Boone County
2012 Annual Report

Reliable, Responsive and Relevant to Today’s Needs
December 2012

Dear County Commissioners and Associated Friends of MU Extension:

At MU Extension, we know that citizens want their taxpayer-supported institutions to be responsive to their needs. Our distinct land-grant mission is to provide relevant, reliable and responsive education that improves Missourians’ lives, communities and the economy. We fulfill that mission by providing access to many research-based resources of the University of Missouri, in partnership with local and statewide organizations and groups.

Funded through the support of federal, state and county government; grants and contracts; fees for services; and private gifts, MU Extension leverages every dollar received to create expanded educational opportunities. Every dollar appropriated from county government is leveraged with $6 to create a significant return on investment.

MU Extension creates value for citizens – including those who do not participate directly in its programs. For example:

The MU Extension Fire and Rescue Training Institute teaches volunteer and career firefighters how to handle or mitigate fires and disasters, resulting in safer firefighters, citizens and communities. In FY2012, MU FRTI trained 17,096 fire and emergency service personnel through 217,000 instructional hours of training. Enrollees were from all of Missouri’s 114 counties.

This summer’s severe drought put MU Extension faculty in an active leadership role in helping Missourians deal with the crisis. MU Extension developed educational materials and programs and provided technical assistance for homeowners, businesses and the agricultural community. Social media, including Facebook, YouTube and websites, were used to inform citizens on such topics as animal nutrition, including nitrate poisoning; heat-related disabilities; government programs; wildfires; and more. Extension faculty also worked with Soil and Water Conservation Districts to implement drought cost-share practices, which allowed more than 11,000 landowners to apply for state assistance to access adequate water supplies for livestock and crop production.

These are just two examples of MU Extension’s public value impact. I’m sure you will find many other examples in your local community.

I want to thank you for your support of MU Extension as a critical team player in your locale. Your ideas for improving our partnership are always welcome.

Sincerely,

Michael D. Ouart
Vice Provost and Director
Every Missouri county has an extension council comprised of elected and appointed citizens who guide the 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.

Fellow Citizens of Boone County,

Looking back over the past year, there have been numerous times in the midst of our work when it was appropriate to just reflect on how fortunate we are to have the opportunities provided by the county’s University of Missouri (MU) Extension Center. We have thriving programs and a great facility thanks to the support of volunteers from across the county who dedicate their valuable time and energy. We are also thankful to the Boone County Commission for being supportive and understanding the public value of our mission to educate and serve.

The stated mission of MU Extension can be summarized in three words - “improve Missourian’s lives.” As you read this year’s Annual Report you’ll see the scope and impacts of these efforts. The Extension Council understands that today’s challenges demand that our mission be dynamic - supporting new initiatives in the areas of youth development, entrepreneurial skills, agriculture, nutrition, home finance, family relationships, home gardening, food preservation, energy and natural resources.

We are always interested in your suggestions to help us adapt our programs to better serve your needs. We invite your input and hope to hear from you soon.

Paul Brugmann, Chair
Marie Pasley, Secretary
Boone County Extension Council

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2012 Boone County Extension Council

Paul Brugmann, Chair ................................................................. Columbia
Vicky Miserez, Vice Chair ............................................................ Columbia
Marie Pasley, Secretary ............................................................... Columbia
Nancy Franklin, Treasurer .......................................................... Hallsville
Dan Atwill ..........Boone County Commission Representative, Columbia
Luke Barnett............. Farm Bureau Representative, Hartsburg
Cheryl Brown..........................Hallsville
Al Buchanan ................................................................. Columbia
Elizabeth Hoyos ................................................................. Columbia
Willie Jones ................................................................. Columbia
Rick Kitchen ................................................................. Columbia
Tony Martin ....................Rocheport
Becky Mott ................................................................. Rocheport
Laura Redfield-Jacobs ......................................................... Ashland
J. R. Richardson ................................................................. Columbia
Dan Rhoades ................................................................. Centralia
Catherine Simmons ............................................................. Centralia
Denise Tate-Kuhler............City of Columbia Representative, Columbia
Bill Thompson ................................................................. Columbia
Barbara Walker ................................................................. Columbia
Lisa Wood ................................................................. Columbia
Chelsea Wren ................................................................. Ashland
Amy Wilsdorf ................................................................. Columbia
Brenda Wilsdorf ..........Senior 4-H Council Representative, Midway
Kelly Wilsdorf ................................................................. Youth Representative, Midway
Boone County 4-H Grows Future Leaders

Fourteen 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 experienced a strong 12% growth in 2012 with 619 members.

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 science or engineering courses or careers

Boone County 4-H highlights for 2012 included:
- Local 4-H members entered 881 youth arts exhibits at the Boone County Fair with 172 exhibits judged and selected for the Missouri State Fair. The annual Jr. Livestock Auction generated over $169,000 in sales.
- Eight Boone County members - a record number - were selected by statewide competition for the Missouri 4-H Shooting Sports team that took second place at the National 4-H Contest in Nebraska.
- The Boone County 4-H Livestock Judging Team of Maddie Grant, Emily Montgomery, Layne Robinson and Andy Mott took second place in state.
- Boone County members receiving 4-H college scholarships were Savannah Angell, Sarah Kelley, MaKayla Nadler, Andrew Perry, Ashton Rhine and Benjamin Smith.

4-H Camp!

The 4-H Camp program is planned and conducted by the MU Extension Youth Development staff with over 100 youth, teens, and family members 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 very thankful for the ongoing support of the Boone County 4-H Foundation for sponsoring the camp scholarship program that assists members to attend.
Stay Strong, Stay Healthy Gets Adults Moving

Stay Strong, Stay Healthy is a ten-week exercise program designed for middle-aged and older adults. Research has shown that older adults who increase their physical activity and strength train regularly improve their strength, balance and flexibility. This results in reduced risk for falls, better overall health and greater independence.

These health benefits decrease the likelihood of a participant entering a nursing home, which costs on average $51,465 per year in Missouri. The money saved benefits the community by keeping more discretionary income in circulation locally. It also keeps people actively, independently contributing to society longer.

At the end of the program series, 26 participants completed a post-fitness assessment for strength, flexibility and balance, as well as a class evaluation. Results from the evaluations show:

- 100% improved in at least four of the five fitness assessments, with 80% improving in all five measures.
- 86% thought their health was better as a result of participating in the program.
- 93% felt more flexible.
- 86% felt physically stronger.
- 79% felt they had more energy.
- 86% reported they had added more physical activities to their weekly schedule.

Stay Strong, Stay Healthy participants shared the following comments about the program:

- “I am more motivated now to keep doing my exercises and do other things to stay healthier.”
- “My balance has definitely improved and I’m a lot more flexible now. Good news for me!”
- “This program has helped me be more active and I’m walking more now too.”
- “I feel stronger and more empowered in my life.”
- “I am feeling more positive about my life overall now. Thank you for this great program!”

Older adults who exercise more have greater independence.
Learning Home Food Preservation Skills

The interest in preserving food at home continues to grow along with the interest in gardening and eating locally grown foods. Unfortunately many people do not have the necessary skills to safely preserve foods and some are using unsafe recipes and processes that could endanger lives.

MU Extension provides research-based home food preservation information to help consumers safely preserve foods at home. Individuals who develop skills in home food preservation can decrease their risk of food-borne illness, reduce food costs, as well as improve their eating habits and health. They also help improve the environment by eating and preserving foods that are locally grown.

Four food preservation workshops were offered in Boone County in 2012, providing individuals the opportunity to increase their knowledge and skills. Post-program surveys revealed that:

- 100% found the workshops were helpful in improving their understanding, knowledge or skills in home food preservation, as well as feeling more confident in their ability to preserve foods.
- Prior to the workshops, 66% reported none to very limited experience preserving foods.
- 100% planned to preserve food as a result of attending the workshop.
- 92% will use tested recipes from reliable sources.
- 81% planned to share food preservation resources and skills with others.

Comments from food preservation workshop participants:

- “I really enjoyed these classes and learned so much!”
- “I am very excited about preserving foods now and will be able to maximize the nutrition of the fruits and veggies I freeze and can.”
- “Great classes! I finally have the confidence to start canning foods!”

Horticulture for Home and Business

Twenty Boone County residents participated in a hands-on home fruit care workshop series that was conducted this spring. Participants learned about site selection, varietal choices, pruning, and pest control.

The climate, soils and population base of Missouri are conducive to growing of certain high value horticulture crops such as tomatoes, berries, melons, wine grapes, and peaches. Providing growers with unbiased and research-based information to make better decisions will help them be successful with commercial production and marketing of their crops.

MU Extension provides this information through workshops, newsletters, field days, farm tours and grower conferences. Over 352 adults from Boone County were reached with activities in 2012 such as the following:

- A series of ‘Twilight Walk and Talk’ community garden presentations.
- A horticulture presentation for a FFA (Future Farmers of America) field day at Bradford research farm.
- Horticulture events such as the annual Tomato Fest, the Comprehensive Elderberry Conference and Farm Tour in Hartsburg, and the Missouri Horticulture Symposium, which partnered with Les Bourgeois and two vegetable producers using high tunnels.
- Grower attendance to the annual Great Plains Growers Conference.
Teaching New Technologies to Improve Agriculture

The last decade has seen a rapid shift in producers having their own self-propelled sprayers. For many this has been their first exposure to pesticide applications with this type of technology.

In 2012, over 50 Boone County producers were reached with information on sprayer technologies, as well as, pesticide applicator training. From studies from surrounding land grant universities, the following impacts could be estimated from these programs:

- 20,000 acres of pesticides are being applied correctly.
- 1,000 acres of over application of pesticides was corrected.
- $15,000 in savings could be realized due to reductions in over application per year.

In conjunction with the purchase of self-propelled sprayers, producers are investing in the precision farming technologies to be incorporated with these sprayers. The combination of these technologies results in new opportunities for producers to learn how to maximize yields.

An aMAZEing Way to Educate

Have you ever wondered what goes into making a corn maze? When to plant the corn? Is there anything special about the corn?

For the past ten years, Kent Shannon has worked with the MU Bradford Research and Extension Center in creating a corn maze for students in Boone and surrounding counties. Over 3,000 Boone County youths visited the maze in 2012.

This year students found their way through a corn maze with a “MIZ - SEC” pattern cut into it. The maze was planted with corn specially designed for mazes that boasts a distinctive dark purple kernel and reddish leaves.

Corn is planted in 15-inch rows in the last week of June or the first week of July—later than typical corn planting so the corn will be green during the fall months when people will visit the maze.

When the corn is about 12-24 inches tall, one person equipped with a portable GPS unit walks through the cornfield, followed by a person operating a self-propelled mower.
Teaching Lifelong Health and Fitness

A full range of Family Nutrition Education Programs provide research-based information on nutrition, food safety, and physical activity for lifelong health and fitness. In 2012, these programs reached 8,272 participants in Boone County.

Adult participants learn to make healthier meal choices, eat breakfast more often, are more willing to try new foods and are more likely to increase their physical activity. These efforts serve to reduce healthcare costs over the participant’s lifetime, saving taxpayers money in reduced public healthcare benefits and insurance Premiums. Community partners include the Boone County - Columbia Health Department, the McCambridge Center, Salvation Army, Harbor House and area food pantries.

Nutrition education for youths provides information in kid-friendly terms and lessons with hands-on activities. Activities include opportunities for taste-testing healthy foods and practicing skills that lead to good health. With each lesson a newsletter goes home to the family that provides a summary of the lesson using a game or puzzle or recipe as an interactive way for parents to discover what their student learned.

In addition, Early Sprouts is a 24-week preschool nutrition and gardening program that expanded in 2012 to 250 pre-school age children in Boone County. The program focuses upon children’s preference for six target vegetables. Through cooking activities, gardening experiences, and family recipe kits.

Evaluations from teachers described parents interest in the nutrition lessons - children who were resistant to healthier foods were now willing to try new foods and encouraged parents to “cook healthy”.

Showing youth the world of agriculture

Most people are generations removed from the farm, says Smith, livestock specialist with University of Missouri Extension. That's why she has been presenting the program "Ag in My World" to elementary school students.

"They don't understand the scope of agriculture and everything it entails," Smith said. "I think it is important for us to educate our youth about agriculture and the jobs and the products we get from agriculture so they have a better understanding of where their food comes from."

A pilot program began during the summer, when Smith reached more than 400 summer school students through Columbia Public Schools' Adventure Club after-school program. Smith says it was very well received and has continued into the regular school year.

"We don't graduate enough agriculturalists to fill all the positions that are available in the agriculture industry," Smith said. "What we need to do is get that information out to those kids and let them know that there are opportunities out there."

“It is important for us to educate our youth about agriculture.”
Partnerships

Building Stronger Communities

The Neighborhood Leadership Program is a four year partnership with the city of Columbia that teaches citizens how to become more involved and have greater impact in their community. A primary goal is to promote a higher level of communication between residents and their city officials.

MU Extension assists in planning and conducting the spring and fall Neighborhood Congresses attended by representatives from Columbia’s neighborhood associations. Sessions highlight working cooperatively, strategic planning, citizen involvement and managing change.

MU Extension has also worked closely with the Columbia Housing Authority on a monthly series of capacity building trainings for residents and members of the Tenants Association.

Promoting Economic Development

MU Extension works in partnership with local and regional economic development organizations to expand small business opportunities, entrepreneurship, job creation, and youth retention. One example is the ongoing collaboration with the Centralia Regional Development, Inc. (CREDI) that has resulted in the roll-out of a “buy local” campaign to promote area merchants.

Another successful collaboration is “Columbia Imagined,” a new community visioning initiative partnering with the city’s Comprehensive Planning Task Force. MU Extension provides support and assistance in:

- Developing data and scenario reports for use in determining key trends and projections for future growth.
- Training task force members in public presentations skills and developing presentations on each of the plan elements.
- Creating outreach strategies for inclusive community participation.

The plan is now being drafted and will be shared with the public in early 2013.

Encouraging Participation

The monthly radio show “Community Connections” brings together representatives of community groups, organizations and governmental bodies to talk about upcoming events and programs across mid-Missouri. The show reaches listeners in a seven county region at drive-time and invites residents to help build more vibrant and livable communities.

Forming strong partnerships enhances our ability to reach more people.
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 2012, MU Extension served 608 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.

Impact of MU Extension Small Business Services in Boone County for 2012

- 278 new jobs,
- 191 jobs retained
- $9,725,061 in increased sales
- $19,168,434 awarded in government contracts
- 25 new businesses started
- $27,161,934 in business loans and investments
- 326 clients and companies received business counseling
- 240 business training attendees and conference participants

Business Development Resources for Farmers

A series of workshops to strengthen farm business practices were conducted during the past year and included:

- A tax school covering current tax laws with the potential to affect many farms and agricultural producers. Topics included the most recent regulations, rulings and legal cases and specific impacts for small businesses and individual taxpayers with an agricultural focus.

- QuickBooks has become the “standard” and popular accounting software tool for farm record keeping. Participants learned to customize their chart of accounts, utilize enterprise accounting and generate farm-specific financial reports.
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 2012, the local Heart of Missouri Chapter logged over 1,750 service hours.

Chapter accomplishments over the past year include the demonstration garden in west Columbia used to teach good gardening practices, youth gardening support at Ashland Elementary, landscaping at local Habitat for Humanity homes and advanced gardening workshops.

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. Over 4,500 hours were donated, a 28% increase over the previous year.

One highlight included seed collection on nearby prairie preserves. Seeds and volunteer plants are harvested to share with other native gardens in the area.

Making a Difference!

“Planting a native garden and attracting wildlife is a way to show others a sample of what Missouri can give - birds singing, bees buzzing, butterflies fluttering - the peace and harmony of nature.”

Nancy Bowles, Master Naturalist
Boone’s Lick Chapter

2012 Master Gardener graduation class with MU Extension Specialist Kent Shannon.

Jeff Zimmershied (center), owner of the Lawn Company, speaks to Heart of Missouri Master Gardeners about the practices used at Shelter Gardens.

Master Naturalists collect native plant seeds at Prairie Fork Conservation Area.
### 2012 Boone County Financial Summary

**Income:**
- County Commission Appropriation: $120,000
- Fundraising Support: 1,033
- **Total Income**: $121,033

**Expenses:**
- Salaries, wages, benefits: 67,022
- Travel: 11,764
- Telephone service: 3,218
- Advertising: 828
- Rent/lease equipment: 7,079
- Supplies/services: 6,396
- Utilities: 4,394
- Contract services: 8,336
- Insurance: 2,613
- Miscellaneous: 320
- Repairs/maintenance: 2,513
- Furniture/equipment: 1,291
- **Total Expenses**: $108,762

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**Web access** makes hundreds of fact sheets available on topics of interest to individuals and organizations in the community. Visit us at:

extension.missouri.edu/boone

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### Faculty & Staff

- **Vera Massey**
  - County Program Co-Director
  - Nutrition and Health Education Specialist

- **Jim Ronald**
  - County Program Co-Director
  - 4-H Youth Development Specialist

- **Larry Dickerson**
  - Community Development Specialist

- **Kent Shannon**
  - Natural Resource Engineering Specialist

- **Orin Pogue**
  - 4-H Youth Program Assistant

- **Sandra Zapata Arias**
  - Nutrition Program Assistant

- **Sara Placke**
  - Nutrition Program Assistant

- **Frankie Anderson**
  - Office Manager

- **Beth Carter**
  - Bookkeeper

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