2016 Annual Report

Bollinger County Extension



UNIVERSITY OF MISSOURI Extension

Table of Contents

Table of Contents
Letter from Vice Chancellor, Marshall Stewart
Letter from the Bollinger County Extension Council4
Council Activities5
Bollinger County Extension6
Bollinger County Staff
Bollinger County 4-H8-11
Horticulture
Agronomy14-15
Livestock Education16-17
Human and Environmental Science18
Community Development19
Human Development and Leader Honor Roll20
Family Financial21
Family Nutrition Education Programs22-23
Business Development and Century Farm24
Family Nutrition Education25
Continuing Education26-27
Recycling
State Fair Farm Family
Mission
Impact on Bollinger County
Financial Report

Extension

PHONE: (573) 882-7477 FAX: (573) 882-1955

January 5, 2017

Dear County Commissioners and Friends of MU Extension:

The past year was a busy one for University of Missouri Extension. As a long-time extension professional and newcomer to Missouri, I have found the support from people like you to be remarkable. Missouri is a special place with a promising future.

Through the efforts of faculty, staff and amazing volunteers, MU Extension connects millions of Missourians with knowledge they put into action in their daily lives. Using a range of learning experiences, we reach people of all ages and backgrounds, in every corner of the state.

In response to direct input received from local councils and the unique nature of each county, extension programs vary slightly across the state. This strength of local flexibility and public engagement enables county-based Mizzou faculty to provide local learning experiences that improve lives and community vitality. For example:

- MU Extension business specialists helped local Missouri businesses achieve sales increases of \$186 million while creating or retaining 7,766 jobs.
- Helping assure access to health care in local communities, MU Nursing Outreach made it
 possible for 2,094 nurses keep their skills up to date.
- Our 4-H youth development specialists and other extension team members worked with volunteers and community leaders to reach 269,000 youths ages 5 to 18 across the state.
- Anticipating the needs of Missouri's aging farm population, extension faculty developed workshops that target estate planning, succession and retirement planning specific to farmers.

These are just a few examples of how Mizzou's commitment to extension and engagement benefitted Missourians this past year.

In the interest of better serving Missourians, we are conducting a statewide needs assessment. It will include extensive input from local communities and stakeholders. It will result in stronger alignment between extension programs and local needs.

I encourage you to read the attached annual report from your county office to gain an understanding of how MU Extension has worked this past year to serve your community.

Your support of MU Extension and our efforts in your community is greatly appreciated. As always, I welcome your input on how the University of Missouri can better serve the people.

Sincerely,

Warshall News

Marshall Stewart, Ed.D. Vice Chancellor for Extension

A Message from the Council

Dear Friends of Extension:

The University of Missouri Extension Council would like to thank the Bollinger County Commission for supporting extension programs during this past year. We are pleased to present this 2016 Annual Report to give you a brief overview of the programs and educational information that was provided for the citizens of Bollinger County.

In 2016, Missourians all over the state turned to the University of Missouri Extension to help solve problems, gain information, and receive educational programming. As a statewide effort we strive to provide research-based information and educational programs to individuals, families, farmers and businesses. Programs in agriculture and natural resources, 4-H youth development, health and nutrition, business, community development and continuing education have improved their quality of life.

The success of University of Missouri Extension in Bollinger County depends upon the dedication and support of members of the Extension Council.

The Extension Council appreciates the continued support from the county commission, individual volunteers, groups, organizations, business and county citizens. We look forward to the planning, programming and development for the years ahead.

If you would like more information or if we can assist you, please contact the Bollinger County University of Missouri Extension Center.

Extension Council Members

Ronda Elfrink, Chair Karla Kiefer, Vice Chair Barb Bailey, Treasurer Sharon Hopkins, Secretary Karen Barlow Gary Brewer (Co-op Rep.) Micah Bristow Travis Elfrink (Commission) Theresa Henson Debbie Lincoln Gary Lincoln (Farm Bureau Rep.) Dana Mayfield Peggy Mouser Jennifer Proctor Brigitte Thiele

Ronda Elfrink

Ronda Elfrink **Bollinger County Extension Council Chair**

Donna Aufdenberg

Donna Aufdenberg Bollinger County Program Director

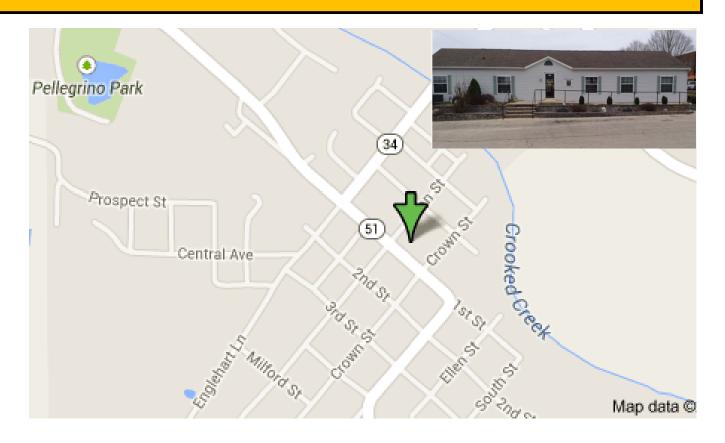
Council Activities



2016 Council Members Sworn into office during the 2016 Annual Meeting



Bollinger County's University Extension



Bollinger County Extension Center is located at:

302 Union Street Marble Hill MO 63764 Tel: (573) 238-2420

Office hours:

Monday-Friday 8 a.m. to 4 p.m.

Email: bollingerco@missouri.edu **Website:** www.extension.missouri.edu/bollinger

Bollinger County Staff

Staff Based in Bollinger County



DONNA AUFDENBERG County Program Director Horticulture Specialist VICKIE SEILER Nutrition Program Assistant





WILLIE SAPUTO 4-H Youth Program Assistant SUE FISHER Office Manager



Additional Staff Serving Bollinger County

Bethany Bachmann, Nutrition Specialist Ashley Bales, Family Financial Education Specialist Rebecca Blocker, Housing and Environmental Design Specialist DeNae Gitonga, Community Development Specialist Mary Gosche, Human Development Specialist Janet Kline, Regional Director Erin Larimore, Livestock Specialist Linda Morgan, Regional Coordinator FNP Anthony Ohmes, Agronomy Specialist Richard Proffer, Business and Industry Specialist Frank Wideman, Natural Resource Engineer Specialist



4-H Youth Program Assistant Willie Saputo

Number of Bollinger County Learners in 2016	 85 4-H members 1 4-H teen conference participant/1 volunteer 5 state congress participants/2 volunteers 16 southeast regional 4-H energizer participants 12 heartland 4-H camp attendees/1 volunteer 8 members attending Legislative day/3 volunteers Youth Civic Leaders summit - 7 members, 1 volunteer Horse Camp—4 members attended Cardinals/4-H Day—3 members, 2 volunteers attended State Shoot - 3 members participated Members participated in the SEMO District Fair, East Perry, Madison And Butler County Fairs
What Did They Learn?	Bollinger County 4-H clubs offer long-term educational experiences in which members learn life skills such as decision making, leadership, responsibility, and teamwork. Members learn by doing under the guidance of adult volunteers who teach the different project areas. Clubs also involve children and teens in community service, fundraising and educational trips and workshops.
How Participants Benefit	4-H helps grow caring, confident, contributing members of the community. The youth are empowered with knowledge of how to set goals , learning management skills , self-motivation and an understanding of what it means to be part of something bigger than themselves .
How Does This Work Make Bollinger County and Missouri Better?	 4-H members are the future leaders, businessmen, and community members of Bollinger County. Learning the skills that 4-H has to offer and by empowering youth, our volunteers have helped to create a better community for all of us to live in. 4-H is a great return on investment. For every \$1 million invested from public resources for Missouri 4-H, the program leveraged \$3.4 million to serve youth and families statewide. Studies show that youth in programs like 4-H are 70% more likely to attend college and increase their earing potential by \$2.01 million over their lifetime.





TEENS GATHER ON MU CAMPUS FOR 71st STATE 4-H CONGRESS

Teens from across Missouri gathered on the University of Missouri campus June 1-3 for the 71st annual State 4-H Congress. In all, 233 teens ages 14-18 participated in a variety of hands-on workshops that fit their interests. Choices included topics such as marketing, agriculture education, electricity, leadership, line dancing, and a food challenge.

"4-H is about belonging to a group that is learning new skills and exploring the things they care most about. "State 4-H Congress is a place where teens find positive new friends, develop leadership, and explore possible careers as they experience life on a university campus." Delegates also worked to set priorities for the 36 peers they elected to represent their regions on Missouri's State 4-H Council for the coming year, outlining youth-identified goals for the next 3-5 years. The State 4-H Council represents their voice at the state level, working as ambassadors of 4-H and representatives of the youth in their regions.

4-H in Missouri is a program of MU Extension. Over 23,000 Missouri children and teens participate in 4-H clubs, and 269,000 were reached by Missouri 4-H programs in 2015. Research shows young people involved with 4-H more likely to pursue careers in science, attend college, and are nearly four times more likely to contribute to their communities.



The Bollinger County delegation to the 4-H Congress, from left: Chaperone Nikki Wolfe, the leader of the Leopold 4-H Club, and Bollinger County 4-H members Beth Lincoln, Raylee Leimer, Kyleigh Wolfe, Grace Seabaugh, Ashley Nussbaum and Maria Calvert. Also in attendance, but not pictured, was Jennifer Wilkinson, leader of the Crooked Creek 4-H Club.



Program Assistant Willie Saputo

4-H members plant historic Liberty Tree in Bollinger County

SEDGEWICKVILLE, Mo. – The Cheerful Workers 4-H Club is helping to preserve American history by planting a Liberty Tree at the Sedgewickville City Park. The project is part of a unique service-learning initiative that was launched in February by the Missouri 4-H Foundation in partnership with Crader Distributing and local STIHL dealers.

The original Liberty Tree was a famous elm tree that stood near Boston Common during the Revolutionary era. In 1765, the Sons of Liberty, a group of American colonists, staged the first act of defiance against British rule under the tree. This spawned the resistance that eventually led to the American Revolutionary War. During the war, several other towns designated their own Liberty Trees as support for the resistance spread throughout the colonies. These Liberty Trees become symbols of American independence. The last original Liberty Tree, a Tulip Poplar, stood on the grounds of St. John's College in Annapolis, Md. until 1999 when it died during Hurricane Floyd. Prior to its death, 14 seedlings were successfully germinated from the tree through a project spearheaded by the nonprofit conservation organization American Forests. The seedlings were planted throughout the original 13 colonies.

In order to further preserve the legacy of the Liberty Trees, a bud-grafting program was launched, through which several bud-grafted trees were grown. Thanks to the generosity of Crader Distributing and local STIHL dealers, one of these bud-grafted trees was donated to the Bollinger County 4-H club.

"Since 4-H leaders and members represent many of the same patriotic and self-sustaining qualities inherent in America's forefathers, Crader Distributing and local STIHL dealers are delighted to team with Missouri 4-H in the distribution and planting of seedlings from America's last standing Revolutionary era Liberty Tree," said Stan Crader, president of Crader Distributing. "It is our hope that each tree will grow into a highly visible living monument to deep-rooted American val-

ues."to more than 1,300 dealers throughout the Midwest.







4-H Youth Program Assistant Willie Saputo

























Horticulture



Horticulture Specialist Donna Aufdenberg

Donna Aufdenberg, Horticulture Specialist, assists homeowners in Southeast Missouri as well as Bollinger County residents on horticulture questions. Donna assists on a variety of topics such as vegetable gardening, flower gardening, houseplants, outdoor plants, insect problems, soil testing and disease diagnostics.

Donna assists commercial fruit and vegetable growers, Farmer's market growers as well as greenhouse growers.

Donna serves as secretary to the Bollinger County Soil and Water Conservation District Board and a board member to the Bollinger County Recycling Board.

Donna co-writes and coedits a gardening newsletter called "The Garden Spade". This newsletter provides gardeners with timely topics on gardening. The newsletter goes out to people throughout the state of Missouri.



TOP INFORMATION REQUESTS

How to Interpret Soil Tests Insect Identification Plant Diagnostics Weed Identification and Control

2016 SUMMARY

186 Soil Tests

1000+ inquires about horticulture and agriculture information

900+ Master Gardeners and garden enthusiasts in southeast Missouri receive The Garden Spade monthly newsletter

In 2016, Donna conducted Master Gardener training in the Southeast Region. The training

covered topics such as plant anatomy, soils, flowers, woody ornamentals,



vegetable gardening, herbs, home fruit production, lawn care, diseases and insects, propagation and houseplants. Eleven participants took this training and two of those were Bollinger County residents.



Master Gardeners volunteer for clean up work day.

Horticulture Programming



Horticulture Specialist Donna Aufdenberg

Number of Learners in 2016	 53 direct contact participants through programming (participants are actively engaged in the learning process); <i>i.e.</i>, Master Gardener Programs, Farmer's Market Workshop, Pesticide Training, Horticulture Programs, etc. 10 individual contacts (one on one); <i>i.e.</i>, farm visits 1175 indirect contacts (information distributed); <i>i.e.</i>, calls, walk-ins, emails, monthly newsletter, meetings and other special assignments
What Did They Learn?	Participants who engaged in horticultural/agronomy programming learned about integrated pest management (insects, weeds, disease), soil health, general plant care and variety selection.
How Participants Benefit	 Participants who gained knowledge on horticulture/agronomy topics may benefit in the following ways: Learn to identify the problem, be it insect, disease, weed or nutrient and use an effective control measure, therefore reducing pesticide application and runoff into local water systems. Knowledge gained about soil health leads to saving money by applying the need rates of fertilizer, reducing nutrient runoff and improving soil quality for future generations. Knowledge gained on general plant health and selecting the right plant for the right place for landscaping leads to increased property values, environmental benefits of reduced erosion and improved air quality, and conserving natural resources through reduced heating/cooling costs. Knowledge gained on home vegetable and fruit production leads to increased consumption of healthy food and increased exercise.
How Does This Work Make Bollinger County	Participants will increase the use of IPM, increase use of personal protective equipment, and read the label contributing to correct pesticide application practices, which leads to reduced use of pesticides, decreased pesticide exposure, and increased IPM practices. This will benefit the community by reducing cost to
and Missouri Better?	consumers, increasing health and safety, and protecting the environment and non- targets.

Agronomy



Number of	Program: Missouri Crop Management Systems 12 were in attendance.
Learners in 2016	
What Did They Learn?	This program uses multiple delivery methods to target a broad range of learners on various aspects of sustainable crop production. Education events include: direct contact through corn, soybean, certified crop advisor meetings; individual contact through field and office visits, soil test reports, phone calls and email; and indirect contact through extension publications and agronomy fact sheets. Additionally, these programs motivate learners to implement practices that will minimize their impact on the environment.
How Participants Benefit	 Soil tests. Missouri variety trial books taken for selecting genetics. Cover crop acres improving water infiltration and decreasing soil erosion. Improved nutrient application timing for maximum crop uptake and improved yields. Increased knowledge of crop advisors in crop production, pests, soils, nutrients and water quality passed on to producers.
How Does This Work Make Bollinger County and Missouri Better?	 The goal for the program is to change row crop management by increasing: Knowledge of available information sources and hot to use them in selecting the best crop genetics. Knowledge of the complex interactions between crop choice, planting date, seedling rate, nutrient management, soil management, and harvest management. Knowledge of the limitations of different sources of information used in crop management decisions.

Other programs include Pesticide Applicator Training. This program provides certification and recertification education to private and commercial pesticide applicators. This education fulfills the legal requirements and provides technical knowledge to make informed decision before applying a pesticide into the environment and understanding the fate of the pesticide once it is applied. The goal for the program is to change management practices that promote the long-term viability of pesticides by increasing:

- Knowledge that will meet the legal requirements for certification.
- Knowledge and skills to properly apply pesticides while reducing transfer processes such as drift, runoff, leaching, volatilization and crop removal.
- Knowledge that the responsible use of pesticides will reduce personal exposure and result in a cleaner and safer environment.

Agronomy



Number of Learners in 2016	Program: Forage Production and Management 69 were in attendance.
What Did They Learn?	This program covers the largest agricultural industry in Missouri. Direct contact at two events: Forage Nutrient Management and Forage Production Workshops. Direct in conjunction with indirect and individual contact, forage producers learn to better manage their forage resources by improving forage quality, quantity, and persistence through proper grazing and hay harvesting, soil testing, nutrient distribution, and forage specie selection for improved economic return while protecting the environment.
How Participants Benefit	 soil tests phosphorus (P) application on low P soils to improve root development and decrease grass tetany shift to more fall application of nutrients improved persistence and increased stockpiling fescue to reduce hay needs increase in rotational grazing vs. continuous grazing to improve plant health and nutrient distribution renovation of pastures with legumes to improve animal gain and reduce dependence on nitrogen replaced toxic fescue with novel endophyte fescue to improve animal performance rotating hay feeding areas to reduce compaction and improve manure distribution.
How Does This Work Make Bollinger County and Missouri Better?	 The goal for the program is to change forage management by increasing: Knowledge of managed intensive grazing to improve forage quality, quantity and persistence. Knowledge of the complex interactions between forage types, planting date, seedling rate, planting methods: Knowledge of fescue toxicosis and benefits of replacing with novel endophyte fescue Knowledge of nutrient (manure) management for improved plant development and reduced environmental impact.

Livestock Education



Livestock Specialist Erin Larimore

Number of Learners in 2016	 95 direct contact participants through programming (participants are actively engaged in the learning process); <i>i.e.</i>, beef cattle workshops, Show-Me Quality Assurance training, and judging clinics. 40 individual contacts (one on one); <i>i.e.</i>, farm visits, walk ins, phone calls, emails. 283 indirect contacts (information distributed); <i>i.e.</i>, newsletters, SEMO Bull Sale, Show-Me-Select Replacement Heifer Program, meeting and other special assignments.
What Did They Learn?	Participants who engaged in livestock programming learned about new antibiotic labeling and use, controlling anaplasmosis bull and heifer selection, genomic testing, preventing and treating calf scours, marketing show animals to potential buyers, managing females during breeding. Youth participating in the Show-Me Quality Assurance Training learned about proper animal handling and care.
How Participants Benefit	 Participants who gained knowledge on livestock topics may benefit in the following ways: Knowledge gained helps producers learn new antibiotic labeling laws and the processes for obtaining medically important antibiotics that go into the feed or water for livestock. Adoption of better fly control and anaplasmosis prevention techniques can help producers minimize loss from the devastating bacterial disease. Youth gained knowledge on how to produce a high quality meat product, how to make business contacts to sell their product, and how to better present their animal in the show ring. Show-Me-Select producers improve their herd management, reproduction, and genetics with retained ownership or market heifers for added income.
How Does This Work Make Bollinger County and Missouri Better?	Livestock production education programs teach management practices that can lead to a reduction of input costs and increased profitability. Increased livestock management tends to result in the production of higher quality meat or milk product therefore, increasing the value of that product. Educating youth about proper animal handling and welfare practices at an early age increases the chance they will continue utilizing the proper techniques as adults.

Livestock Education



The Show-Me-Select Replacement Heifer Program was designed to implement a total quality management strategy to on farm heifer development, enhance marketing opportunities for and add value to Missouri-raised heifers, and provide a reliable source of quality replacements based on management, reproduction, & genetics.

Thirty-eight heifers from Bollinger County were enrolled in the program in 2016 and six heifers sold in the May sale bringing an average value of \$2283. Ten Show-Me-Select heifers were purchased from residents of Bollinger County. Three of the four buyers from Bollinger County were new buyers. This program has one new participant from Bollinger County who has enrolled fifteen heifers.



Beef and Swine Judging Clinic



Livestock Specialist Erin Larimore

Identifying rust in fescue pasture in Bollinger County.



Livestock & Forage Meeting: Presented on anaplasmosis and the veterinary feed directive.

Human & Environmental Sciences



Housing and Environmental Design Specialist Rebecca Blocker

Free Radon Testing: Searching for a Silent Killer

Radon education programs distributed 105 free radon test kits to increase awareness of the risks of radon exposure in the home, encourage home testing and to gather radon data. A National Healthy Homes grant of \$18,000 provided funding for the statewide project. Each year, lung cancer caused by radon costs about \$2 billion in medical care expenses and lost productivity. The good news is that radon levels can be reduced by up to 99 percent.

The Environmental Protection Agency (EPA) estimates that 1 of 15 homes in the United States have high radon levels. A simple, inexpensive test can determine your risk. Basic practices can help prevent and lower radon levels. The EPA guideline for taking action to reduce radon levels indoors is \geq 4.0 picocuries per liter (pCi/L). Levels as low as 2.0 pCi/L indicate there is some health risk. Results of the 74 viable radon tests:

- 55 Percent of homes tested had radon levels above 2.0 pCi/L, indicating a health risk. Eighteen percent were https://www.eighteen.com to pCi/L requiring action and 16 percent <0.06 showing no measurable risk. The range was <.03 to 9.7 pCi/L,
- Six Head Start Centers tested in SE Missouri had very low rates from 0.03 to 1.8 pCi/L. Partnering with Head Start centers provided a way to share radon health risks and test information to low-income families with young children.
- Homeowners with high radon levels took immediate actions including: Retesting with a long-term test (recommended), hiring certified radon mitigation contractors, DIY sealing of basement cracks, covering the sump pump and improving cross-ventilation on the lowest home level.
- Free radon test kits are available by contacting the MO Department of Health and Senior Services online at: <u>https://health.mo.gov/living/environment/radon/testkit.php</u> or contact the Extension office and I will order your free kit from DHSS.

Specific test results for locations.

New Madrid 1.1

Perryville < 0.3

Dexter – 0.9

Charleston- 0.8

Sikeston – 1.1

Ross -<0.3

Community Development

st ga

Community Development Specialist DeNae Gitonga

Serving Missouri Counties: Madison, Iron, Wayne, Bollinger, Reynolds, & Cape Girardeau

Brief list of services and courses available:

For Youth Development:

- Entrepreneurship Investigation Series
- Step Up to Leadership Series
- Tackling the Tough Skills for Teens Series
- Adventures in Diversity & Cultural Awareness Series

For Adult Development:

- Leadership Online for Today Series
- Resume Guide
- True Colors Personality Assessment
- Step Up to Leadership Series
- Generational Differences

For Staff Working with Youth:

• Youth Development Academy Series

For Organization or Company:

- Volunteer Management Training
- Build Your Board Training Series
- Group Process & Decision Making
- Strategic Planning & Doing

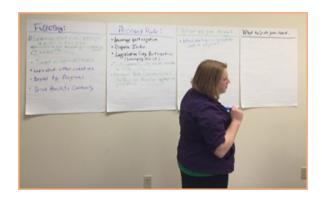
For Communities, Counties, or Regions:

- Facilitation of Civic Forum or Town Hall Meeting
- Community Capitals Asset Mapping



- Community Development Academy
- Supervisory Certificate Series
- Program Evaluation
- Food Enterprise Working Group





Human Development



Human Development Specialist Mary Gosche

Number of	9 participated in the babysitting program .
Learners in 2016	
What Did They Learn?	The 12 year old participants learned in babysitting classes that babysitting is an important job, learned parenting skills and that safety procedures must be in place.
How Participants Benefit	Participants have information that will help them earn money while keeping children safe and well taken care of.
How Does This Work Make Bollinger County and Missouri Better?	The babysitting classes will help the participants be a good parent someday. Good parents take good care of their children and this prevents child abuse and neglect plus keep infants and children out of the foster care system. This saves the state of Missouri money.

Leader Honor Roll

Each year, the Bollinger County Extension Council is given the opportunity to name individuals to the University of Missouri Leader's Honor Roll to recognize individuals who have gone above and beyond their call of duty on behalf of extension. The Leader Honor Roll certificates are presented at the annual extension council banquet in March. This year Nikki Wolfe and Karla Kiefer received the award.





Family Financial



Family Financial Education Specialist Ashley Bales

Number of	8 participated in "Who Gets Grandma's Yellow Pie Plate?"
Learners in 2016	
What Did They Learn?	Participants learned how to communicate with their family about transfer of non- titled property, how to determine what is fair or equitable when passing on their personal possessions, and the different methods that could be utilized for distributing their personal property.
How Participants Benefit	Participants learn how to open lines of communication regarding estate planning in a safe and genuine way. They leave the program with a better understanding of how to make the transfer of non-titled property a less stressful process.
How Does This Work Make Bollinger County and Missouri Better?	100% of attendees reported that – as a result of the class – they were more knowledgeable about how to distribute their non-titled property and that they would make an effort to talk to their family about how they want it transferred. If they follow through, this could mean less family struggles over "who gets what" when a family member passes away. On a larger scale, it could potentially mean less dollars spent on costly family splits or lawsuits in the future.
Number of Learners in 2016	8 participated in Finances on a Fixed Income.
What Did They Learn?	Those who attended Finances on a Fixed Income played the Money Habitudes [®] to learn more about their natural money habits. 88% reported an increase in their understanding of how to set financial goals, 75% said they increased their knowledge of how to prepare a net worth statement, and 75% reported an increased understanding of where to get help with Medicare when they need it!
How Participants Benefit	Those who attended the program were Medicare beneficiaries (or a family member of a Medicare beneficiary) who wanted to learn more about living on a fixed income during their senior years. Participants learned the basics of a net worth statement and spending plan, how to save on grocery spending and whether or not they might qualify for Extra Help to pay for their Medicare expenses.
How Does This Work Make Bollinger County and Missouri Better?	Managing financial resources can be difficult sometimes. When participants learn new techniques to manage those resources in more efficient ways (such as finding a leak in their budget or taking advantage of help with their Medicare prescription drug costs), it not only benefits them personally because they are saving money, but it means they are less likely to need additional resources at the state or federal levels.



Family Nutrition Education Programs



Nutrition Program Educators Vickie Seiler

Number of Bollinger County Learners in 2016	University of Missouri Extension's Family Nutrition Program (FNP) reached a total of 2504 participants. Of that number; 1687 were direct and 817 indirect nutrition education in Bollinger County during 2016. A significant percentage of these participants were low income. FNP provides information on nutrition, food safety, gardening, and physical activity for lifelong health and fitness by working with qualifying schools, community groups and agencies.
Workshop Participation in 2016	1878 collective workshop hours.
What Did They Learn?	Youth from Pre-school to 12th grade learned through kid-friendly, hands-on lessons and activities. Activities include opportunities for taste-testing healthy foods and practicing skills that lead to good health. Education for adults also included nutrition, food safety, and physical activity, as well as food resource management.
What Action Did They Take?	Nutrition Program Associates (NPA's) teach in schools and other grant eligible locations in the county to help them make healthier choices and build healthy habits. Also, through indirect teaching as well as health fairs or other one time workshops, they impact many people that they are unable to actually see in a classroom setting.
How Does This Work Make Bollinger County and Missouri Better?	The Family Nutrition Program (FNP) brought \$8,582,289 in Federal funds to the state of Missouri. These funds were used to provide nutrition education to 951,652 food stamp recipients and food stamp eligible citizens of Missouri. 2,504 of these participants reside in Bollinger County. Participants in FNP became more aware of nutrition, make healthier meal and snack choices, eat breakfast more often, are more willing to try new foods, increased 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.

Family Nutrition Education Programs



Nutrition Program Educators Vickie Seiler

Learning leads to better health and fitness!







Business Development



Business Development Specialist Richard Proffer

Number of Learners in 2016	 14 clients (9 male/female owned; 3 female owned; 2 male owned) 32 hours of counseling time of 31 sessions with 7 clients (an average of 4.6 hours/client)
How Participants Benefit	 Participants learned about marketing/sales, cash flow management, financial loan opportunities, business planning, marketing research, managing a business, and how to start a business. Our Procurement Technical Assistance Center also helped clients learn how to do business with the government.
How Does This Work Make Bollinger County and Missouri Better?	Our clients received personalized counseling that helped them make decisions about their business ideas.

Century Farm



The Missouri Century Farm program's history dates back to 1976 as a result of the Missouri Committee for Agriculture which was co-chaired by James B. Boillot, Director, Missouri Department of Agriculture, and Elmer R. Kiehl, Dean of the College of Agriculture, University of Missouri. The committee's purpose was to organize the American Revolution Bicentennial celebration in Missouri. One activity that was initiated by the committee was the "Centennial Farm" project which awarded certificates to persons owning farms that had been in the same family for 100 years or more. Interest in the program continued after 1976. The College of Agriculture, Food and Natural Resources and University of Missouri Extension planned a 10-year update in 1986 called the "Century Farm" program. This program has been sustained as a yearly event with over 100 farms recognized each year. In 2008, Missouri Farm Bureau became a program co-sponsor. Bollinger County added three Century Farms in 2016.

<u>The Linda Long Family Farm</u>, Marble Hill, MO has been in the family since approximately 1916 with 49 qualifying acres.

David and Dana Vandeven Family Farm, Marble Hill, MO has beenin the family since approximately 1913 with 40 qualifying acres.

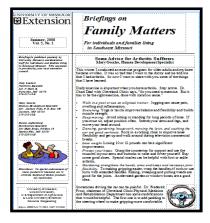
Deanna Jo Wiggins Mason Family Farm, Advance, MO has been in the family since approximately 1916 with 120 qualifying acres.

Family Nutrition Education

Nutrition Specialist Bethany Bachmann

Bethany Bachmann, Nutrition and Health Education Specialist, delivers health related programs to audiences of all ages. Some of the programs she presents includes Home Food Preservation, Stay Strong, Stay Healthy, A Matter of Balance, and Cooking Matters, as well as many others.

The **"Briefings on Family Matters"** is a quarterly newsletter that approximately 50 county residents receive. It consists of information from Mary Gosche, human development specialist, Bethany Bachmann, nutrition specialist, and Donna Aufdenberg, horticulture specialist. The articles consist of information for relationships, nutrition and gardening. This newsletter can be found on the web at: http:// extension.missouri.edu/bollinger/familymatters.aspx



MU Extension Impacts Local Areas

- Over 100,000 residents of southeast Missouri annually turn to University of Missouri Extension to gain practical knowledge, solve problems, adapt to change and make informed decisions.
- There are also many University of Missouri Extension programs that have a positive impact on residents of Bollinger County. Local efforts such as 4-H, Master Gardeners, and the Family Nutrition Education Program have great impact, along with other county specific efforts determined by a publicly elected council.

MU Fire and Rescue Training Institute is a part of Extension's Continuing Education programs. There were 62 FRTI student in 2016 from Bollinger County, 6 enrollments in Missouri Training Institute, and 31 enrollments in MU Conference Office.



Continuing Education

Office of Continuing Medical Education and Physician Lifelong Learning (CME/PLL)

CME/PLL serves both MU Extension and the MU School of Medicine by educating physicians and other health care professionals and enhancing the standard of health care to improve the health of the people of Missouri and beyond through health education, wellness promotion and health care quality improvement/performance improvement initiatives. Additionally, CME/PLL facilitates and manages health care quality improvement projects for the University of Missouri Health Care system and the MU School of Medicine Springfield clinical campus. In FY 2016, CME/PLL offered 1,879 noncredit programs, courses and educational activities with 31,779 participants. *http://medicine.missouri.edu/cme/about*

Fire and Rescue Training Institute (MU FRTI)

MU Extension's Fire and Rescue Training Institute (MU FRTI) provides 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 29,000 firefighters and the 6 million citizens they serve. Courses prepare firefighters for medical emergencies, hazardous materials response and disaster preparedness and mitigation, as well as fires. In FY2016, MU FRTI trained firefighters representing all 114 Missouri counties for a total enrollment of 13,828 fire and emergency responders. Student enrollment numbers rose by 6 percent in FY 2016 as compared to the previous fiscal year. MU FRTI served 1,360 fire departments, organizations or agencies in FY 2016. http:// www.mufrti.org

Law Enforcement Training Institute (LETI)

LETI brings state-of-the-art, certified, professional training to law enforcement officers and continuing professional education to a wide spectrum of other criminal justice and public safety professionals. For more than 60 years, the institute has been the state's leader in providing vital training and education services to Missouri's 17,000 in-service personnel and police recruits annually. Working with national, state and local agencies from 31 states, LETI provided basic and advanced animal cruelty investigations training. LETI also conducted 17 armed intruder/personal safety presentations to extension personnel and council members. LETI led several presentations to civic organizations, churches and businesses throughout the state on a variety of topics, including personal safety and armed intruder response. *http://leti.missouri.edu*

MU Conference Office

The MU Conference Office provides high-quality, professional, full-service meeting management for a variety of noncredit educational programs, such as conferences, workshops, seminars and symposia. Whether a meeting is hosted on campus, in out-state Missouri or anywhere in the world, the office's professional staff provides assistance to create the best learning environment for participants. In FY 2016, 12,215 Missourians registered to attend MU Extension conferences for teacher education in math, science and writing; crop management, and agricultural lending, as well as statewide youth leadership programs. — FCCLA and 4-H. *http://muconf.missouri.edu*

Continuing Education

MU Nursing Outreach

Keeping Missouri nurses up to date with the knowledge and skills they need to effectively provide care and fully participate in the state's health care efforts is a primary goal for Nursing Outreach. In FY 2016, Nursing Outreach helped 2,094 health care professionals participate in its programs and reached another 881 nurses through co-sponsored multidisciplinary programs. Nursing Outreach serves a predominantly rural health care audience with high-quality, affordable continuing education programs using face-to-face, web-based and online delivery methods. A full 92 percent of Nursing Outreach's Missouri participants reside outside the metropolitan St. Louis and Kansas City areas. *http://nursingoutreach.missouri.edu*

Osher Lifelong Learning Institute (OLLI)

The Osher Lifelong Learning Institute (Osher@Mizzou) appeals to the curious and intellectual world of adults 50 and better. Classes are taught by retired faculty, authors, artists and world travelers. Courses cover subjects such as religion and politics, poetry and folklore, arguments before the Supreme Court, writing your memoirs, and the 2017 solar eclipse. In addition to the broad array of classes, Osher hosts social activities and provides service opportunities for members. As the retiree population is projected to double in the next 15 years, Osher is poised to stimulate and engage the minds of seniors. *http://osher.missouri.edu*

Veterinary Medical Extension and Continuing Education (VMECE)

Veterinary Medical Extension and Continuing Education (VMECE) focuses on issues that have widespread impact on Missouri veterinarians and livestock owners. Factors such as disease risks, rising input costs and increasing regulations all impact the livelihood of farming operations. The primary goal of VMECE is to provide up-to-date information and consultation to veterinarians and livestock owners so they are better prepared to address these challenges. For FY2016, VMECE provided continuing education for veterinarians seeking continuing education credit to renew their veterinary licenses. Team members also presented information about production-related topics or animal disease at more than 70 meetings across the state. *http://cvm.missouri.edu/cont-education.htm*

Missouri Training Institute (MTI)

The Missouri Training Institute provides continuing education, custom-designed training programs and 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 and other business-related topics. The institute's consulting services include curriculum design, human resources, strategic planning, board development and facilitating meetings and retreats. In FY 2016, 11,997 people enrolled in the institute's 421 programs. *http://mti.missouri.edu*

Labor Education

The MU Extension Labor Education Program works with members and leaders of a variety of workplacebased organizations across Missouri to help them develop skills to contribute to their organizations, act effectively in the workplace, and be informed and active participants in their communities. In FY 2016, the Labor Education Program offered 38 courses and conferences to meet the needs of 1,007 participants. The majority of these participants are elected and appointed leaders of organizations representing the economic interests of more than 20,000 working people in Missouri and surrounding states. *http://labored/ missouri.edu*

Recycling Project

Waste Management in Bollinger County

It was a very good year! The Center had its sixth anniversary in August 2016. We had our usual three county -wide collection days, in the Spring, Summer and Fall. The event was well attended. As long as people take advantage of this opportunity to recycle in their own communities we will continue to schedule this event. Thanks to Mouser Steel, Country Mart and Scopus United Methodist Church for being our host sites for these events.

Thanks to the local businesses who provided donations for our Spring fundraiser and the anonymous person who matched the funds. This money allowed us to repair the baler when old wiring in the control box caught on fire. The money also paid for replacing a fire extinguisher, lawn mowing services and on-going repairs to the forklift. We hope to have an annual spring fundraiser to help with those unexpected costs for future years.

We sent out two trailer loads of recyclables this year. All of which will go back into the market making new products for consumer's daily use. The total weight of these two trailers was 49,997 lbs. This brings our total of recyclables kept out of the land fill since we started recycling in this county to 152 tons. The recycling market has not recovered yet from the decline in 2014. We continue to receive half of what our poundage was worth in 2013. We added another machine to our inventory. Our can compactor has been delivered and wired up. Our test run flattened metal cans like pancakes. This will allow greater volume on our out-going trailers. It will also help manage the over congestion in the center. If the compactor manual can be believed we can expect a gaylord ration of 5:1. Our current 42 gaylords of cans will be reduced to 8 or 9 gaylords. This will free up a lot of space.

We lost our center manager, Michael, when his contract with Experience Works terminated in July. It took months of searching, facebook boosts and Banner ads to locate a new manager. Pat Morgan, our new manager, was contracted through Experience Works in November. Under her management the center is open more days a week for shorter hours. (Tues - Sat from 11-3)

We have started an Up-for- Grabs corner with bubble wrap and several sizes of styrofoam coolers. We also have gallon pails for berry picking, crafts, etc. We have lots <u>cardboard</u> egg cartons. These are items that our recyclers may have a need for. The items that are not grabbed-up for re-use will be recycled.

We were approached by one of our regular recyclers about setting up a library. It is a movement known as the Little Free Library (LFL) This recycler has now become our library organizer. The library is truly little with only six shelves. In the month that we have had the library, books have arrived and left and more have arrived. We have contacted Bollinger Co Library who have agreed to help out by taking our over flow.

We still need more participation at the center. Reach out to family, neighbors and friends and get them started on the road to cleaning up the environment. Recycling is something everyone should be doing because it is the right thing to do. Consider coming to the monthly meetings on the fourth Tuesday of every month. All are welcome!

Lastly: With grateful hearts we remember those people, volunteers and businesses, who have contributed in any way to the growth and success of recycling in Bollinger County. We have made great strides this year. We could not have done it without you.



Recycle!





State Fair Farm Family

Local residents chosen as State Fair Farm Family for Bollinger County

Marble Hill, MO—Matt and Lacy Upchurch and family of Marble Hill were among the families honored during the Missouri Farm Family Day, August 15 at the Missouri State Fair. The Upchurch family was selected as the Bollinger County Missouri Farm Family by the Bollinger County Extension Council and local Farm Bureau. The family includes Heidi and Zeke Upchurch. Each year, the fair sets aside a day to recognize farm families from across the state who are active in their communities, involved in agriculture and participate in local outreach and extension programs such as 4-H or FFA. The annual event is sponsored by five partner agencies, including the Missouri Farm Bureau, the Missouri Department of Agriculture, the Missouri State Fair and Commissioners, the University of Missouri College of Agriculture, Food and Natural Resources, and University of Missouri Extension. This was the first year in its 58-year history that all 114 counties participated by nominating a family. The event showcases the impact Missouri Farm Families have on the economy and heritage of our state. "These families are involved in agriculture activities in their communities, and are active participants in local outreach and extension," said Missouri State Fair Director Mark Wolfe. "As the showcase for Missouri agriculture, the Missouri State Fair is most certainly the appropriate place to celebrate these families."



Pictured Back Row: Rob Kallenbach, Asst. Dean of Ag Extension, MU College of Agriculture, Food, and Natural Resources; Todd Hays, Vice President, Missouri Farm Bureau; Ted Sheppard, State Fair Commissioner; Lani Ogle, 2016 Missouri State Fair Queen; Jack Magruder, State Fair Commissioner; Barbara Hayden, State Fair Commissioner; Lloyd Wilson, Deputy Director, Missouri Department of Ag. Front Row: Matt, Zeke, Heidi, and Lacy Upchurch.

Mission

UNIVERSITY OF MISSOURI Extension

The Mission of University of Missouri Extension is to

Improve Missourians' lives by addressing their highest priorities through the application of research-based knowledge and resources.

As an integral part of the land-grant mission, University of Missouri Extension is a joint venture of

- * University of Missouri campus
- * Lincoln University Cooperative Extension
- * The people of Missouri through county extension councils
- * Cooperative State Research, Education and Extension Service of the U.S. Department of Agriculture
- * Other stakeholders and partners

Diverse, Experienced and Well Trained Staff

The staff of the University Extension office in Bollinger County is diverse, representing a variety of backgrounds, experiences and educational levels. Staff members have owned their own businesses, worked for other educational institutions, worked in the public and private sector and collectively have over 15 years of work experience with University Extension.





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Bollinger County, Missouri



UM Students: 16

- UM Alumni: 78
- UM Employees: 5

UM Students from the County in 2016

16 students

- > 8 MU
- > 1 UMKC
- ≽ 5 Missouri S&T
- ≽ 2 UMSL
- 13 Undergraduates
- 3 Graduates
- > 13 -Full-time students
- 3 Part-time students

UM Employees and Retirees Residing in the County in 2016

- 5 people employed by UM
 - ≽ 5 MU

UM Alumni Residing in the County in 2016

- 🕨 78 alumni
 - > 50 MU
 - ≽ 4 UMKC
 - ≽ 9 Missouri S&T
 - ≽ 15 UMSL
- 42 Selected School Alumni
 - 1 Medicine
 - ≽ 5 Nursing
 - 4 Health Professions
 - ≽ 2 Dentistry
 - ≽ 1 Pharmacy
 - 2 Veterinary Medicine
 - 14 Agriculture
 - ≽ 9 Engineering
 - ≽ 4 Law

UM Alumni Teaching K-12 in the County in 2016

- 6 teachers
- 4% of all county teachers

UM Services Received in the County in 2016

- 12 patients seen at UM Health Care, with \$61 of uncompensated care.
- 1 patient seen at the UMSL Center for Eye Care with an average of \$52 per patient in uncompensated care.
- 1 patient seen at the UMKC School of Dentistry with an average of \$54 per patient in uncompensated care.
- 19,961 contacts with MU Extension through MU Extension events held in district counties.

UM Footprint in the County Bollinger County MU Extension Center

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12/2/2016

Page 1 of 2

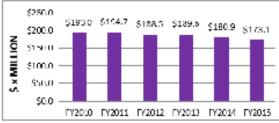
2017



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Bollinger County, Missouri

UM Research Expenditures Funded by Federal and Private Sources



 Between FY2010 and FY2015, UM brought in more than \$1.1 billion in federal and private research funds.

Economic Development Highlights

- With \$3.2 billion in total revenue, UM would have been the 14th largest publicly held Missouri-headquartered company in the state in 2016.
- With approximately 32,000 employees in the state, UM was Missouri's 2nd largest employer in 2016.
- In 2014, UM's \$147.7 million in federal research expenditures represented 94.5% of these expenditures at Missouri public universities.
- In 2015, UM's \$34.9 million in National Science Foundation (NSF) awards represented 84% of all NSF awards made to Missouri public universities.
- > UM earned \$16.4 million in licensing income in 2016.
- UM received 184 new invention disclosures in 2016.
- 3 startups were created around UM technologies in 2016.
- UM was issued 39 U.S. patents and filed 63 new U.S. patent applications in 2016.

Electronic Services to the State in 2016

- The Missouri Research & Education Network (MOREnet) provided internet connectivity and technical services to members that include:
 - 59 higher education institutions with more than 238,000 students.
 - 521 K-12 schools serving more than 838,000 students and 75,000 faculty.
 - 121 public libraries connecting 322 library buildings that serve 5.32 million Missourians.
 - Serving the State Office of Administration, several municipalities and various other eligible organizations.
- MOREnet procured over \$20 million worth of telecommunications services from companies doing business in Missouri.

Financial Aid Provided to UM Students in 2016

- \$916.7 million provided to 58,251 total students
 - \$476.3 million (28,288 students) MU
 - \$193.7 million (11,144 students) UMKC
 - \$114.1 million (7,722 students) Missouri S&T
 - \$132.6 million (11,097 students) UMSL

Education Highlights

- UM enrolled 44.8% of first-time undergraduates attending four-year public institutions in Fall 2014.
- UM awarded 43.2% of the 1,480 Research/Scholarship Doctor's degrees earned in Missouri in 2013-2014.
- UM awarded 25.7% of the 3,252 Professional Practice Doctor's degrees earned in Missouri in 2013-2014.
- UM awarded 55.1% of the 31,016 bachelor's or higher degrees awarded by Missouri's four-year public institutions in Academic Year 2013-2014.

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 2016, based on the best available data. Data Sources include: Missouri Office of Administration • UM IR • Office of Social and Economic Data Analysis (OSEDA) • Center for Applied Research and Environmental Systems (CARES) • MU • UMKC • Missouri S&T • UMSL • UM System • UM Health Care • MU Extension • US Census Bureau • US Dept of Health and Human Services • National Science Foundation

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12/2/2016

Financial Report

Bollinger County Extension is funded through a three way partnership between federal, state and county government. County funding provides the local Extension Center with office space, operation cost which includes secretary salary, travel expense of specialists who conduct educational programs in Bollinger County, telephone, and other miscellaneous council costs for programming.



BOLLINGER COUNTY COMMISSIONERS James Null, Travis Elfrink, and Steve Jordan

2016 FINANCIAL REPORT

INCOME	
County appropriations	\$25,000.00
TOTAL INCOME	\$25,000.00
EXPENSES	
Secretary Salary	\$19,000.00
Payroll expenses	\$1,600.00
Travel reimbursement	\$1,700.00
Postage	\$100.00
Rent/Lease Space	\$100.00
Phone	\$1,200.00
Supplies/Services	\$500.00
4-H Development	\$500.00
Other (IT Service)	\$300.00
TOTAL EXPENSES	\$25,000.00
BALANCE	\$0

DID YOU KNOW?

You can direct your donation to a specific county as a gift to be used immediately or as an endowment contribution to support the county's efforts long term. Gifts are generally used within one to two years. Monies put into an endowment are left in the fund forever to earn interest; once the endowment is fully funded, the county extension office receives the earnings monthly—forever.

You can also direct your donation to a specific MU Extension program, such as your county's Master Gardener or 4-H program.