions for Government Contracting for Marion County</td>
<td>Total Follow up counseling sessions for those trying to participate in government contracting</td>
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<td>Five (new) Eighteen (existing)</td>
<td>79 sessions</td>
<td>The registration processes for state and federal contracting along with potential opportunities that pertains to their product or services offered.</td>
<td>Possible contracts that give them opportunities to bid on and ultimately receive contracts from their bid proposals. Government Contract Awards Amount in 2014 $313,140 in Marion County</td>
<td>This is job creation along with increasing small business opportunities in Rural Northeast Missouri. Overall, the University of Missouri’s Business Development Programs (BDP) served people and their businesses state-wide. The total impact for all businesses assisted by the BDP was: Government contracts: $349,593,124</td>
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<td>University of Missouri Extension’s Family Nutrition Program (FNP) reached 3,679 participants directly schools 1,425 indirectly with nutrition education in Marion County. A significant percentage were low income.</td>
<td>11,037 collective workshop hours</td>
<td>Preschool to 12th grade youth learned nutrition and health information through lessons with hands on activities. They had opportunities for: • taste-testing healthy foods • practicing skills that lead to good health Adult education includes • nutrition • food safety • physical activity • food resource management</td>
<td>Nutrition Program Associates (NPA’s) go into schools and other grant eligible locations and interact with community members to help them make healthier choices and build healthy habits. They see the difference the program makes in people’s lives. For youth who participated in FNP, statewide results summarized revealed the following positive impacts: • 52% have participated in FNP for three or more years. • 98% (2,461 teachers) reported one or more changes in students after FNP.</td>
<td>The Family Nutrition Program (FNP) brought $8,872,444.71 in Federal funds to the state of Missouri. Funds were used to provide nutrition education to 1,047,203 food stamp recipients and food stamp eligible citizens of Missouri. -5,104 of these participants reside in Marion County. This grant funds two full-time Nutrition Program Associates, (one serves three counties) for programming for qualified schools and agencies in the county. Participants in FNP are more aware of nutritional healthier meals, snacks, eat breakfast more often, and more likely to try new foods, and increase their physical activity. Those who practice healthy eating and activity are more likely to enjoy a high quality of life as an adult and into old age. Having healthy labor force is critical to attracting and keeping jobs in Missouri. This important programming effort serves to reduce healthcare costs over the participant’s lifetime, saving taxpayers money in reduced public healthcare benefits and insurance premiums.</td>
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## NUTRITION AND HEALTH EDUCATION

### ServSafe
Health Insurance Education Initiative
Discretionary Calories-CHART Teen Health Fair

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<td>Thirty foodservice workers participated in ServSafe programs in 2014</td>
<td>ServSafe is taught as a series of four, three hour classes. The exam lasts for two hours. Collective workshop hours: 900</td>
<td>Participants learned: • causes for food becoming unsafe • measures they need to follow to keep food safe.</td>
<td>Twenty of the participants passed the ServSafe exam. Participants benefited by receiving instruction that helped them pass the ServSafe exam and achieve certification. ServSafe certification is recognized nationally in the foodservice industry.</td>
<td>The need is to protect food from contamination by pathogenic microorganisms, parasites, and naturally occurring toxins. The risk for foodborne illness occurring from foodhandlers decreases if they receive training through ServSafe. In Marion County, residents benefit with safer restaurants and fewer medical costs associated with illness from eating unsafe food.</td>
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<td>Five participants attended Health Insurance Education Initiative program at the Hannibal Public Library.</td>
<td>Collective workshop hours: Ten</td>
<td>Participants learned: • how the new law affects them • basic health insurance terms • different available health insurance options The program explained Missouri’s Health Insurance Marketplace and how to get enrolled in health insurance. The program explained: • impact on employer coverage • how to get help to pay for health insurance • impact of this program on other types of health insurance and changes to Medicare.</td>
<td>All five of the participants stated they would contact a community navigator and check out the options available to them on the healthcare website. They all stated they wanted to get insurance and this program was very helpful to them.</td>
<td>University of Missouri Extension reaches out to families and individuals with relevant and timely education across the state on the Affordable Care Act. Unbiased, solid information was provided to the participants. When a program of this nature is supported, a law which impacts everyone directly or indirectly can be addressed with the public in a non-biased manner.</td>
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"Discretionary Calories" was the theme of a health display at the Teen Health Fair in Hannibal. Fair was attended by five hundred youth and adults.

The health fair lasted for three hours.

"Discretionary Calories" helped raise awareness in teens on which foods to select to maintain health.

Teens were given a "A Year of Being Well" kit to take home and use. The kit offers one step each month that families can follow to lead healthier lives.

Teens can make healthy food choices. The results will last them a lifetime. The county benefits by having a healthier population which can lead to more sustainable and prosperous communities.
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<td>Seven residents had their dial pressure gauges tested for accuracy.</td>
<td>An opportunity was offered for free pressure gauge testing at the Palmyra extension office in. The event time was four hours.</td>
<td>Participants had their dial pressure gauges checked for accuracy and directed to replace as needed. MU extension guide sheets on food preservation were also distributed.</td>
<td>Testing of pressure gauges is recommended each year. Participants benefited by having a local venue to test their gauges. Also, having an accurate pressure gauge is the only way to safely preserve low acid foods.</td>
<td>MU Extension delivers food preservation lessons based on safe food handling research. The need is to protect food from contamination by pathogenic microorganisms, parasites, and naturally occurring toxins. This program helps prevent a foodborne illness outbreak which could result in unneeded healthcare costs and possible deaths.</td>
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<td>Four women attended the &quot;Portion Control&quot; program at the Hannibal Public Library.</td>
<td>The program lasted one hour, for a total of four collective workshop hours.</td>
<td>Participates learned: • Portion sizes of food have grown larger over the years. • People no longer recognize a normal portion of food. • Re-learning normal portion sizes for food can decrease overeating. • Plates, cups and dishes have also gotten bigger. • Buying smaller plates, cups and dishes can help reduce overeating.</td>
<td>Participants gained information on making healthy food choices which can help them improve their health. All participants stated: • They would start paying attention to the portion sizes they eat. • They stated they would evaluate the size of plates and glasses in their homes.</td>
<td>Approximately two out of three American adults are overweight or obese. Healthy eating habits can reduce the risk for obesity. This can benefit the community by decreasing the amount of money spent on healthcare.</td>
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2014 CHART Teen Task Force teen health fair
## Human Development and Family Studies

### Community Emergency Management Program
Marion County Whitehouse Education Series
Chronic Disease Self-Management

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<td>Community Emergency Management Program: Community Organizations Active in Disaster (COAD) Tabletop Exercise Webinar: 4 Exercise: 10</td>
<td>Training webinar &amp; Tabletop Exercise 34 collective hours</td>
<td>Participants were introduced to the 2nd Edition of the COAD manual for disaster recovery/preparedness/response. In the Exercise: - Current unmet needs committee discovered that their work covers more than just recovery in disaster. - The unmet needs committee also identified the need to develop a protocol manual for our work as key members retire/find new employment/exit from the committee. - We are planning to develop a pet sheltering plan for the county</td>
<td>We are currently collecting information and data for the protocol manual and pet sheltering plan.</td>
<td>Research has shown that communities that have plans in place and conduct exercises are often more resilient in the face of disaster which can shorten recovery time and require less resources. An effective unmet needs committee can also avoid duplication of services, speed recovery by accessing resources in a timely fashion thus helping communities recovery more quickly.</td>
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<td>Marion County White House Education Series: Average of 19 people per session with 22 sessions that were 2 hours in length</td>
<td>418 collective hours</td>
<td>Topics presented included: - Mental Health First Aid (MHFA; multi-session series) - Heat Safety - Severe weather safety - Lightning safety - Cold weather safety - General Diabetes education</td>
<td>Participants indicated that they felt they would be more knowledgeable about appropriate actions to take for a person who was having difficulty due to their mental illness. They also indicated and reported at subsequent sessions action they had taken to remain safe in potentially dangerous weather situations as well as assistance they may have provided to a person with a mental illness</td>
<td>One in five people are diagnosed with a mental illness in the US. Appropriate early intervention can lessen the impact on the individual and other around them. MHFA participants are better able to assist individuals with mental illnesses: anxiety, depression, substance abuse, and psychosis. Additionally participants are better able to understand these illnesses reducing stigma. Being able to take appropriate actions in adverse weather conditions allows people to remain safe and less likely to become injured or ill.</td>
</tr>
<tr>
<td>Chronic Disease Self-Management Course was co-taught by Jim Meyer, Nutrition Specialist and Sherry Nelson, Human Development Specialist. Eight participants started and five completed</td>
<td>85 collective Hours</td>
<td>Participants learned information and skills that helped them to change behaviors and better manage their chronic health condition(s). Education included: - Better eating habits - Reducing stress - Exercising - Getting healthy sleep - Dealing with the health system - Communicating with their healthcare provider(s)</td>
<td>Participants reported: - developing exercise programs - better interactions with healthcare providers - changes in sleep patterns (better) - reduced levels of stress</td>
<td>When people are better able to self-manage their chronic health condition(s) they are better able to function in their life and may experience fewer complications, lead more independent lives, and set goals/problem solve to achieve desired health goals.</td>
</tr>
</tbody>
</table>
## CHART (Community Health Assessment Resource Team) Teen Task Force

<table>
<thead>
<tr>
<th>Number of Marion County Learners</th>
<th>Total Hours of Collective Educational Participation in 2014</th>
<th>What Did They Learn?</th>
<th>What Action Did They Take?</th>
<th>How Does This Work Make Marion County and Missouri Better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHART Teen Task Force</td>
<td>Students had the RCIS for nearly 48 hours 2544 collective hours</td>
<td>Students had a significant increase in understanding about:  - The difficulty of caring for an infant was greater than they had thought after using the RCIS.  - The amount of care required was more than they had thought after using the RCIS.  - That they found they had become more easily upset than they had thought after using the RCIS.  - That caring for the RCIS had more effect on their school than they had thought post RCIS use.  - That caring for the RCIS had more effect on their time with friends and activities than they had thought post RCIS use.</td>
<td>84.8% of students found Some, Quite a lot, Very much value for themselves by participating in this project.  95.4% of students thought their peers would get Some, Quite a lot, Very much value by participating in this project.  87.1% of students indicated they would be Likely/Extremely likely to wait to have a baby until after high school graduation.  87.9% of the students indicated they would be Likely/Extremely likely to wait to have a baby until after graduating from college or career training.</td>
<td>The big news for our coalition, the CHART Teen Task Force and Marion County, is that there has been a 57% decrease in teen births from 1995 to 2012 in all the 7 counties combined (2012 latest year data available for). Counties included in service area are Marion, Clark, Lewis, Ralls, Pike, Monroe, and Shelby. The Marion County teen pregnancy is currently 32 per 1000. This is a drop from 65 per 1000 in 1995 when the program began. The reduction of ten births to teenagers creates a cost savings of $232,630 in social and health costs in Marion County.</td>
</tr>
<tr>
<td><strong>Real Care Baby Project:</strong> Children's Trust Fund Grant Project During the 2013-14 school year Marion County schools had 53 students utilize the REAL Care Infant Simulator (RCIS)</td>
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<tr>
<td><strong>Empathy Belly</strong> Fifty-one students participated in using the Empathy Belly pregnancy simulation</td>
<td>Students wore the simulator for 1 hour giving 51 collective hours</td>
<td>95 percent of the participants felt they were more knowledgeable about the discomforts of pregnancy.</td>
<td>96 percent indicated they intended to delay sexual activity and becoming pregnant.</td>
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<tr>
<td><strong>CHART Teen Health Fair</strong> – rescheduled to April due to winter weather in early February. Number of youth and adults was 400. Thirty-eight presenter booths.</td>
<td>Fair is 3 hours in length so approximately 1200 hours of collective learning</td>
<td>This year students learned about Lightning Safety at the Extension booth I provided along with information about Extension programming. Jim Meyer, Ralls County Extension specialist had a booth with nutritional information. Other educational booths address health and safety issues for adolescents.</td>
<td>95% of the attendees indicated they learned new information and that they found the event to be worthwhile.  96% indicated they intended to attend again.</td>
<td></td>
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</table>
Marion County 4-H

A community of members building life skills, engaging in science and connecting to community

4-H Youth Educator
John Martellaro

<table>
<thead>
<tr>
<th>Number of Marion County Learners</th>
<th>Total Hours of Collective Workshop Participation in 2014</th>
<th>What Did They Learn?</th>
<th>What Action Did They Take?</th>
<th>How Does This Work Make Marion County and Missouri Better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>There were 272 members in the traditional club program</td>
<td>Over 500+ hours of learning in Marion County</td>
<td>Marion County 4-H serves youth through 10 organized clubs, school enrichment, camps and more. 4-H members demonstrate learning through the following: Fair exhibits: 443 inside building exhibits 782 livestock exhibits Regional, State, and National 4-H events attended by Marion County 4-Hers Teen Conference (five members) State and Regional horse judging (5 members) 4-H Camp &amp; Counselors (eight members) State Congress (two members) State Fashion Review (two members) Livestock Judging (four members) Public Speaking (five members) Marion Co. Robotics (eleven members) Going The Distance Leadership and Challenge course. (44 -7th grade, 44 - 8th grade participants)</td>
<td>Marion County 4-H clubs offer educational experiences in which members learn life skills such as decision making, public speaking and teamwork. Members learn by doing under the guidance of adult volunteers, who teach projects ranging from rocketry to livestock to arts and crafts. Clubs also involve youth and teens in community service projects, camping and educational trips.</td>
<td>Missouri 4-H members are twice as likely to have been on a college campus as their non 4-H peers. MU is the most visited campus and 4-H is the second most reported reason for youths to be on the MU campus. (Learner 2008) Having these on campus experiences can be key in exposing youth to the idea of seeking continued education. Those students who attend these events are more likely to attend college.</td>
</tr>
<tr>
<td>There were 129 trained volunteers</td>
<td>Over 5,000 volunteer hours contributed $100,000 + in time to 4-H</td>
<td>Volunteers gained knowledge in how to offer a valuable learning experience for the youth in their program as well as where to find further resources</td>
<td>Volunteers facilitate learning experiences for youth to participate in and encourage them to develop their skills.</td>
<td>Adult volunteers serve as mentors for our youth helping them transition into a healthy adulthood, helping to shape the next generation.</td>
</tr>
</tbody>
</table>
### Embryology

<table>
<thead>
<tr>
<th>Number of Marion County Learners</th>
<th>Total Hours of Collective Workshop Participation in 2014</th>
<th>What Did They Learn?</th>
<th>What Action Did They Take?</th>
<th>How Does This Work Make Marion County and Missouri Better?</th>
</tr>
</thead>
</table>
| 600                             | 6,000 total hours                                      | Life skills include:  
• managing feelings  
• critical thinking  
• contributions to group effort  
• empathy  
• concern for others  
• healthy living | Eggs are distributed with incubators and teaching resource materials to teachers in participating classrooms.  
Students have the responsibility of helping maintain the proper incubator temperature for hatching eggs and rotate them daily throughout the incubation process. | Exposing youth to life skills at an early age gives them a greater opportunity to utilize them. They also become more responsible for their own behavior and its impact on others. Having the ability to be responsible, feel empathy and concern for others as well as cooperate in a group setting allows them to better navigate their world now and in the future. |
Impact on Marion County, Missouri

The County at a Glance

- UM Students: 159
- UM Alumni: 774
- UM Employees: 24
- Population: 28,904
- UM Salary & Retirement Income: $696,906
- UM State Tax Revenue: $22,521
- UM Federal Tax Revenue: $108,214

UM Students from the County in 2014

- 159 students
  - 120 - MU
  - 12 - UMKC
  - 25 - Missouri S&T
  - 2 - UMSL
  - 133 - Undergraduates
  - 26 - Graduates
  - 140 - Full-time students
  - 19 - Part-time students

UM Alumni Residing in the County in 2014

- 774 alumni
  - 609 - MU
  - 57 - UMKC
  - 69 - Missouri S&T
  - 39 - UMSL
  - 355 Selected School Alumni
    - 17 - Medicine
    - 30 - Nursing
    - 29 - Health Professions
    - 13 - Dentistry
    - 7 - Pharmacy
    - 12 - Veterinary Medicine
    - 114 - Agriculture
    - 100 - Engineering
    - 33 - Law

UM Employees and Retirees Residing in the County in 2014

- 24 people employed by UM
  - 18 - MU
  - 6 - UM Health Care
  - 6 UM Retirees and Beneficiaries

UM Services Received in the County in 2014

- 1,273 patients seen at UM Health Care, with $631,041 of uncompensated care.
- 1 patient seen at the UMKC School of Dentistry with an average of $123 per patient in uncompensated care.
- 26,316 contacts with MU Extension through MU Extension events held in district counties.

UM Construction Projects involving Vendors located in the County in 2014

- 1 vendor involved with 6 projects, for $77 thousand.

UM Alumni Teaching K-12 in the County in 2014

- 47 teachers
- 12% of all county teachers
- 5 principals and administrators
- 29% of all county principals and administrators

UM Footprint in the County
Marion County MU Extension Center
Impact on Marion County, Missouri

UM Research Expenditures Funded by Federal and Private Sources

<table>
<thead>
<tr>
<th>Year</th>
<th>$x Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2008</td>
<td>$179.3</td>
</tr>
<tr>
<td>FY2009</td>
<td>$193.2</td>
</tr>
<tr>
<td>FY2010</td>
<td>$193.0</td>
</tr>
<tr>
<td>FY2011</td>
<td>$194.7</td>
</tr>
<tr>
<td>FY2012</td>
<td>$188.5</td>
</tr>
<tr>
<td>FY2013</td>
<td>$189.6</td>
</tr>
</tbody>
</table>

- Between FY2008 and FY2013, UM brought in more than $1.1 billion in federal and private research funds.

Economic Development Highlights

- With $3.2 billion in total revenues in 2014, UM would have been the 16th largest publicly held Missouri-headquartered company in the state in 2013.
- With almost 32,000 employees in the state, UM was Missouri's 2nd largest employer in 2013.
- In 2012, UM's $165.2 million in federal research expenditures represented 94.3% of these expenditures at Missouri public universities.
- In 2014, UM's $31.0 million in National Science Foundation (NSF) awards represented 91% of all NSF awards made to Missouri public universities.
- UM earned $10.8 million in licensing income in 2014.
- UM received 176 new invention disclosures in 2014.
- 4 startups were created around UM technologies in 2014.
- UM was issued 53 U.S. patents and filed 83 new U.S. patent applications in 2014.

Electronic Services to the State in 2014

- The Missouri Research & Education Network (MOREnet) provided internet connectivity and technical services to members that include:
  - 61 higher education institutions with more than 238,000 students.
  - 517 K-12 schools serving more than 846,000 students.
  - 132 public libraries connecting 335 library buildings that serve 5.3 million Missourians.
  - Serving the State Office of Administration, several municipalities and various other eligible organizations.
- MOREnet returned over $15 million in telecommunications expenditures to companies doing business in Missouri.

Financial Aid Provided to UM Students in 2014

- $888.2 million provided to 58,553 total students
  - $444.9 million (28,087 students) - MU
  - $202.2 million (11,887 students) - UMKC
  - $102.2 million (6,819 students) - Missouri S&T
  - $138.9 million (11,740 students) - UMSL

Impact on Education

- UM enrolled 44.8% of first-time undergraduates attending four-year public institutions in 2013.
- UM awarded 50.4% of the 1,210 doctoral degrees earned in Missouri in 2012.
- UM awarded 41.8% of the 1,890 first professional degrees earned in Missouri in 2012.
- UM awarded 53.6% of the 30,793 bachelor’s or higher degrees awarded by Missouri's four-year public institutions in 2012.

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 2014, based on the best available data.
Data Sources include: Missouri Office of Administration • UM IRP • 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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309 University Hall • Columbia, MO 65211 • 573-882-2726
www.umsystem.edu/umour

12/15/2014
The investment in Marion County youths, families, and businesses

<table>
<thead>
<tr>
<th>Marion County Extension Council</th>
<th>Extension Faculty and Staff in Marion County</th>
<th>Additional Faculty Serving Marion County</th>
<th>Financial Summary Year Ending December 31, 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glenn Wagner</td>
<td>Sherry Nelson</td>
<td>Shelley Bush Rowe</td>
<td>Revenue</td>
</tr>
<tr>
<td>Chairman/District 3</td>
<td>Human Development Specialist</td>
<td>Regional Director</td>
<td>County Appropriations</td>
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<tr>
<td></td>
<td>County Program Director</td>
<td>Moberly, Missouri</td>
<td>$39,985.00</td>
</tr>
<tr>
<td>Rose Hudson</td>
<td>John Martellaro</td>
<td>Wendy Brumbaugh</td>
<td>Investment Income</td>
</tr>
<tr>
<td>Vice Chairman/District 2</td>
<td>4-H Youth Development Educator</td>
<td>Family Financial Education</td>
<td>$980</td>
</tr>
<tr>
<td>Susan Obert</td>
<td>Kristen Williams</td>
<td>Shelby County</td>
<td>Gifts/Grants/Contracts</td>
</tr>
<tr>
<td>Treasure/District 1</td>
<td>Secretary</td>
<td>Karisha Devlin</td>
<td>Resales/ Education services</td>
</tr>
<tr>
<td>Nancy Goellner</td>
<td>Chelsea Lippincott Dunn</td>
<td>Agri-Business</td>
<td>Total Revenue</td>
</tr>
<tr>
<td>Secretary/District 1</td>
<td>Family Nutrition Program</td>
<td>Knox County</td>
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<tr>
<td>Dwayne Goodwin</td>
<td>Kelly Rich</td>
<td>Patty Fisher</td>
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<tr>
<td>District 2</td>
<td>Family Nutrition Program</td>
<td>4-H Youth Development</td>
<td></td>
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<tr>
<td>Rosemarie Hudson</td>
<td>Mary Smyser</td>
<td>Pike County</td>
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<tr>
<td>District 2</td>
<td>Family Nutrition Program</td>
<td>Max Glover</td>
<td></td>
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<tr>
<td>Kris Graupman</td>
<td>Becky Mannigel</td>
<td>Agronomy</td>
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<tr>
<td>District 3</td>
<td>Family Nutrition Program</td>
<td>Shelby County</td>
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<tr>
<td>Lenora Gottman</td>
<td>Jody Meyers</td>
<td>Charles Holland</td>
<td></td>
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<tr>
<td>District 4</td>
<td>Secretary</td>
<td>Business Development</td>
<td></td>
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<tr>
<td>Tamara Reed</td>
<td></td>
<td>Monroe County</td>
<td></td>
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<tr>
<td>District 5</td>
<td></td>
<td>Daniel Mallory</td>
<td></td>
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<tr>
<td>Louis Riggs</td>
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<td>Livestock Specialist</td>
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<tr>
<td>District 6</td>
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<tr>
<td>Steven Viorel</td>
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<td>Brenda Arnold</td>
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<tr>
<td>District 6</td>
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<td>Lewis County</td>
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<tr>
<td>Megan Gottman</td>
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<td>James Meyer</td>
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<tr>
<td>Farm Bureau Liaison</td>
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<td>Nutrition and Health</td>
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<tr>
<td>Daniel Taylor</td>
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<td>Education</td>
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<td>MFA Liaison</td>
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<tr>
<td>Marcia Bross</td>
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<tr>
<td>4-H Council Liaison</td>
<td></td>
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<tr>
<td>Sean Frankenbach</td>
<td></td>
<td></td>
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<tr>
<td>FFA Liaison</td>
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<tr>
<td>Randy Spratt</td>
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<tr>
<td>Commission Liaison</td>
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</tr>
</tbody>
</table>

Expenses

- Salary .................................. $28,960.28
- Travel .................................. $6,000.00
- Communications .......................... $3,152.62
- Supplies & Service ...................... $3,727.36
- Furniture & Equipment .................. $154.86

Total Expenses .......................... $41,995.12
The Marion County Extension Center is located at:
100 S. Main, Suite 201, Palmyra MO 63461

Phone number: 573-769-2177         Fax number: 573-769-2178
Office email: Marionco@missouri.edu
County web page: http://extension.missouri.edu/marion

Office hours: 8:00 A.M. to 12 Noon and 1:00 P. M. to 5:00 P.M.
Monday through Friday