December 2013

Dear County Commissioners and Associated Friends of MU Extension:

As we enter 2014, we at University of Missouri Extension celebrate our 100-year partnership with you, with the State of Missouri and with the federal government. Through the Smith-Lever Act of 1914, the Cooperative Extension Service was established to provide practical application of research knowledge “to persons not attending or resident in said colleges in the several communities.” Over the years, the mission to bring you relevant, reliable and responsive education to improve lives and local economies remains the same. Yet, we also have changed to help you meet emerging issues and to take advantage of emerging opportunities.

Every day, MU Extension helps create value for citizens. For example:

Throughout the state, MU Extension provides information to help address issues and opportunities related to Missouri’s economic infrastructure, public services, economic development, jobs and educational access. **Counseling more than 3,000 business clients** in FY12 resulted in 9,328 new jobs, sales increases of $188 million, $213 million in new business financing, and government contracts of more than $195 million.

Our state and nation are in need of workers who are highly proficient in science, technology, engineering and math (STEM). Research has shown that 4-H members develop an increased interest in science three times higher than their non-peers. Both non-traditional activities, such as robotics, and more traditional activities, such as livestock judging and food preparation, are doorways to science-related careers.

Livestock production accounts for about 53 percent of the state’s agricultural receipts. MU Extension’s **Tier Two Show‐Me‐Select Replacement Heifer Program**, which improves reproductive efficiency of beef herds, has garnered producers $237 to $357 per heifer, depending on breeding protocol followed. Statewide economic impact of the program has exceeded $65 million.

These are just two examples of MU Extension’s impact – made possible through your support of MU Extension in your community. I look forward to our continuing partnership, and as always, your ideas for improving our partnership are welcome.

Sincerely,

Michael D. Ouart
Vice Provost and Director
January 2014

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
Healthy and Productive Clinton County Children and Families
4-H.................................................................................................................. 6-8
Clinton County Green Team................................................................. 9
Family Nutrition Education................................................................. 10
School Enrichment............................................................................. 11
Water Festival..................................................................................... 12

Healthy Financial Programming in Clinton County
Tax Preparation.................................................................................... 13
Rent Smart.............................................................................................. 13

Healthy Agriculture Programs in Clinton County
Agronomy Education.............................................................................. 14
Beef and Forage Education................................................................. 15
Horticulture............................................................................................ 16
Missouri Century Farms....................................................................... 17

Greg Razer, Senator McCaskill staffer, left, demonstrates his former 'Truman the Tiger' pose with Clinton County Extension Council University of Missouri alumni.

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.
CLINTON COUNTY 4-H

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

<table>
<thead>
<tr>
<th>Number of Clinton County Learners</th>
<th>Total Hours of Collective Participation in 2013</th>
<th>What Did They Learn?</th>
<th>What Action Did They Take?</th>
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</table>
| 146 4-H Members                  | 9,782 4-H'er learning hours                   | Clinton County 4-H serves youth through five organized clubs, school enrichment, camps and more. Clinton County 4-H clubs offer long-term educational experiences in which members learn life skills such as decision making, public speaking and working with others. Members learn by doing under the guidance of adult volunteers, who teach projects ranging from aerospace and arts to veterinary science and sport fishing. Clubs also involve children and teens in community service, camping and educational trips. The youth of Clinton County have continued to demonstrate leadership and learning through the following regional, state, and national activities:  
  • Clover Kids Camp—two members and two volunteers  
  • Teen Conference—six members  
  • State Congress—four members  
  • State Equine Tour—five members  
  • 4-H Summer Camp—16 youth and three volunteers  
  • State Shooting Sports—19 members  
  • State Public Speaking—five members  
  • Missouri State Fair—21 members | 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 2013, 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  
  • improve quality of life through more opportunities for leisure and hobbies  
  • improve health for themselves and their children (Porter, 2003)  
  • more likely to vote as adults  
  • more likely to contribute to their community (Lerner, 2009; Zaff et al, 2003). | Youth who earn their bachelor’s degree, increase annual earnings by $2.4 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 $42 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 $19 per hour, based on average Missouri incomes, the contribution of Clinton County 4-H volunteers was worth more than $241,300 in 2013! 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 meaningfully community leadership roles. |
| 127 Volunteers                    | 12,700 adult volunteer hours                  | One of every five Missourians between the ages of five and 18 participated in a Missouri 4-H program in 2013. |

Clinton County’s new State Fair 4-H Building Banner created in 2013.

Clinton County 4-H members gained life skills through the 2013 4-H Canine Class.

Clinton County 4-H at the St. Louis Cardinals 4-H Day on the 4-H St. Louis Science Discovery Trip.
Investment in University of Missouri Extension is an investment for our future.

2013 achievements of Clinton County 4-H youth are direct results of positive youth development through 4-H.

“Sorry, I’ve got 4-H’ is something that probably comes out of my mouth more than my school friends would like to hear, but I don’t mind. I am happy to be able to be involved in many activities and new learning opportunities and services where I could help others and my community. I have worked with fellow 4-H’ers helping youth at the Plattsburg Community Christmas event and also went to many state horse events such as horse bowl, Hippology and Horse Public Speaking contests. Through opportunities like those I have gained confidence to give presentations and participate in activities outside of 4-H such as church and school. Public speaking is the most important skill I have gained from 4-H and would like to continue to improve. I have learned to be accepting, tolerant and cooperative of those around me in 4-H and those traits will help me my whole life. There are also team experiences in opportunities given in 4-H, and I have learned quality leadership traits such as fairness, trust and compassion being around fellow 4-Hers. Most importantly, lessons I have learned in my 4-H experiences are to be a good friend and how to make new friends. Together we pledge our head, heart, hands and health to help ourselves and those around us.”

* Tana Anderson. Age 13, Lathrop Shamrock 4-H

“Each year I have been in 4-H, my club has hosted a party for a local group home. This has always been my favorite part of being in 4-H. At the party we do crafts, play games and play bingo with the residents. Then we eat pizza and dessert with them. I have so much fun interacting with the residents and helping them make crafts. This experience has really opened my eyes to see what tenderhearted people the residents are and that they are no different than I am. I believe that I have made a difference in their lives by spending time with them and showing them that kids care about who they are as a person. I plan on attending college, being a physical therapist and eventually having a family. I believe 4-H has influenced me to want to help others in any way I can.

* Lea Burkhead. Age 14
Keystone Willing Workers 4-H

“One of the things I like best about 4-H is camp. I did all kinds of activities like canoeing, leatherwork, archery, campfires and water games. I like doing demonstrations and being able to choose the projects I’m interested in. It’s hard to say what I like best because there are so many fun things to do in 4-H.

* Kyra Thompson. Age 8, Lathrop Shamrock 4-H
Photo: 2013 Regional 4-H Camp at Crowder State Park, Trenton, MO
Investment in University of Missouri Extension is an investment for our future.

2013 achievements of Clinton County 4-H youth beyond the county are direct results of positive youth development through 4-H.

**Taylor Orton**, left, was selected as the 2013 Interstate Girl based upon her outstanding 4-H accomplishments. Taylor received a $1000 scholarship from Missouri Western State University.

**Gretchen Mayes**, second right, accepted the Dennis E. Gallup 4-H Memorial Scholarship from Missouri 4-H Foundation Trustees Morgan Beach, left, and Johanna Thomas, far right, at the 2013 Missouri 4-H Foundation Banquet. Not pictured, **Maggie Glidewell** who also received a Foundation Scholarship.

**Sydney Orton**, left, was a member of 2013 Missouri Recurve Archery Team which earned first place at the National 4-H Shooting Sports Contest. Sydney also earned individual top ten awards. The Missouri 4-H Shooting Sports Team was named reserve national champions.

**Jacqueline Heath**, second right, member of the Missouri State Hippology Team which earned 2013 Reserve 4-H National Championship.

**Gretchen Mayes**, second left, was a member of the Missouri 2013 International Exchange Program to enhance world understanding and global citizenship. Gretchen lived for four weeks with a host family in Finland.

**Gretchen Mayes**, second right, member of the Missouri State Hippology Team which earned 2013 Reserve 4-H National Championship.
**CLINTON COUNTY GREEN TEAM**

“Feed the Soil, Feed the People”

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<tr>
<td>16 4-H teen members and eight adult leaders are members of the 2013 Clinton County Green Team</td>
<td>668 hours of workshops and field trips</td>
<td>Members have gained sustainable agriculture practices with field trips to a local Community Sustainable Organic Farm and experiential learning at the Heifer Ranch, Perryville, Arkansas.</td>
<td>Team members are teaching Clinton County youth water and soil stewardship lessons and sustainable agriculture targeting elementary and middle school age students. Team members have increased their leadership roles in county and regional 4-H. Two members began volunteering at a local food pantry as a direct result of their experiences. “Feed the Soil, Feed the People” is the guiding theme chosen by the team and is used with all their activities. Plans have been made to create container gardens for distribution at local food pantries in Spring 2014 reinforcing fresh food production. When you support Clinton County 4-H Green Team, Missouri citizens recognize the value of protecting the soil and water resources to provide sustainable food resources. Participants become more active in practicing soil and water conservation protecting agricultural resources. Citizens gain knowledge about local food insecurities and create opportunities to reduce local hunger. Clinton County citizens will increase local food production for improved diets with fresh food and potential food savings while protecting agriculture resources utilizing sustainable practices. Youth participating in team building and development of leadership skills will most likely be engaged citizens modeling the positive agriculture practices learned through this team experience.</td>
<td></td>
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<tr>
<td></td>
<td>1,480 collective hours participating in the Heifer International Global Challenge</td>
<td></td>
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The log was a challenging team building activity during the Heifer Ranch Global Challenge Experience.

The team learned organic and sustainable agriculture practices at the local Fair Share Community Supported Agricultural Farm.
### FAMILY NUTRITION EDUCATION

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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 at Ellis Elementary, I had twin boys with sensory issues in my classroom. Each lesson when I would walk into the room, they both always asked if we were having a food tasting. If I told them ‘yes’, they would instantly get upset. The first tasting both boys had to be removed from the room. Second tasting, they stayed in the room but would not set at the table near the food. The third tasting, I got them to lick the food. The fourth tasting, they actually ate part of it. After all of the lessons, the twin’s mother was so excited to report that they were now trying new foods at home. She (mother) stated that she was so thankful for the progress of her children and the FNEP program.”</td>
<td>The Family Nutrition Program (FNP) brought $7,653,958 in Federal funds to the state of Missouri. These funds were used to provide nutrition education to 1,069,104 food stamp recipients and food stamp eligible citizens of Missouri. 770 of these participants reside in Clinton County. The grant funds enable the programming to be available for qualified schools and agencies in the county.</td>
</tr>
<tr>
<td>770 elementary students and 11 adults participated in FNEP in Clinton County.</td>
<td></td>
<td>99 per cent reported one or more changes</td>
<td>Angie Rhoad:</td>
<td>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 healthcare costs over the participant’s lifetime, saving taxpayers money in reduced public healthcare benefits and insurance premiums.</td>
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**Angie Rhoad, Nutrition Program Associate, showing a class of third graders the nutrition worksheets and newsletters they will complete during class. The students are encouraged to take the newsletters home to share with their families which include information on nutrition, food safety, physical activity and recipes for students to prepare at home.**
### SCHOOL ENRICHMENT PROGRAMS

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<td>329 students and 12 teachers Embryology Program</td>
<td>1,705 total hours of embryology classroom learning in 12 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 team work, 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>65 Students and three teachers SHOW-ME CHARACTER Program</td>
<td>3,150 hours of Show-Me-Character classroom learning in three classrooms</td>
<td><strong>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.</strong></td>
<td><strong>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 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.</strong></td>
<td><strong>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.</strong></td>
</tr>
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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.’*
Students engaged in a total 327 hours of workshop learning in the nine learning sessions.

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 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 Enviroscap Table Model; water energy; and Birds and Beaks.

Comparing pre and post test 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 per cent of students incorrectly answered the question on the pretest compared to 88 per cent correctly answering on the post-test. Comparing overall scores showed a pretest average of 65 per cent and a 87 per cent post-test 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 per cent of the students correctly answered on the pretest and 97 per cent answered same question correctly on the post-test.

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.

**Teona Harris**, Clinton County Soil and Water District Staff Educator, instructing students on soil erosion.
**TAX PREPARATION**

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<tr>
<th>Number of Clinton County Learners</th>
<th>Summary of Workshop Participation in 2013</th>
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<td>Ten income tax returns were completed and e-filed in Plattsburg. One male and female filed single. One female filed head of household. Four couples—three without children and one with two children (son and daughter) filed married filing jointly.</td>
<td>Taxpayers—ten  Combined AGI—$185,508  Total refunds—$7,793  IRS tax refunds—$7,072  IRS tax owed—$5,269  MO tax refunds—$721  MO tax owed—$1,242  Earned Income Credit—$1,075  American Opportunity Credit—$2,026</td>
<td>Two families received $1,075 of Earned Income Credit (EIC). The family receiving the $815 EIC also received $2,000 from the Child Tax Credit (CTC). An additional family was able to take advantage of the CTC in the amount of $1,000. Only two taxpayers qualified for the property tax/rent credit, in a combined amount of $158.</td>
<td>Adjusted gross income (AGI) ranged from $0 (one taxpayer) up to $42,195; combined AGI is $185,508. Total refunds were $7,793. Federal refunds totaled $7,072. Missouri state refunds were $1,925. One taxpayer owed $1,242 in Missouri state income taxes.</td>
<td>When you support the Missouri Taxpayer Educational Initiative, taxpayers avoid high cost refund anticipation loans, leading to reduced family debt, which assists in stabilizing the county tax base.</td>
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**HOUSING AND ENVIRONMENTAL DESIGN**

**EDUCATION PROGRAMS AND ASSISTANCE TO CITIZENS**

* Serving Northwest Missouri, including Clinton County *

<table>
<thead>
<tr>
<th>Number of Clinton County Learners</th>
<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>
</tr>
</thead>
<tbody>
<tr>
<td>Three participants from the Green Hills Women’s Shelter</td>
<td>Rent Smart</td>
<td>Participants learn the basics of budgeting, the rental application process, how to maintain positive landlord-tenant relationships, credit reports, and indoor air quality information and how to keep their homes safe and clean.</td>
<td>Participants benefit by applying the information that they receive in the training to their own lives. They learn how to budget their money; how to be a successful renter by maintaining positive landlord-tenant relationships; understand the Missouri Landlord-Tenant Laws; the importance of documentation and record keeping; and steps they can take to improve their indoor air quality and keep their home clean and safe.</td>
<td>The Rent Smart program is designed to provide training and educational resources for individuals, agencies and organizations serving low-income populations so they can obtain and maintain affordable rental housing successfully.</td>
</tr>
</tbody>
</table>

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

Dr. Rebecca J. Travnichek was in Plattsburg, Missouri, March 29, 2013 performing tax preparations for 10 Clinton County residents for the fourth year of Free Tax preparation provided by the Extension office.  

Connie Neal  
Housing and Environmental Design Specialist
# AGRONOMY PROGRAMMING

<table>
<thead>
<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>
<th>How Does This Work Make Clinton County and Missouri Better?</th>
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| The value of all crops including row crop, forages and commercial horticulture are $406 million in Holt, Atchison, Andrew, Nodaway, Clinton, Buchanan, and DeKalb. 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 NW Region. The programming effort is accomplished through media such as radio, newspaper, newsletters, meetings and answering grower’s questions. | Participants learned:  
- New precision ag technology and biotechnology and how technology fits into a growers 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 growers operation  
- Pesticide safety  
- Product costs and determining their cost effectiveness  
- 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, what are the advantages and disadvantages of using a product, a strategy, or sometimes how to address a situation or problem. | 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 help growers expand markets and produce food not only locally but globally.  
Certified crop adviser meetings provide technical information to crop advisers.  
Graves Chapple Research Center and Hundley-Whale Research Center provides the latest research to help growers remain competitive and provide an economic driver for northwest Missouri.  
As world population continues to increase, the need for food production continues to grow. It is critical to continue to increase crop yields while maintain competitiveness to increase food production in an environmentally responsible manner. |

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**Program Titles:**

- Management of Genetically Improved Crops
- Missouri Crop Management Systems
- Plant Protection
- Nutrient Management Planning
- Forage Production and Management
# BEEF and FORAGE PRODUCTION EDUCATION

**James Humphrey**  
LIVESTOCK SPECIALIST

*Serving: Andrew, Buchanan, Caldwell, Clinton, DeKalb Livingston and Ray Counties in Northwest Missouri*

<table>
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<th>Number of Learners</th>
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<tr>
<td>831 Beef Cattle and Forage Producers</td>
<td>1,014 hours were spent in learning beef cattle production, forage production and utilization, nitrate management, nutrition management and ration balancing by area participants.</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>With the 2012 and 2013 drought, producers were provided Extension resources “Dealing with Drought” which better prepared them to make informed decisions about their operations. Producers gained information about animal health, genetic selection, nutrition, income and expenses affec tion bottom-line for their operations.</td>
<td>Producers are better equipped to seek Extension resources to customize a total quality management for each operation. The improved quality management can help producers get the information and resources they need to improve the bottom line for their operations.</td>
</tr>
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| 744 plus Youth participants | Approximately 889 hours were spent by area youth learning conservation, water cycles and good agricultural production practices. | Participants learned how to best determine the forage values regarding:  
- quality variation  
- maintaining feedstuffs  
- maintaining productivity  
- maximizing nutrient utilization with minimal negative environmental impact. | Producers designed individual feeding programs based on feedstuff availability, nutritional analysis and cost structure for each operations animal’s production stage requirements. | When you support beef and forage production for the clients 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. |

*When you support beef and forage production for the clients 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.*

*Producers designed individual feeding programs based on feedstuff availability, nutritional analysis and cost structure for each operations animal’s production stage requirements.*

*By utilizing the research based information and good production practices taught by Extension, producers and youth will be better stewards of land and resources.*

*Producers are better equipped to seek Extension resources to customize a total quality management for each operation. The improved quality management can help producers get the information and resources they need to improve the bottom line for their operations.*

*Well-informed youth are better prepared to make decisions based on research based results. Youth are our future and provide great opportunities for our area.*

*Producers designed individual feeding programs based on feedstuff availability, nutritional analysis and cost structure for each operations animal’s production stage requirements.*

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### HORTICULTURE PROGRAMS

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<td>Four students completed the Master Gardener Training.</td>
<td>The 2013 Master Gardener Classes were conducted by University of Missouri staff in a variety of locations. A total of 30 people from northwest Missouri took the training conducted from March through early May. The 2013 northwest Missouri program offered 36 hours of training to participants.</td>
<td>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 ornamentals, basic landscaping, growing native plants, and pesticide use/safety.</td>
<td>The Clinton County Master Gardeners are responsible for the planters around the Courthouse, 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.</td>
<td>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>
</tr>
</tbody>
</table>

Master Gardeners tending their landscaping project at the Clinton County Courthouse.

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**Clara Hanks**, Clinton County Master Gardener, preparing seedlings for the annual plant sale.
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 Hours of Collective Participation in 2013</th>
<th>Topic</th>
<th>How did Clinton County Participants Benefit?</th>
<th>How Does This Work Make Clinton County and Missouri Better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>85 participants</td>
<td>255 hours of celebrating by Clinton County farm families and community leaders</td>
<td>Century Farms Celebration is included with the Clinton County Extension Annual Picnic. It is an opportunity to also recognize the State Fair Farm Family. 2013 also marked the 50th anniversary celebration of the Clinton County Youth Building. This celebration would not be possible without the team effort of the County Commission, Clinton County 4-H, Farm Bureau and University of Missouri Extension.</td>
<td>The Moody/Hoback family farm swelled the Clinton County ranks of Century farms to 87 since the recognition program began in 1976. This is a great time for members of the farm community and community stakeholders to come together for recognition and celebration.</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>

Festivities at the Century Farm Family 2013 celebration included the 50th anniversary of the Clinton County Youth Building.

Family members and descendants of the Mood/Hoback family celebrated 100 years of family ownership with Extension and Farm Bureau representatives.
CONTINUING EDUCATION FOR CLINTON COUNTY

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 FY2013, MUCO registered 13,982 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 23,600 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 648 Missouri students in 2013.

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 FY2013, more than 12,907 people from all Missouri 114 counties enrolled in the institute’s 518 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 91 (80 percent) of Missouri’s 114 counties and the City of St. Louis attended continuing education programs in FY2013 sponsored by MU Extension. In FY 2013, 2,691 Missourians participated in a nursing outreach program and another 1,182 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 FY2013, more than 1700 programs reached 27,195 health care Missouri professionals.

MU Continuing Education Identified Missouri County Enrollments 2012-2013

<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>56</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>60</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>118</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.

Karma Metzgar, (left) NW Regional Extension Director, presented Clinton County Office Manager, Vickie Kilgore with the University of Missouri Extension 2013 Junior County Clerical Staff Recognition Award.

Margaret Schemmer (right) 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 the youth of Clinton County.

Receiving the 2013 Clinton County Leader’s Honor Roll Recognition from Debbie Davis, County Program Director and Brenda Norton, Clinton County Extension Council Chair are John Killgore, left photo and Laura Robinson, right photo.

Pictured with the Jason and Rebecca Mink Clinton County 2013 State Fair Farm Family are (from left to right) Ted Sheppard, Missouri State Fair Commission; Sherry Jones, Missouri State Fair Commission; Dr. Jack Magruder, Chairman, Missouri State Fair Commission; Dennis Baird, Deputy Director, Missouri Department of Agriculture; Ashley Bauer, 2013 Missouri State Fair Queen; and Dr. Michael Ouart, Vice Provost for Extension, University of Missouri. The Mink Family was among the 108 Missouri farm families honored during the Missouri State Fair. The annual event is sponsored by the Missouri Farm Bureau, Missouri Department of Agriculture, Missouri State Fair, University of Missouri Extension and the University College of Agriculture, Food and Natural Resources.
2013

Impact on Clinton County, Missouri

UM Research Expenditures Funded by Federal and Private Sources

Electronic Services to the State in 2012

- The Missouri Research & Education Network (MOREnet) provided internet connectivity and technical services to members that include:
  - 64 higher education institutions with more than 308,000 students.
  - 500 K-12 schools with 868,000 students and 76,000 faculty.
  - 134 public libraries connecting 345 library buildings that serve 5.4 million Missourians.
  - MOREnet returned $13 million in telecommunications expenditures to companies doing business in Missouri.

Economic Development Highlights

- With $3.2 billion in total revenues, UM would have been the 17th largest publicly held Missouri-headquartered company in the state in 2012.
- With more than 31,000 employees in the state, UM was Missouri’s 2nd largest employer in 2011.
- In 2010, UM’s $169 million in federal science and engineering research expenditures represented 93% of these expenditures at Missouri public universities.
- In 2012, UM’s $223 million National Science Foundation (NSF) awards represented 80% of all NSF awards made to Missouri public universities.
- UM earned $6.8 million in licensing income in 2012.
- UM received 163 new invention disclosures in 2012.
- 8 startups were created around UM technologies in 2012.
- UM was issued 34 U.S. patents and filed 69 new U.S. patent applications in 2012.

Financial Aid Provided to UM Students in 2012

- $371.2 million
  - $432.1 million - MU
  - $202.2 million - UMKC
  - $97.5 million - Missouri S&T
  - $139.4 million - UMSL

Impact on Education in 2011

- UM enrolled 50% of first-time undergraduates attending four-year public institutions in 2011.
- UM awarded 49% of the 1,130 doctoral degrees earned in Missouri.
- UM awarded 42% of the 1,937 first professional degrees earned in Missouri.
- UM awarded 54% of the 28,798 bachelor’s or higher degrees awarded by Missouri’s four-year public institutions.

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 2012, 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 • UM Extension • US Census Bureau • US Dept of Health and Human Services • National Science Foundation

Advancing Missouri

Office of Government Relations
309 University Hall • Columbia, MO 65211 • 573-882-2726
www.umsystem.edu/umorg/
Impact on Clinton County, Missouri

The County at a Glance
- UM Students: 117
- UM Alumni: 474
- UM Employees: 13
- Population: 20,743
- UM Salary & Retirement Income: $378,610
- UM State Tax Revenue: $12,589
- UM Federal Tax Revenue: $48,570

<table>
<thead>
<tr>
<th>UM Students from the County in 2012</th>
<th>UM Alumni Residing in the County in 2012</th>
<th>UM Services Received in the County in 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>117 students</td>
<td>474 alumni</td>
<td>38 patients seen at UM Health Care, with $20,791 of uncompensated care.</td>
</tr>
<tr>
<td>50 - MU</td>
<td>280 - MU</td>
<td>78 patients seen at the UMKC School of Dentistry with an average of $36 per patient in uncompensated care.</td>
</tr>
<tr>
<td>48 - UMKC</td>
<td>170 - UMKC</td>
<td>11,143 contacts with MU Extension through MU Extension events held in district counties.</td>
</tr>
<tr>
<td>9 - Missouri S&amp;T</td>
<td>20 - Missouri S&amp;T</td>
<td></td>
</tr>
<tr>
<td>86 - Undergraduates</td>
<td>4 - UMSL</td>
<td></td>
</tr>
<tr>
<td>31 - Graduates</td>
<td>209 Selected School Alumni</td>
<td></td>
</tr>
<tr>
<td>95 - Full-time students</td>
<td>4 - Medicine</td>
<td></td>
</tr>
<tr>
<td>22 - Part-time students</td>
<td>20 - Nursing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6 - Health Professions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 - Dentistry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 - Pharmacy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - Optometry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8 - Veterinary Medicine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>83 - Agriculture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>38 - Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24 - Law</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UM Employees and Retirees Residing in the County in 2012</th>
<th>UM Alumni Teaching K-12 in the County in 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 people employed by UM</td>
<td>26 teachers</td>
</tr>
<tr>
<td>8 - MU</td>
<td>8% of all county teachers</td>
</tr>
<tr>
<td>5 - UMKC</td>
<td>4 principals and administrators</td>
</tr>
<tr>
<td>6 UM Retirees and Beneficiaries</td>
<td>27% of all county principals and administrators</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CLINTON COUNTY EXTENSION 2013 FINANCIAL REPORT

State, Federal and County Funding for Extension

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

INCOME

County Appropriations $22,155.96

TOTAL INCOME $22,155.96

EXPENSE

Personnel Services-Salaries & Wages $13,550.00
Payroll Expenses $1,211.73
Travel $558.52
Postage $100.00
Telephone - Local & Long Distance $1,755.40
Rent/Lease Space $600.00
Rent/Lease Equipment $2,736.00
Supplies/Services $1,137.69
Utilities $1,287.99
Other Contract Services - Internet Connection $300.00
Insurance (Surety Bond & Liability) $287.50
Extension Council Election Expense $36.75

TOTAL EXPENSES $23,561.58

NET INCOME $(1,405.62)

University of Missouri’s Contribution to County Extension Program

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

## Clinton County Elected Council Members
- Carmen Bennett
- Susan Burton
- Charles Dawson, Commissioner
- Mark Hoover
- John Killgore, Vice Chair
- Pam Korneman
- Susie LaFavor
- Brad Lawrence
- Andy Mathews
- Zane Meyer, Farm Bureau
- Brenda Norton, Chair
- Leanne Orton
- Sydney Orton, Youth Representative
- Sadina Millard, Treasurer
- Sean Millard
- Debi Stewart
- Gina Thompson
- Jim Thompson
- Charles Wolven, Secretary

## Clinton County Commissioners And Legislators
- Wade Wilken, Jr  
  Presiding Commissioner
- Charles Dawson  
  District 1 Commissioner
- Larry King  
  District 2 Commissioner
- Representative Jim Neely  
  District 8
- Senator Brad Lager  
  District 12
- Congressman
- Sam Graves  
  District 6
- Senator Roy Blunt
- Senator Claire McCaskill

## Extension Faculty and Staff Based in Clinton County
- Debbie Davis  
  4-H Youth Specialist  
  County Program Director
- Dale Hunsburger  
  4-H Youth Program Associate
- Vickie Kilgore  
  Office Manager/Bookkeeper

## Additional Faculty and Staff Serving Clinton County
- James Crawford  
  Natural Resource Engineer  
  Atchison County
- Penny Crawford  
  Nutrition Program Associate  
  NW Region
- Clinton Dougherty  
  Business Development and PTAC  
  Buchanan County
- Wayne Flanary  
  Agronomy  
  Holt County
- Tom Fowler  
  Horticulture  
  Buchanan County
- Janet Hackert  
  Nutrition and Health  
  Harrison County
- Jim Humphrey  
  Livestock  
  Andrew County
- Robert Kelly  
  Agriculture Business  
  Buchanan County
- Beverly Malsberger  
  Community Development/Emergency Management, Buchanan County
- Don Miller  
  Human Development  
  Buchanan County
- Connie Mowrer  
  Nutrition Program Associate  
  Northwest Region
- Connie Neal  
  Housing and Environmental Design  
  Nodaway County
- Angela Rhoad  
  Nutrition Program Associate  
  Northwest Region
- Rebecca Travnichek, PhD  
  Family Financial Education  
  Andrew County

## Regional Director
- Karma Metzgar  
  NW Regional Director
- Jill Knadler  
  NW Regional Administrative Assistant

## Regional Office
- St. Joseph, MO

## 2013 Clinton County Extension Council