RETURN ON INVESTMENT

Clinton County Annual Report 2014
December 2014

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
January 2015

The County Commission
Courthouse
Plattsburg, MO 64477

Dear Commissioners:

The University Missouri Extension council and staff would like to thank the Clinton County commissioners for your support and funding for programs during this past year. In turn, the council and staff remain committed to improving people's lives in Clinton County with responsive and relevant research-based education and information to meet the opportunities and challenges of the 21st century.

When you support University of Missouri’s Extension programming in Clinton County, significant impact can be gained by individuals and communities that directly participate in them. In addition to participant impact, many of our programs have critical public value where individuals, communities and government entities who have not directly participated in these programs realize important benefits.

Our Clinton County residents and their needs determine the direction of extension’s educational programming with the current focus on Youth, Agriculture, Healthy Lifestyles, Horticulture, Leadership and Community Development.

We are proud to present this report to you summarizing the highlights of our educational efforts during the past year. We could not have accomplished this great work without your help! Thank you.

Submitted by,

Charles Wolven
Extension Council Secretary

Brenda Norton
Extension Council Chair

Debbie Davis
County Program Director

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

EQUAL OPPORTUNITY/ADA INSTITUTIONS
In 2014, MU Extension and Clinton County celebrated the 100th anniversary of the Smith-Lever Act which created Cooperative Extension, the forerunner of modern-day MU Extension.

2014 PROGRAMS OF DISTINCTION

Healthy and Productive Clinton County Children and Families

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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.
4-H YOUTH DEVELOPMENT

A community of youth building life skills, engaging in science and connecting to their community.

One of every five Missourians between the ages of five and 18 participated in a Missouri 4-H program in 2014.

Clinton County 4-H participat- ed in the St. Louis Cardinals 4-H Day on the 4-H St. Louis Science Discovery Trip.

Clover Kid Campers Gus Mink (left) and Will Mathews studying reptiles at camp.

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<tr>
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</table>
| 176 4-H members                  | 17,600 4-H'er learning hours                  | Clinton County 4-H serves youth through six organized clubs which offer long-term educational experiences in which members learn life skills such as decision making, public speaking and working with others. Members learn by doing under the guidance of adult volunteers who teach projects ranging from aerospace to veterinary science. Clubs also involve members in community service, camping and educational trips. The youth of Clinton County developed leadership and learning at the following 2014 regional, state, and national activities:  
- State Teen Conference, six members;  
- State Congress, seven members;  
- 4-H Summer Camps, 25 youths and ten volunteers;  
- State Shooting Sports, 21 members;  
- State Public Speaking, six members;  
- Missouri State Fair: 30 live-stock exhibitors; 15 demonstrators and seven winners; 30 project exhibitors.  
- National 4-H Congress, three members;  
- National 4-H Shooting Sports, two members;  
- National Horse Bowl, one member;  
- Missouri Equine Tour to Colorado, seven members;  
- St. Louis Science Trip, three members;  
- State Horse Bowl, eight members;  
- State Horse Judging, eight members  
- State Horse Public Speaking, three members;  
- State Fashion Revue, four members; and  
- Legislative Academy, one member.  
| Missouri 4-H members are twice more likely to have been on a college campus than their non-4-H peers. MU is by far the campus most frequently visited and 4-H is the second most reported reason to be on the MU Campus (Lerner, 2008). In 2014, MU Extension 4-H connected over 8,500 young people to University of Missouri campuses and faculty. Being on a campus is a predictor of youth going on to higher education (Hoover, 2006). These students are more likely to go to college and enjoy:  
- increased financial success for themselves and their children,  
- being better consumers,  
- improved quality of life through more opportunities for leisure and hobbies,  
- improved health for themselves and their children (Porter, 2003),  
- being more likely to vote as adults, and  
- being more likely to contribute to their community (Lerner, 2009; Zaff et al, 2003).  
| Youth who earn their bachelor’s degree, increase annual earnings by $2 million over their lifetime (NACUBO, 2012).  
If 70 percent of Clinton County members participating in 4-H events on the MU campus earn their bachelor’s degree, 4-H will help these young people earn $12 million more in their lifetime.  
Volunteers create, support and are part of the 4-H community. Missouri 4-H volunteers responding to a survey report they contribute on average 100 hours per year. Valuing their time at $21 per hour, based on average Missouri incomes, the contribution of Clinton County 4-H volunteers was worth more than $394,800 in 2014. More importantly, these adults serve as mentors for our youth helping them transition into a healthy and productive adulthood.  
4-H youth report three times more opportunities than their non-4-H peers to engage in meaningful community leadership roles.  

#iam4H

Lathrop Shamrock 4-H Club at 2014 Recognition Day.

Debbie Davis  
4-H Youth Development Specialist  
Clinton County

Dale Hunsburger  
4-H Youth Development Associate  
Clinton County
“Being involved in 4-H for seven years has really helped me become a better person. I’ve done so many things and learned so many things that help me in the present and will help me in the future. That’s what I love about 4-H. When I first joined 4-H, I hated it. I wasn’t very talkative and didn’t want to voice my opinion. After almost a year of being in 4-H and experiencing everything, I changed for the better and even won Outstanding First and Second Year Girl Awards. Throughout the years, I’ve been involved in many 4-H events, made many new friends, developed public speaking skills, and I’m so proud to say that I’m in 4-H.”

Lauren Adams, Age 15, Gower Dynamites 4-H

Because of 4-H, I love volunteering both in my club and outside of our club especially with a group called the Clinton County Green Team. The Green Team is an amazing group with a great cause trying to spread the awareness of hunger throughout community and surrounding towns. We also have a catchy slogan: “Feed the Soil, Feed the People.”

Haleigh Karl, Age 14, Gower Dynamites 4-H

Investment in University of Missouri Extension is an investment for our future.

Clinton County 4-H provides positive learning experiences for youth.

25 Clinton County 4-H members spent over 726 hours learning positive life skills in Northwest Missouri 2014 4-H camping programs.

Positive character development is the ultimate outcome of 4-H livestock projects. Brian Williams, Clinton County 4-H alumni and highly successful FFA advisor was the 2014 Clinton County Livestock Show judge. Austin Dotson, Keystone 4-H, exhibited his champion goat with awards presented by 4-H fair royalty Brylee Martin, far left, and Natalie Orton.

Clinton County Green Team members prepared 65 tomato container gardens in June 2014 which were distributed to clients at each of the Clinton County Food Pantries.
Investment in University of Missouri Extension is an investment for our future.

2014 achievements of Clinton County 4-H youth beyond the county are the direct results of positive youth development through 4-H.

Kate Wright, Sydney Orton, and Taylor Orton represented Missouri at the 2014 National 4-H Congress in Atlanta, Georgia. To be chosen as a Missouri National Congress Delegate is one of the most prestigious honors in Missouri 4-H. Clinton County 4-H Youth Specialist Debbie Davis was a chaperone.

Kate Wright, second left, was a member of the Missouri State Horse Bowl Team which earned fifth place at 2014 Nationals. Kate was high point national individual.

Kate Wright, was selected to receive the 2014 Missouri MFA Saddle Award and was high point individual at Missouri State Horse Bowl 2014.

Kate Wright, Sydney Orton, and Taylor Orton represented Missouri at the 2014 National 4-H Congress in Atlanta, Georgia. To be chosen as a Missouri National Congress Delegate is one of the most prestigious honors in Missouri 4-H. Clinton County 4-H Youth Specialist Debbie Davis was a chaperone.

Kate Wright, was selected to receive the 2014 Missouri MFA Saddle Award and was high point individual at Missouri State Horse Bowl 2014.

A few of the many Clinton County 4-H youths in the 2014 Missouri State Fair Winner’s Circle: Carter Ward, top right; Britney Adam, lower right; and Morgan Anderson, below.

Sydney (left) and Taylor Orton were the only siblings to compete at the 2014 National 4-H Shooting Sports Invitational. Sydney was a member of the Missouri Air Rifle Team and Taylor was a member of the Compound Archery Team. Both teams earned fifth place, and the Missouri 4-H Shooting Sports Team was named reserve national champions in the overall sweepstakes.

2014 State Shooting Sport Medalists, left-right: Natalie Orton, Katie Shewey, Daniel Carlton, Michael Carlton, and Taylor Orton.

2014 achievements of Clinton County 4-H youth beyond the county are the direct results of positive youth development through 4-H.
### FAMILY NUTRITION EDUCATION PROGRAM

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<td>Family Nutrition Education Program (FNEP) provides information on nutrition, food safety, and physical activity for lifelong health and fitness.</td>
<td>3,969 Total Hours</td>
<td>The following are students’ changes reported by teachers after FNEP classes.</td>
<td>Angie Rhoad: “In Clinton County, Lathrop Elementary, a mother of a kindergartner was volunteering in the classroom while I was teaching the fruit lesson. During this lesson we talked about eating a rainbow of colors and how they could eat different colors of fruit. After that, we tried 3 different types of fruit and the visiting mother really loved the lesson. When I returned to the classroom the following week, the teacher showed me a picture. It was different kinds of fruit spread out like a rainbow. The mother who been there the previous week had sent it for snack. The teacher said that the children ate all of it and were bragging that they were not going to get sick and would not have a bad cough.”</td>
<td>The Family Nutrition Program (FNP) brought $8,872,444.71 in federal funds to the state of Missouri. These funds were used to provide nutrition education to 1,047,203 food stamp recipients and food stamp eligible-citizens of Missouri. 1,030 elementary students and eleven adults participated in FNEP programs in Clinton County. Participants in FNP 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. Those who practice healthy eating and activity behaviors are more likely to enjoy a high quality of life as an adult and into old age. 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.</td>
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1,030 elementary students and 11 adults participated in FNEP in Clinton County.

FAMILY NUTRITION EDUCATION PROGRAM

Angela Rhoad

Nutrition Program Associate

Serving Clinton County

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**Nutrition Program Associate, Angie Rhoad, works with students learning the variety of foods in the protein group; the importance of eating these foods and what these foods do for our bodies.**
# SCHOOL ENRICHMENT

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<td>240 students and 14 teachers Embryology Program</td>
<td>2,400 total hours of embryology classroom learning in 14 classrooms</td>
<td>The 4-H Embryology Program gives children a hands-on experience in hatching chickens while developing personal confidence and leadership ability through embryology project activities. Children learn by listening, observing, experimenting and applying their knowledge to real-world situations. As students continue learning, they have increased knowledge and skills in nutrition, food production, food safety, and food systems.</td>
<td>As a result of participating in the Clinton County 4-H Embryology Program, students developed and practiced the life skills of teamwork, personal goal setting, creative expression and personal competency discovery.</td>
<td>Missouri is seeking to be a national and international leader in life sciences. The school enrichment embryology project helps students at an early age develop an understanding of science as a technology for supporting and potentially contributing to Missouri’s scientific and agricultural industries. 4-H science programs reach more than five million youth with experiential learning experiences supported by more than 500,000 adult volunteers. 4-H will help address the long-term solution for improving science literacy and aptitude by preparing one million new young people to excel in science, engineering and technology by 2013.</td>
</tr>
<tr>
<td>59 students and three teachers Show Me Character Program</td>
<td>354 hours of Show Me Character classroom learning in three classrooms</td>
<td>Show Me Character is a framework that teaches young people to make sound moral judgments. It encourages all adults to become more involved in helping youth develop positive character traits.</td>
<td>Students engaged in the six-week Show Me Character program demonstrated the positive character traits in the care of their classroom “character fish.” Students also wrote a thank you note to the Youth Specialist, Debbie Davis, at the conclusion of the sessions expressing their learned lessons. A post two month classroom visit indicated an increased level of respect among the students and individual success stories shared by the teachers.</td>
<td>Our communities benefit when youth and adults understand the importance of being involved as caring citizens and “doing the right thing” by incorporating the Six Pillars of Character in their daily lives.</td>
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**Students witness the hatching of chickens in classroom embryology projects.**

**Ellis Elementary students practice the respect character lessons using table manners at an “indoor picnic.”**
# Clinton County Water Festivals

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<td>300 Cameron, East Buchanan, Lathrop, and Plattsburg fifth-grade students</td>
<td>Students engaged in a total of 1,200 hours of workshop learning in the nine learning sessions.</td>
<td>The purpose of the Festival is to help students learn about the water cycle, watersheds, soil erosion, and the importance of keeping our water clean. Students spent 25 minutes in nine experiential teaching stations taught by staff from NW Missouri Region Extension, Missouri Department of Conservation, and Clinton County Soil and Water District. The soil and water stewardship lessons included: stream table water channeling; topography mapping and environmental pollution impacting water supplies; soil bottles; soil composition; water biology study with microscopes; ecological food web; water cycle; point and non-point source pollution with the Enviroscape Table Model; water energy; and Birds and Beaks.</td>
<td>Comparing pre- and posttest scores revealed a definite increase in knowledge at the conclusion of the day’s event. The highest increase in knowledge was question eight related to the energy which drives the water cycle. 50 percent of students incorrectly answered the question on the pretest compared to 88 percent correctly answering on the posttest. Comparing overall scores showed a pretest average of 65 percent and an 87 percent posttest score. The question which showed the least amount of change was question four related to what is not a part of the food web. 89 percent of the students correctly answered on the pretest and 97 percent answered same question correctly on the post-test.</td>
<td>When you support MU Extension’s Watershed Festival program, Missouri citizens recognize the value of water protection and learn how they can make a difference in water quality and quantity. Participants become more active in litter prevention, stream clean-up and water conservation. The local community and everyone downstream benefits from a clean, healthy and adequate drinking water supply.</td>
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The Missouri Department of Conservation staff conduct an interactive lesson with the Stream Table which demonstrates the impact of channelization upon soil erosion.

University of Missouri Extension faculty member Beverly Maltsberger, demonstrating the impact of point and non-point pollution using the Enviroscape table top model.
### TAX PREPARATION

<table>
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<tr>
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<th>Topic</th>
<th>What Did They Learn?</th>
<th>How Did Participants Benefit?</th>
<th>How Does This Work Make My Assigned Area and Missouri Better?</th>
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</table>
| Thirteen income tax returns were completed and e-filed in Plattsburg. Three males and five females filed single. Two females filed head of household. Three couples all without dependents filed married jointly. | **Taxpayers:**  
  Combined Adjusted Gross Income: $169,763  
  Total refunds: $19,079  
  IRS tax refunds: $16,810  
  IRS tax owed: $0  
  Mo. tax refunds: $2,269  
  Mo. tax owed: $103  
  Earned Income Credit: $7,228  
  American Opportunity Credit: $2,026 | Three families received $7,228 of Earned Income Credit (EIC). One family received $1,215 EIC. An additional family was able to take advantage of the Child Tax Credit in the amount of $1,000. One taxpayer qualified for the property tax/rent credit, in a amount of $1,419. One taxpayer qualified for $46 Retirement Savings Credit. | Adjusted gross income (AGI) ranged from $0 (one taxpayer) up to $42,195; combined AGI is $185,508. Total refunds were $19,079. Federal refunds totaled $16,810. Missouri state refunds were $2,269. One taxpayer owed $103 in Missouri state income taxes. | When you support the Missouri Taxpayer Education Initiative, taxpayers save an average of $200 in tax preparation fees per year, which leads to families being able to purchase necessities, benefitting community members by reducing the demand for public assistance. |

**Donald Miller**  
**HUMAN DEVELOPMENT SPECIALIST**  
Serving Northwest Region, including Clinton County

**Dr. Rebecca J. Travnichek**  
**FAMILY FINANCIAL EDUCATION SPECIALIST**  
Serving Northwest Region, including Clinton County

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### HEALTHY LIFESTYLES

<table>
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<tr>
<th>Number of Clinton County Learners</th>
<th>Summary of Workshop Participation in 2014</th>
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<td>150 Students at East Buchanan High School, Gower, Mo.</td>
<td>Docu-Drama Crash Simulations</td>
<td>Students became more aware of the results of drinking and driving or distracted driving such as texting and driving from the video presentation and crash simulation March 28.</td>
<td>The surveys completed by the 150 East Buchanan High School teens following the crash simulation indicated that 98 per cent would not ride in a car with a driver who had been drinking. 99 percent of respondents indicated that they will not drink and drive after viewing the presentation.</td>
<td>When you support University of Missouri Extension Choosing Healthy Lifestyles programming, youth have indicated they will choose healthy and safe decisions related to driving for themselves and their friends. Safe drivers will reduce traffic accidents and save lives and property.</td>
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**Dr. Rebecca J. Travnichek** was in Plattsburg, Missouri, March 29, 2014, performing tax preparations for 13 Clinton County residents for the fifth year of Free Tax preparation provided by Clinton County Extension.
# AGRONOMY PROGRAMMING

Wayne Flanary  
AGRONOMIST  
Serving Clinton County

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<tr>
<th>Programs</th>
<th>Topic</th>
<th>What Did They Learn?</th>
<th>What Action Did Participants Take or How Did They Benefit?</th>
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| The value of all crops including row crop, forages and commercial horticulture is $406 million in Holt, Atchison, Andrew, Nodaway, Clinton, Buchanan, and DeKalb counties. To maintain a competitive viable agriculture industry in northwest Missouri, requires the latest research, education and resources to continue its growth. | The agronomic programming focused on timely delivery of crop management information and research to the seven counties in the NW Region. The programming effort is accomplished through media such as radio, newspaper, newsletters, meetings and answering growers’ questions. | Participants learned  
- new precision ag technology and biotechnology and how technology fits into a grower’s operation,  
- new hybrids and varieties through our testing program,  
- improved weed control research and teaching,  
- new weed, insect, and disease pests that potentially can attack crops utilizing our pest monitoring program,  
- product evaluation to determine if the product is effective and how to adopt and utilize this in a grower’s operation,  
- pesticide safety,  
- product costs and determining their cost effectiveness and  
- choosing and applying fertilizers. | Over the past eight years, the value of the agronomic meetings rated a 4.25 on a scale of one to five with five being excellent and one being poor.  
Data summarized over past eight years indicated that growers would recommend this meeting to other growers rated a 4.38 percent average on a scale of one to five with five being excellent and one being poor.  
Agronomic programs vary with methods of delivery. The result is an action or a decision and knowledge is gained by growers.  
Growers request what the research indicates, the advantages and disadvantages of using a product, a strategy, or sometimes how to address a situation or problem.  
Grains Chapple Research Center and Hundley-Whale Research Center provide the latest research to help growers remain competitive and provide an economic driver for northwest Missouri. | Winter agriculture update meetings focus on critical topics for row crop and livestock producers enabling them to be competitive.  
Private applicator training provides growers with the knowledge to apply pesticides safely while protecting the environment.  
Cooperation with commodity groups helps growers expand markets and produce food not only locally but globally.  
Certified crop adviser meetings provide technical information to crop advisers.  
As world population continues to increase, the need for food production continues to grow. It is critical to continue to increase crop yields while maintaining competitiveness to increase food production in an environmentally responsible manner. |

Program Titles:
- Management of Genetically Improved Crops
- Missouri Crop Management Systems
- Plant Protection
- Nutrient Management Planning
- Forage Production and Management

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## Beef and Forage Production Programs

**What Did They Learn?**
- Participants gained strategies to optimize beef production and improve costs on their operations. Additionally, they gained information on managing feedstuffs, pregnancy checking, documenting individual animal performance throughout the entire production phase, and animal values.
- Participants learned how to best determine the forage values regarding:
  - quality variation,
  - maintaining feedstuffs,
  - maintaining productivity and
  - maximizing nutrient utilization with minimal negative environmental impact.

**What Action Did Participants Take or How Did They Benefit?**
- Beef and forage producers are better prepared to make informed decisions on their operations regarding animal health, genetic selection, nutrition as well as income and expenses that affect the bottom-line for their respective operations.
- Producers are better equipped to reduce feed waste and market low productive animals in a timely manner.
- Producers designed customized feeding programs based on feedstuff availability, nutritional analysis, cost structure, and production stage requirements of the animals in their operation.
- By utilizing the research-based information and good production practices taught by extension, producers and youths will be better stewards of land and resources.

**How Does This Work Make Clinton County and Missouri Better?**
- When we support beef and forage production in our area, participants learn high quality unbiased research-based production strategies which result in increased success for producers in reaching their production and financial goals.
- By maintaining or improving soil health and water quality through better distribution of nutrients on our forage and beef cattle operations, we ensure future generations will have safe and plentiful natural resources.
- With over 80,000 head of beef cattle in the area, a viable agriculture economy has a positive impact on our area and plays a key role in our local, regional state, national and world economies.
- Well-informed youths are better prepared to make good management decisions based on research-based results to build a positive agriculture future in Northwest Missouri.

### Programs and Topic

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<td>450 Cattle and Forage Producers</td>
<td>Area participants spent 900 hours learning beef cattle production, forage production and utilization, nutrition management and ration balancing</td>
<td>Participants gained strategies to optimize beef production and improve costs on their operations. Additionally, they gained information on managing feedstuffs, pregnancy checking, documenting individual animal performance throughout the entire production phase, and animal values.</td>
<td>Beef and forage producers are better prepared to make informed decisions on their operations regarding animal health, genetic selection, nutrition as well as income and expenses that affect the bottom-line for their respective operations. Producers are better equipped to reduce feed waste and market low productive animals in a timely manner. Producers designed customized feeding programs based on feedstuff availability, nutritional analysis, cost structure, and production stage requirements of the animals in their operation.</td>
<td>When we support beef and forage production in our area, participants learn high quality unbiased research-based production strategies which result in increased success for producers in reaching their production and financial goals. By maintaining or improving soil health and water quality through better distribution of nutrients on our forage and beef cattle operations, we ensure future generations will have safe and plentiful natural resources. With over 80,000 head of beef cattle in the area, a viable agriculture economy has a positive impact on our area and plays a key role in our local, regional state, national and world economies. Well-informed youths are better prepared to make good management decisions based on research-based results to build a positive agriculture future in Northwest Missouri.</td>
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<td>750 youth participants</td>
<td>Youth spent approximately 900 hours learning conservation, water cycles and productive agricultural practices.</td>
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<td>By utilizing the research-based information and good production practices taught by extension, producers and youths will be better stewards of land and resources.</td>
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### HORTICULTURE PROGRAMS

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<td>Five members of the Clinton County Master Gardeners participated in the state conference, attending seminars and touring different landscapes. During the annual spring plant sale, garden plant information was provided by Master Gardeners. A Master Gardener information booth was set up at the Plattsburg Fall Festival to answer plant questions and give out seeds and bulbs. The Master Gardeners provided general horticulture information in public venues. Citizens had opportunities to obtain specific answers to their horticulture questions. The Master Gardener program provides in-depth horticultural training to individuals who then volunteer their time applying what they have learned to teach gardening to others in their communities. To become trained as a Master Gardener, an individual must attend the 30-hour core course training. The topics covered during the Master Gardener training were introduction to plants, insects, soils, herbaceous perennials, turf grass, plant diseases, growing vegetables, home fruit production, woody ornaments, basic landscaping, growing native plants, and pesticide use/safety. The Clinton County Master Gardeners are responsible for the planters around the Court- house, Community Center, Perkins Park, Clinton County Youth Building, 19 downtown planters, and several Plattsburg churches. The Clinton County Master Gardeners continue to work with Plattsburg FFA, hosting a community plant sale each May with the proceeds divided between the FFA and the Master Gardeners. The spring plant sale creates a positive community connection, promotion for the Master Gardener Program, horticulture education, and provides funds to maintain the community Master Gardener projects. Through the Master Gardener programs, Missouri communities and the people in them will have increased community pride. Missourians will lead more active, fulfilled lives and will have improved mental and physical health through exercise and also through fresh vegetables and fruits to supplement their diet.</td>
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**Missouri Master Gardener**

*UNIVERSITY OF MISSOURI EXTENSION*

*During fall 2014, the Clinton County Master Gardeners created a new landscape at the Clinton County Courthouse and replaced plantings.*
MISSOURI CENTURY FARMS

Recognizing Clinton County family farms remaining in the same family for at least 100 years

<table>
<thead>
<tr>
<th>Number of Clinton County Participants</th>
<th>Total Collective Hours of</th>
<th>What Did They Learn?</th>
<th>What Action Did Participants Take or How Did</th>
<th>How Does This Work Make Clinton County and Missouri Better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 participants</td>
<td>115 hours of celebrating by Clinton County farm families, community leaders, and the Clinton County Extension Council and staff</td>
<td>Century Farms Celebration is included with the Clinton County Extension Annual Picnic.</td>
<td>The Stephens, Silvius, Hanks/Greaves and Bower family farms swelled the Clinton County ranks of Century farms to 91 since the recognition program began in 1976.</td>
<td>Research has proven that the thriving rural communities maintain a strong sense of pride and multi-generational family traditions with evidence of community pride and cooperative spirit. The heritage of agriculture in Missouri and America is significant. As stewards of the land which has passed down through the generations, these families have an established practice of sustainability which is becoming a critical talking point for the future of agriculture. It is important to celebrate the efforts of Clinton County farm families who value the traditions of our county and state. Their ownership is the future face of agriculture in not only Clinton County but Missouri and America.</td>
</tr>
</tbody>
</table>

The Hanks/Greaves farm was originally owned by Robert Greaves in 1901, grandfather to Violet Hanks, the mother of the current owners, Sid and Myra Hanks.

The Bower farm was originally purchased in 1876 by George Long, the great-grandfather of the current land holder.

Pictured left to right are Dorothy and George Silvius, Farm Bureau Agent Zane Meyers, and Debbie Davis, Clinton County program director. George’s great grandfather received a land grant in 1863 to begin the Silvius farm upon which Dorothy and George still live.

Mary Stephens, center front, has lived over 70 years on her family farm which began in 1914. Over 200 friends and family came to the Stephens farm to celebrate the Missouri Century designation with Mary.
MU CONFERENCE OFFICE
The MU Conference Office (MUCO) provides high-quality, professional, full-service meeting management for a variety of noncredit educational programs, such as conferences, workshops, seminars and symposia. For FY2014, MUCO registered 13,484 Missourians in MU Extension conferences.

MU Extension’s Fire and Rescue Training Institute is charged with providing 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 24,000 firefighters and the 5.9 million citizens they serve. Courses prepare firefighters for medical emergencies, hazardous materials response, and disaster preparedness and mitigation, as well as fires.

The MU Extension Law Enforcement Training Institute (LETI) brings state-of-the-art, certified, professional training to law enforcement officers as well as continuing professional education to a wide spectrum of other criminal justice and public safety practitioners. Established in 1948, the institute has been the state’s recognized leader for more than 60 years in providing vital training and education services for Missouri’s 20,000 working officers. LETI is now taking that expertise to non-traditional areas offering seminars to the general public in personal safety, workplace violence and citizen response to armed subjects. LETI served 800 Missouri students from 69 Missouri counties and over 500 from the United States in 2014.

The Missouri Training Institute provides continuing education, custom-designed training programs and business 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, effective decision making, generational differences and business writing. The institute’s consulting services include HR, strategic planning, board development and facilitating board retreats. In FY2014, more than 114,174 people from all Missouri 114 counties enrolled in the institute’s 510 programs.

MU Nursing Outreach (MUNO) is committed to providing high-quality, affordable and accessible professional development programs for Missouri’s nurses. With the half-life of nursing knowledge being less than five years, coupled with the complexities of patient care and health care delivery, it is crucial for professional nurses to have the latest, evidence-based knowledge and skills. MUNO serves a predominantly rural health care audience through face-to-face, web-based and telecommunication delivery methods.

Nurses from 85 (75 percent) of Missouri’s 114 counties and the City of St. Louis attended continuing education programs in FY2014 sponsored by MU Extension. In FY2014, 1,889 Missourians participated in a nursing outreach program and another 994 nurses were served through co-sponsored multidisciplinary programs. Participants rate the overall quality of their continuing education experience as 1.3 (4-point scale with 1 being the highest) and indicate they plan to change their clinical practices based on what they learned at Nursing Outreach programs.

The Office of Continuing Medical Education serves rural primary care physicians with access to education that allows them to meet requirements for state licensure. Additional programs include specialty medicine as well as health education. Distance learning via the Missouri Telehealth Network provides access to weekly grand rounds from various School of Medicine departments. In FY2014, more than 1,800 programs reached 27,322 health care professionals across the state of Missouri and around the world.

### MU Continuing Education Identified Missouri County Enrollments 2013-2014

<table>
<thead>
<tr>
<th>Region</th>
<th>County</th>
<th>FRTI*</th>
<th>Labor Ed</th>
<th>LETI*</th>
<th>MTI*</th>
<th>MU CONFERENCE OFFICE</th>
<th>Nursing</th>
<th>Osher</th>
<th>Vet Med*</th>
<th>Continuing Medical Ed</th>
<th>Grand Total Noncredit</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW</td>
<td>Clinton</td>
<td>86</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>80</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>182</td>
</tr>
</tbody>
</table>
CLINTON COUNTY EXTENSION RECOGNITIONS

The Clinton County Extension Council and Staff strive to build community pride with recognition, participation, and investment.

MU Chancellor Loftin’s November 18 visit to the Northwest Missouri Region included a visit to the Clinton County Schwarweis Farm. The Schwarz’s have utilized Extension resources to build their farm’s success. Photo to the right includes, left-right: Clinton County Extension Chair, Brenda Norton; NW Regional Director, Karma Metzgar; Clinton County Presiding Commissioner, Wade Wilken; Clinton County Program Director, Debbie Davis; MU Extension Director, Dr. Michael Ouart; and MU Chancellor, Dr. R. Bowen Loftin.

Rosalie Ingle, left, was inducted into the Missouri 4-H Hall of Fame during the 2014 ceremonies honoring her 20 plus years as a 4-H volunteer contributing to positive youth development for Clinton County youth.

The Schwarweis four generation family photo left: Farm Manager, Marlon Mier; Carrie Schwarz Watson; Holly Watson; Ian Schwarz; Ray Schwarz; MU Chancellor, R. Bowen Loftin; Ann Schwarz; Kenton Schwarz; and MU Extension Director, Michael Ouart.

Pictured with the Clinton County 2014 State Fair Farm Family John and Lane Killgore are l-r, Dr. Jack Magruder, Chair, Missouri State Fair Commission; Dr. Marc Linit, Senior Associate Dean, Research and Extension, University of Missouri; Barbara Hayden, Missouri State Fair Commission; Richard Fordyce, Director, Missouri Department of Agriculture; Blake Hurst, President, Missouri Farm Bureau; and Ted Sheppard, Missouri State Fair Commission.

Receiving the 2014 Clinton County Leader’s Honor Roll Recognition from MU Director of Donor Education Cynthia Crawford are Charles Wolven and Brenda Norton.
Impact on Clinton County, Missouri

The County at a Glance
- UM Students: 141
  - 62 - MU
  - 69 - UMKC
  - 10 - Missouri S&T
  - Undergraduates: 83
  - Graduates: 58
- UM Alumni: 576
  - 351 - MU
  - 195 - UMKC
  - 24 - Missouri S&T
  - 6 - UMSL
  - 270 Selected School Alumni
  - 3 - Medicine
  - 30 - Nursing
  - 7 - Health Professions
  - 18 - Dentistry
  - 11 - Pharmacy
  - 1 - Optometry
  - 9 - Veterinary Medicine
  - 115 - Agriculture
  - 49 - Engineering
  - 27 - Law
- UM Employees: 14
  - 141 students
  - 576 alumni
  - 20,571 Population

UM Students from the County in 2014
- 141 students
  - 62 - MU
  - 69 - UMKC
  - 10 - Missouri S&T
  - 83 - Undergraduates
  - 58 - Graduates
  - 92 - Full-time students
  - 49 - Part-time students

UM Alumni Residing in the County in 2014
- 576 alumni
  - 351 - MU
  - 195 - UMKC
  - 24 - Missouri S&T
  - 6 - UMSL
  - 270 Selected School Alumni
  - 3 - Medicine
  - 30 - Nursing
  - 7 - Health Professions
  - 18 - Dentistry
  - 11 - Pharmacy
  - 1 - Optometry
  - 9 - Veterinary Medicine
  - 115 - Agriculture
  - 49 - Engineering
  - 27 - Law

UM Employees and Retirees Residing in the County in 2014
- 14 people employed by UM
  - 7 - MU
  - 6 - UMKC
  - 1 - UM Health Care
- 5 UM Retirees and Beneficiaries

UM Services Received in the County in 2014
- 56 patients seen at UM Health Care, with $32,558 of uncompensated care.
- 93 patients seen at the UMKC School of Dentistry with an average of $123 per patient in uncompensated care.
- 4,348 contacts with MU Extension through MU Extension events held in district counties.

UM Alumni Teaching K-12 in the County in 2014
- 25 teachers
- 8% of all county teachers
- 2 principals and administrators
- 13% of all county principals and administrators

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

UM Research Expenditures Funded by Federal and Private Sources

$ x MILLION

$179.3 $193.2 $193.0 $194.7 $188.5 $189.6

- 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 (OSED) • 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

Office of University Relations
309 University Hall • Columbia, MO 65211 • 573-882-2726
www.umsystem.edu/umaur

12/15/2014
**Federal, State and County Funding for Extension**

University of Missouri Clinton County Extension programs are funded by Federal, State and County appropriations. Local funding for support of Clinton County Extension Center is provided by the Clinton County Commission which provides office space, related office expenses, clerical salary and travel expenses of extension specialists who conduct educational programs in Clinton County.

**University of Missouri’s Contribution to Clinton County Extension Program**

The University of Missouri provides salaries and benefits for all professional and para-professional staff members headquarter in Clinton County.

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**2014 County Appropriations Financial Report**

<table>
<thead>
<tr>
<th>INCOME</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Appropriations</td>
<td>$ 22,155.96</td>
</tr>
</tbody>
</table>

**EXPENSE**

| Personnel Services - Salaries & Wages       | $ 14,311.50  |
| Payroll Expenses                            | $ 1,171.50   |
| Travel                                      | $ 173.13     |
| Postage (Rental on PO Box)                  | $ 106.00     |
| Phone - Local & Long Distance               | $ 1,804.62   |
| Advertising (Position)                       | $ 49.50      |
| Rent/Lease Space                            | $ 600.00     |
| Rent/Lease Equipment                        | $ 2,854.48   |
| Supplies/Services                           | $ 887.80     |
| Utilities                                   | $ 1,621.30   |
| Other Contract Services - Internet Connection| $ 300.00    |
| Insurance (Surety Bond & Liability)         | $ 287.50     |
| Extension Council Election Expense          | $ 30.19      |

**TOTAL EXPENSE $ 24,197.52**

**NET INCOME $ (2,041.56)**

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The Clinton County Extension Council owns and manages the Youth Building and Livestock Pavilion, Plattsburg, MO. The facility is home to Clinton County 4-H and MU Extension programs and is rented for family, community and regional events. The Clinton County Master Gardeners and Clinton County 4-H Clubs provide routine maintenance of the facilities.

The Clinton County Extension Council continues to fulfill the intended purposes for which the building was established over forty years ago with significant investments of community volunteers’ time, energy and financial donations. Again in 2014, the Youth Building Fund was the recipient of a generous gift from the Woodward Trust.
## Clinton County Leadership

### University of Missouri Extension

<table>
<thead>
<tr>
<th>Clinton County Extension Elected Council Members</th>
<th>Clinton County Commissioners And Legislators</th>
<th>Extension Faculty and Staff Based in Clinton County</th>
<th>Additional Faculty and Staff Serving Clinton County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carmen Bennett</td>
<td>Wade Wilken, Jr Presiding Commissioner</td>
<td>Debbie Davis 4-H Youth Specialist County Program Director</td>
<td>James Crawford Natural Resource Engineer Atchison County</td>
</tr>
<tr>
<td>Maurine Bodenhausen</td>
<td>Charles Dawson District 1 Commissioner</td>
<td>Dale Hunsburger 4-H Youth Program Associate</td>
<td>Penny Crawford Nutrition Program Associate NW Region</td>
</tr>
<tr>
<td>Susan Burton</td>
<td>Larry King District 2 Commissioner</td>
<td>Vickie Kilgore Office Manager Bookkeeper</td>
<td>Clinton Doughtery PTAC /Business Development Buchanan County</td>
</tr>
<tr>
<td>Charles Dawson, Commissioner</td>
<td></td>
<td></td>
<td>Wayne Flanary Agronomy Holt County</td>
</tr>
<tr>
<td>Mark Hoover</td>
<td>Represent Jim Neely District 8</td>
<td></td>
<td>Tom Fowler Horticulture Buchanan County</td>
</tr>
<tr>
<td>John Killgore, vice chair</td>
<td>Senator Brad Lager District 12</td>
<td></td>
<td>Janet Hackert Nutrition and Health Harrison County</td>
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<tr>
<td>Pam Korneman</td>
<td>Congressman Sam Graves District 6</td>
<td></td>
<td>Jim Humphrey Livestock Andrew County</td>
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<tr>
<td>Andy Mathews</td>
<td></td>
<td></td>
<td>Robert Kelly Agriculture Business Buchanan County</td>
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<tr>
<td>Sadina Millard, treasurer</td>
<td></td>
<td></td>
<td>Beverly Maltzberger Community Development/Emergency Management, Buchanan County</td>
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<tr>
<td>Sean Millard</td>
<td></td>
<td></td>
<td>Don Miller Human Development Buchanan County</td>
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<tr>
<td>Brenda Norton, chair</td>
<td></td>
<td></td>
<td>Connie Neal Housing and Environmental Design, Nodaway County</td>
</tr>
<tr>
<td>Leanne Orton</td>
<td></td>
<td></td>
<td>Angela Rhoad Nutrition Program Associate Northwest Region</td>
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<tr>
<td>Sydney Orton, youth representative</td>
<td></td>
<td></td>
<td>Rebecca Travnichek, PhD Family Financial Education Andrew County</td>
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<tr>
<td>Debi Stewart</td>
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<tr>
<td>Gina Thompson</td>
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<td>Jim Thompson</td>
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<tr>
<td>Charles Wolven, secretary</td>
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<tr>
<td>Zane Myers, Farm Bureau</td>
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<tr>
<td><strong>Regional Director</strong></td>
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<tr>
<td>Karma Metzgar NW Regional Director</td>
<td>Jill Knadler NW Regional Administrative Assistant</td>
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<tr>
<td></td>
<td>Regional Office St. Joseph, MO</td>
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</tbody>
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**Clinton County Extension Council 2014**

*Front Row, l-r: Maurine Bodenhausen, Carmen Bennett, John Killgore, Charles Wolven, Brenda Norton, Sadina Millard, Gina Thompson, and James Thompson*  
*Back Row, l-r: Mark Hoover, Zane Meyers, and Sean Millard*