Boone County
2014 Annual Report
Reliable, Responsive and Relevant to Today’s Needs
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

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

EQUAL OPPORTUNITY/ADA INSTITUTIONS
Every Missouri county has an Extension Council comprised of elected and appointed citizens who guide local educational programming.

Council members are partners in the educational process, from needs assessment through program implementation and evaluation of outcomes.

Extension Council members...

- Work with regional faculty to determine educational programs for the county.
- Manage finances of local extension operations.
- Provide personnel to carry out Extension activities.
- Elect and organize the local Extension Council.

Greetings,

Looking back over the past year of the Boone County Extension Council, there have been numerous times in the midst of our activities when it was appropriate to just reflect on how fortunate we are in Boone County for our county’s Extension Office. Boone County Extension also has the Boone County Commission to thank for being supportive and understanding the value Extension brings to the people of our county.

The stated mission of University of Missouri Extension can be summarize in three words, “improve Missourian’s lives” As you read this year’s Annual Report you’ll see the successful programs accomplishing this mission in Boone County. We are always interested in suggestions to help us adapt our programs to better serve the needs of improving your life.

Cheryl Brown, Secretary
Boone County MU Extension Council

2014 Boone County Extension Council

Vicky Miserez, Chair.................................................................Columbia
Marie Pasley, Vice Chair..............................................................Columbia
Cheryl Brown, Secretary ..............................................................Hallsville
Nancy Franklin, Treasurer ..........................................................Hallsville
John Sam Williamson ..........Farm Bureau Representative, Columbia
Becky Boehmeyer .................................................................Columbia
Paul Brugmann.................................................................Columbia
Al Buchanan ............................................................................Columbia
Dan Downing...........................................................................Hartsburg
Johanna Dudley........................................................................Rocheport
Julie Fleming...........................................................................Rocheport
Jennifer Grabner ........................................................................Ashland
Joyce Kemner ...........................................................................Sturgeon
Richard Kitchen ........................................................................Columbia
Tony Martin................................................................................Rocheport
Becky Mott................................................................................Rocheport
Nancy Nelson............................................................................Rocheport
David Nolke ............................................................................Rocheport
Melissa Quast..............................................................................Columbia
H.C. Russell................................................................................Clark
Bill Thompson............................................................................Columbia
Janet Thompson ..........Boone County Commission Representative
Alan Toigo................................................................................City of Columbia Representative
Boone County 4-H Grows Future Leaders

Thirteen 4-H Clubs across Boone County offer educational experiences that teach essential life skills including leadership, public speaking and service to others. The local program has experienced a strong growth over the past three years with 648 members currently.

Through the guidance of parents and certified adult volunteers, members gain knowledge and skills in over 50 wide-ranging project areas including robotics, photography, archery, sewing and woodworking. For young people with an interest in caring for pets, horses or livestock, 4-H is the premier youth organization offering expertise and support.

According to a recent national study of positive youth development conducted by Tufts University, young people who participate in 4-H programs are:

- 300% more likely to contribute to their communities
- 300% less likely to engage in risk behaviors
- 76% more likely to make better grades
- 70% more likely to go onto college
- 40% more likely to pursue science or engineering careers

Boone County 4-H highlights for 2014 included:

- Local 4-H members entered 847 youth arts exhibits at the Boone County Fair with 180 exhibits judged and selected for the Missouri State Fair.

- Thirty Boone County members participated in statewide competitions for the Missouri 4-H Shooting Sports.

4-H Camp!

The 4-H Camp program is planned and conducted by the MU Extension Youth Development staff with over 100 youth and teens participating at Clover Point Camp at the Lake of the Ozarks.

Campers learn important teambuilding and leadership skills while enjoying traditional favorites such as swimming, archery, crafts, canoeing, singing and the evening campfire.

We are thankful for the ongoing support of the Boone County 4-H Foundation for sponsoring the camp scholarship program that assists members to attend.
**Education**

**Improving Health with Mindfulness**

The World Health Organization calls stress “the health epidemic of the 21st Century.” Many people cope with stress by engaging in unhealthy behaviors like overeating, smoking, self-medicating and not leading a physically active life. Stress is also a contributing factor in many chronic diseases like heart disease and diabetes. Decreased workforce productivity is also strongly correlated with employees having high stress levels.

One approach to helping individuals better manage stress levels is to utilize mindfulness practices. Research on how mindfulness works and the positive effect it can have continues to grow. Neuroscientists are discovering how it affects the brain, medical researchers are observing its health benefits, and social scientists are showing how it can positively impact our lives and our society.

Program participants completed surveys at the end of the program. Their responses showed:

- 100 percent felt they benefited from attending the program.
- 100 percent would recommend the program to others.
- 82 percent felt their knowledge, skills and understanding of the topic was “A lot/ A great deal” after participating in the program. (51 percent of the participants reported they had “None/A Little” knowledge, skills and understanding of the topic prior to the program and 38 percent reported only “Some” before attending the program.)
- 93 percent indicated they planned to make changes in their life as a result of participating in the program. (Ex. regularly practice mindful breathing, increasing physical activity and movement, slow down eating, plan meals, drink more water, eat less processed foods, eat more fruits and vegetables, eat out less and cook in more, taking a few minutes each day for themselves, limit time on digital devices, build in more pauses during the day, limit multi-tasking, be less judging, be more reflective and less reactive.)

“Mindful Living” Participants Respond...

- “Thank you for another wonderful useful program. I appreciate the resource list and will continue to explore these topics.”
- “Very enjoyable, educational and life enhancing!”
- “Reminded me it’s never too late to learn new things and make changes.”
- “Thank you MU Extension for offering these types of classes for its citizens.”
- “Enjoyed the program and really made me think about how I want to live my life.”
- “Excellent program! Makes me want to learn more!”

*Stress - “the health epidemic of the 21st century”*

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Education

Health Care Education

When the new health care law went into effect in 2014, many individuals and families needed to make decisions about their health insurance. As a nonpartisan entity, University of Missouri Extension provided educational workshops to help individuals have the resources and skills needed to make informed health insurance decisions. Educating citizens about the facts related to the law would aid in helping clear up confusion due to the law, help individuals comply with the law and help individuals make informed health insurance decisions for themselves and their families.

Seven health insurance education programs were offered throughout Boone County and reached more than 200 individuals. Post-program surveys completed by the program participants showed:

✦ 92 percent felt their understanding of how the new health care law affects them (or their family) was “good/excellent.” (Prior to the program 84 percent felt their understanding was “poor/fair.”)
✦ 92 percent felt their understanding of their (or their family’s) health insurance options was “good/excellent.” (Prior to the program 72 percent felt their understanding was “poor/fair.”)
✦ 96 percent now know where to go to get help with enrolling in health insurance, if needed.
✦ 72 percent felt they had the information they needed to make an informed health insurance decision for themselves and/or family.
✦ 60 percent felt the decisions they would make about their health insurance was affected by what they learned at the program.

Horticultural Assistance for the Homeowner

By supporting agricultural programming efforts, homeowners and commercial producers gain knowledge and skills that lead to improved efficiencies of production, profitability and sustainability in their home environment and commercial operations. This benefits the citizens of Boone County and Missouri by improving commercial horticulture businesses and rural economy, along with rural community viability; protects and enhances natural resources and nurtures healthy plants for food, clothing, shelter, and energy conservation.

In 2014 there were 76 contacts to provide resources and information to home gardeners to allow them to better manage a wide variety of trees, turf, ornamental, fruit and vegetable plantings. The ability to care for and enjoy your living space has both physical and psychological benefits for people who garden. The participants as a result of our efforts were able to maintain and improve their gardens and landscapes in a timelier fashion and in a more environmentally friendly way. With below average cool weather in 2014, they were better able to manage the various stresses (predominantly fireblight in fruit) that were experienced through much of the state. Mature trees continued to be an issue for the homeowners as they understood the reaction of plants to the drought conditions of 2012 and how to prevent their loss. Trees of this maturity were not only valuable but significant items of the area landscape. Value of the mature trees would be $500 to $880 depending on species and condition.
Outreach

Crop Management and Plant Protection Educational Efforts

In 2014 there were 126 Boone County contacts to communicate with agricultural producers to provide information and/or resources to manage the situations that were being encountered in their production efforts in forage and row crops. Additionally, University of Missouri soil test reports were provided on 110 producer soil samples; 1 playground for heavy metals. Timely and accurate application of fertility based upon crop need and yield goals are the bases for improved yield and environmental stewardship. A pasture management seminar was given to a group of 30 area farmers.

For the meteorological winter season, the Dec-Jan-Feb temperature average was around 27°F, slightly more than 5 degrees below normal, and the coldest Missouri winter in 35 years, or since the brutally cold winter of 1978-79. The winter of 2013-14 continued into March and it ranks 7th coolest. Wet snow fell on May 3 with 2-7 inches reported along a 100 mile wide corridor throughout central and western Missouri. The last snowstorm of this magnitude fell in Missouri on May 2, 1929. This cool patterned delayed normal timely plantings in much of Missouri. Resources to manage the crop early as well as later were provided in a timely and extensive manner.

Planting and managing the 2014 crop was a challenge as in many seasons. After coming through three years of below normal precipitation Missouri needed recharge both above and below the ground and lower yield were predicted early on. All of the early predictions were laid to rest starting with the entire Corn Belt being wet into the first week of July. However, little rainfall fell in July and farmers were once again concerned about crop yields due to inadequate recharge of subsoil. August rains came just in time to fill corn ears and set soybean pods and the timing of these rains could not have been better placed. The key pest of interest in row crops were Japanese beetles and likely brought on by this year’s weather patterns, sudden death syndrome in soybean was widespread across the state.

While certainly outside of what we currently think of as normal, weather conditions were favorable for crops, pastures and livestock as producers began anticipating a bin busting harvest toward the end of summer and grain delivery systems were full to the gulf.

Japanese beetles have been a growing problem over the past several years. While the numbers seemed to be declining in 2013, they climbed back up this year. These efforts resulted in producers not applying pesticides until the beetles were at an economic level or in many instances, not applying any control measures for Japanese beetles. This would result in a cost reduction of $20 per acre on average.
Goodwater Field Day Held

On September 5, Goodwater Field Day was held at the University of Missouri research site (Goodwater Creek Experimental Watershed) north of Centralia. The educational event featured research test plots, a variety of short talks and opportunities to visit with researchers.

The field day focused on three areas: cover crops, bioenergy and sustainable production/water quality. The wagon and walking tours included long term cover crops, utilizing yield data, cover crop mixes, water quality research, Miscanthus, cover crop establishment, cover crop termination, soil health story (long term benefits), bioenergy crop, herbicide rotation effects of cover crops. There was also information on the national policy on cover crops, long term agro-ecological research (LTAR), and alternative uses of Miscanthus. All participants were given a field day book with more details about the research for future use.

Participants reported they plan to use the information gain to: consider cover crops behind corn silage, choose chemicals and considering carryover, choosing cover crop mixes and study the use of filter strips.

Seventy producers attended the event and the sizes of farms vary from 100 acres to 7,000 acres. Fifty percent of those completing the evaluation reported they plan to increase cover crop acreage in the next year. The use of cover crops may lead to the decreased use of fertilizer and herbicides, which can contribute to profitability and a healthy environment.

Combine Blessing and Safety Expo Promotes Safe Harvest

A Combine Blessing and Safety Expo was held on August 2 at the Central Missouri Event Center in Columbia. Boone County University of Missouri Extension and Boone County Farm Bureau sponsored the event.

The combine blessing marked the beginning of the harvest season which is also one of the most dangerous for farmers. The event also reminded the public agriculture is the foundation to end world poverty and hunger.

The event was perfect timing to talk to family members about harvest season safety. Various University of Missouri Extension specialists and other safety experts gave safety tips during the event. Topics included machinery transportation, ATV safety, hearing protection, grain bin safety, LP fuel and fire safety, livestock and horse safety, and demonstrations of a new equipment rollover app for mobile devices.
Food Nutrition Program Reaches Youth

University of Missouri Extension’s Family Nutrition Program (FNP) reached 3,695 participants directly and 32,930 indirectly with nutrition education in Boone County during 2014 a significant percentage of which were low income.

Youth from Preschool to 12th grade learned nutrition and health information in kid-friendly terms through lessons with hands on activities. These activities include opportunities for taste-testing healthy foods and practicing skills that lead to good health. Education for adults also includes nutrition, food safety, physical activity, and food resource management.

Nutrition Program Associates (NPA’s) go into schools and other grant eligible locations and interact with community members to help them make healthier choices and build healthy habits. They see the difference the program makes in people’s lives. Sara Placke and Sandra Zapata are the NPA’s who serve Boone 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 healthcare costs over the participant’s lifetime, saving taxpayers money in reduced public healthcare benefits and insurance premiums.

Success Stories

At Community Fun City, the staff are very involved and often times they are parents themselves. The principal shared with us that her 3rd grade daughter was demanding vegetables at dinner. Her daughter told her that her nutrition teacher told her to eat healthy and to be a “taster”. She said she was surprised by the girl’s enthusiasm and happy that she was listening!

My son goes to Shepard Boulevard School, he is in second grade. I was at the picnic with the kids and their parents and one of the parents reached me and told me she was helping at the picnic giving fruits and vegetables to the kids and one of the girls told her “may I have some fruits and vegetables please, I want to have shiny hair”.

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Supporting Boone County Businesses

As entrepreneurs and innovators, small businesses are becoming a more diverse group that continues to make the economy more productive. Across the state, approximately 500,000 small businesses account for 98 percent of all businesses with employees.

During 2014, MU Extension served 8,030 Boone County residents and their companies. Consultations included information and training to successfully start, run and expand businesses. The resulting increased business activity creates jobs, increases consumer demand, promotes economic development and generates tax revenue for the public's welfare.

Note that the business programs offered in Boone County range from the basic to the advanced and include:

- Exploring Entrepreneurship is a monthly program that introduces future entrepreneurs to the challenges of starting a business.
- Understanding Financial Statements demystifies how to read, understand and most importantly use the information found in the balance sheet and income statement.
- Building an Investor Ready Technology Company helps entrepreneurs who understand technology but do not understand financing to successfully complete for private funding.
- Fast Trac for Displaced Workers provides training on how to start business to individuals who have lost their jobs due to a plant closing.

2014 Impact
MU Extension Small Business Services in Boone County

- 106 new jobs,
- 54 jobs retained
- $14,338,592 in increased sales
- $13,837,084 awarded in government contracts
- 16 new businesses started
- $62,904,541 in business loans and investments
- 1,199 clients and companies received business counseling
- 225 business training attendees and conference participants

From 2012 through 2014, the Missouri Small Business & Technology Development Centers and Missouri Procurement Technical Assistance Centers assisted clients in creating almost $2 billion in economic impact.
Expertise

Master Gardeners Share and Grow Together

After completing a thirteen session training program featuring seminars, field trips and hands-on learning conducted by MU Extension, Master Gardener program graduates agree to volunteer a minimum of 30 hours for community projects and educational events. In 2014, the local Heart of Missouri Chapter logged 1,376 service hours.

Chapter accomplishments over the past year include the Demonstration Garden located in west Columbia that produced over 800 pounds of vegetables that were donated to the Central Pantry.

The Chapter's Habitat for Humanity Committee conducted planting sessions assisting five families.

Master Naturalists Preserve Local Prairies

Upon completion of the three month training program, Boone’s Lick Chapter Master Naturalists contribute a minimum of 40 hours of public service in natural resource conservation.

During the past year, members assisted with plant and animal surveys, natural community restoration, native plant demonstration gardens, speakers bureau presentations, outdoor classroom programs, and interpretive guide opportunities. 4,450 hours were donated, a 1.5% increase over the previous year.

Suzanne Wright (Class of 2005) describes this month’s winning picture of Missouri Master Naturalists collecting seeds at Tucker Prairie: “Seed collecting has been a favorite of mine since 2006 when we first started offering it as a volunteer opportunity. It’s great fun to collecting seed on parts of Prairie Fork that were planted with seed the Boone’s Lick Chapter harvested from other prairies in those early years. There is a wonderful feeling of group accomplishment when we stand on a prairie in bloom knowing in part it’s the result of the Boones Lick Chapter’s efforts. Maybe it’s because I’m a Kansas girl and grew up on the prairie but ending my work day collecting seed is a wonderful de-stresser. Standing in a prairie, facing into the wind always helps me find my center.”
### Faculty & Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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</thead>
<tbody>
<tr>
<td>Kent Shannon</td>
<td>County Program Director</td>
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<tr>
<td></td>
<td>Natural Resource Engineering Specialist</td>
</tr>
<tr>
<td>Christine Mosbrucker</td>
<td>4-H Youth Development Specialist</td>
</tr>
<tr>
<td>Vera Massey</td>
<td>Nutrition and Health Education Specialist</td>
</tr>
<tr>
<td>Letitia Johnson</td>
<td>Community Development Specialist</td>
</tr>
<tr>
<td>Emily Kerley</td>
<td>4-H Youth Program Assistant</td>
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<tr>
<td>Sandra Zapata</td>
<td>Nutrition Program Assistant</td>
</tr>
<tr>
<td>Sara Placke</td>
<td>Nutrition Program Assistant</td>
</tr>
<tr>
<td>Beth Carter</td>
<td>Office Manager</td>
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### Boone County MU Extension 2014 Financial Summary

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Web access makes hundreds of fact sheets available on topics of interest to individuals and organizations in the community. 

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