

**Maries County
University of Missouri
Extension**



**2011
Annual Report**

Mission

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.

Dear Members of the County Commission and Maries County Citizens,

Thank you! Highlights and outcomes of local program efforts in 2011 are included in this annual report. Your support has made it possible for University of Missouri Extension to provide educational programs for the citizens of Maries County. University of Missouri Extension provides research based resources and programs to address high priority issues, and is a direct link to the four campuses of the University of Missouri System. In 2011, more than one million Missourians statewide turned to University of Missouri Extension for help in improving their farms, businesses, families and communities.

For more than 90 years, the University of Missouri has provided cooperative extension services to Missouri residents. Missouri's extension effort has its roots in federal acts (The Morrill Act of 1862, The Hatch Act of 1887 and the Smith-Lever Act of 1914) that enabled the university to create and sustain an Extension service.

The success of University of Missouri Extension in Maries County depends upon the dedication and support of members of the County Extension Council, the Maries County Commission and all the volunteers who assist with our programs. The council assists staff with planning and implementing programs by communicating the interests and concerns of local citizens. We partner in the state to maximize and apply our resources where the greatest impact can be made.

The Maries County Extension faculty, staff, and county extension council members look forward to a continued team effort in 2012 to better our communities and our lives.

Tasha Busch
Chair, 2011
Maries County Extension Council

Christina Moman
Secretary
Maries County Extension Council

Pat Snodgrass
County Program
Director

2011 Maries County Council

The county council is the link between University of Missouri Extension and the people of the state. Established and directed by Missouri state law, the council assists the staff in educational program development and implementation, personnel and fiscal management and membership. County councils are comprised of elected and appointed members who serve two-year terms. The Maries County council members and the districts they represent are:

Elected:

- Tasha Busch, Chair
- Tonya Price, Vice Chair
- Glenn Dressendofer
- Doyle Gray
- Timothy Lehnhoff
- Bill Patton
- Tonya Price
- Brenda Johnson, Treasurer
- Christina Moman, Secretary
- Nina Stratman
- Les Volmert

Appointed:

- Wayne Robertson, MFA
- Ray Schwartz, County Commission
- Richard Huse, City of Belle

2011 Maries County Budget

<u>Revenues:</u>	
County Commission	11,000.00
Short Course/Tour	18,990.00
Resale/Ed. Service	296.00
Postage Reimbursement	<u>1,700.00</u>
	\$31,986.00
<u>Expenditures:</u>	
Secretarial Salaries/Benefits	10,554.00
Telephone	594.00
Supplies	1,508.00
Advertising	102.00
Postage	353.00
Council Expense	20.00
Insurance/Bonds	200.00
Miscellaneous	225.00
Resale	371.00
Capital Purchases	500.00
Mileage	1,889.00
Other	93.00
Tour Expenses	12,323.00
Soil Tests	<u>165.00</u>
	\$28,897.00
Federal and State Revenues to Support Maries County Program	\$106,300.00

State Fair Farm Family
Gene Gillespie Family

Maries County Staff

Secretarial Staff:
Donna Backues
Vivian Honse

Pat Snodgrass
County Program Director
Housing & Environmental Design Specialist
Coordinator—FNEP South Central

Robin (Loehner)Kliethermes
4-H Youth Specialist

Ted Fry/Ed Brown
Agronomy Specialist

Dawn Hicks
Food Nutrition Education Program Associate

Also serving Maries County:
Ted Cunningham
Livestock Specialist

Sarah Hultine-Massengale
Community Development Specialist

Mick Gilliam/Ray Walden
Business Development Specialist

Vacancy
Ag Business Specialist

Chantae Alfred
Family Financial Education Specialist

Tony Bratsch
Horticulture Specialist



Maries County Extension

Courthouse, 4th & Main Street, P.O. Box 116, Vienna, MO 65582
573-422-3359 573-442-3269 FAX

<http://extension.missouri.edu/maries>

January 2012

Dear County Commissioners and Associated Friends of MU Extension:

“Efficiency” and “Innovation” are two watchwords of citizens and government in our currently challenging economy. I am pleased to report that University of Missouri Extension has kept these words in the forefront and acted accordingly for the benefit of Missouri residents statewide.

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 provided from counties is leveraged with an additional \$6.00 to create a significant return on investment.

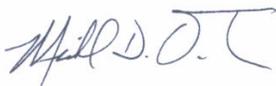
MU Extension creates value for citizens – including those who do not participate directly in its programs. For example:

- *The federal **Expanded Food and Nutrition Education Program** provided \$1.6 million to the state of Missouri. These funds provide nutrition education to limited-resource families. Participants who graduate from the program improve the way they manage their food dollars; demonstrate acceptable food safety practices and make healthier food choices. A healthy labor force is critical to attracting and keeping jobs in Missouri. In addition, this important program reduces healthcare costs over the participant's lifetime, saving taxpayers money in reduced public healthcare benefits and insurance premiums.*
- *2011 has been a difficult year due to natural disasters in Missouri. The MU Extension statewide **Community Emergency Management Program** and local emergency management groups provided immediate on-site assistance by coordinating with the State Emergency Management Agency, Red Cross and other groups and by providing online resources through web pages and other media. As a result, citizens learned how to avoid scammers, ensure safe drinking water and food, and recover from a disaster. MU Extension's emergency management program helps communities, businesses, schools and residents reduce a community's disaster recovery period. This action saves lives and countless dollars in emergency recovery operations and avoids job loss. Additionally, the whole community builds a greater sense of cohesion.*

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. Quart
Vice Provost and Director

MISSOURI CENTURY FARMS



Shown are the Terrill family of the Bland area receiving the 2011 Century Farm Recognition. Pictured are Thomas, Nick and Rhonda Brewer and Sharon and Ronnie Terrill.

Ronnie and Sharon Terrill, Bland, recently received the Missouri Century Farm Recognition. Ray Schwartze, Maries County-Presiding Commissioner and Pat Snodgrass, University Extension County Program Director presented the Terrill family with their recognition sign and certificate at the Maries County Extension Banquet.

The Terrill Century Farm dates back to 1910. The original owner was Louis Vogeler, great grandfather to Ronnie Terrill. The farm consists of 240 acres with the original 1926 farm house still standing. Terrill shared a funny story about the farm regarding hogs and fencing during the presentation.

The Missouri Century Farm Program is sponsored by University of Missouri Extension, UMC's College of Agriculture, Food, and Natural Resources and Missouri Farm Bureau. In 2011, 219 farms across Missouri received this designation.

To qualify as a Century Farm, the same family must have owned the farm for 100 years or more. The family shall consist of direct descendents, as a spouse, child, grandchild, sibling, nephew or niece. Finally, the farm shall consist of no less than 40 acres of the original land and make an overall contribution to the farm income. Applications and information on the 2012 Century Farm Program are available at the Maries County Extension Center.

ANNUAL EXTENSION COUNCIL BANQUET



State Representative Tom Loehner presents Extension Leaders Honor Roll certificates to Erin Johnson. Also receiving this recognition is Nina Stratman and Glenn Dressendofer.

The 2011 Maries County Extension Council Officers take their oath of office from Rhonda Brewer, County Clerk. Pictured are Tonya Price, Vice Chairman; Tasha Busch, Chairman; and Christy Moman, Secretary. Not pictured is Brenda Johnson who serves as Council Treasurer.



Brenda Johnson receiving Extension Leaders Honor Roll.

Extension Leaders Honor Roll Recipients

1950's: Harley D. Schwegler, Joseph C. Brune, Victor D. Street, Joseph B. Lischwe, C. F. Bohn, George W. Snodgrass, R. P. Mosher, August Schwartze, Perry Nelson, Ted Snodgrass, Vincent Lischwe, Fred Wyss, Leonard Bullock, Elsie Mosley and August Schierloh.

1960's: Agnes Schwartze, Vic Renkemeyer, Adolph Winkelman, Jean Henderson, Dollie Tynes and William E. Wagner.

1970's: Tom Elrod, Buel Fannon, Leonard Buschmann, Charles Creason, Harold Oliver, Paul James, Richard James, Jr., Roman Volmert, Wendell Barbarick, James Buechter, Ronnie Terrill and Ernest Dressendofer.

1980's: Jerry Volmert, Laura Schiermeier, Dallas Snodgrass and Charlie Henderson

1990's: Joe Steuber, Jack Feeler, Brady McCall, Howard Henderson, Vic Stratman, and Maries County Bancorp

2003-2010: Les Volmert, Dennis Shirk, Ken Ramsey, Larry Kampeter, Arnold Steinman, Verner Buerlen, Clifford Wagner, Nina Stratman, Eric Johnson and Glen Dressendofer

AGRICULTURE AND NATURAL RESOURCES

*\$14.9 million dollars in direct sales, over 25 million dollars of
Economic impact in Maries County*

South Central Missouri Cattlemen's Tour

The 2011 South Central Missouri Cattlemen's Tour was held July 25-28. The tour, sponsored by University of Missouri Extension, included **36 participants** from 6 counties in south central Missouri and made tour stops in 3 states.



Tour stops included Addison Biological Laboratories in Fayette, MO; The American Angus Association in St. Joseph, MO; Ohlde Cattle Company in Palmer, KS; The USDA Meat Animal Research Center in Clay Center, NE; North Platte Feeders in North Platte, NE; University of Nebraska West Central Research and Extension Center in North Platte, NE; Profit Maker Bulls in Paxton, NE; Heartland Cattle Company in McCook, NE; and Bill Hoertel and Ernie Schlatter Farms

in Smith Center, KS.

Soil Testing

The Extension Agronomy Specialists serve to assist landowners with understanding the nutrient needs of their soils. 2244 soil test reports were reviewed by Extension Agronomy Specialists in 2011, with **348** soil test reports belonging to Maries County residents. Soil testing helps producers determine the best course of action for fertilizing pasture and crop ground. While soil testing is unlikely to save producers money it does enable them to determine how best to spend their money in order to get the most bang for their fertilizer dollar.

Understanding Soil Fertility and Fertilizers

This series of programs provides producers with a wide array of information including Soil Fertility Management, Evaluation of Farm Resources, Understanding of Soil Testing, How to Get a Useful Sample, Interpreting Soil Test Results and Basic Fertilizer Math. This program provides landowners with the tools to make better decisions on the timing and use of fertilizer based on their production goals.

Hay Testing

The County Extension Center serves to assist landowners with understanding the quality of their hay to insure that it meets the nutrient needs of their livestock. 21 hay tests reports were reviewed in 2011 belonging to area residents.

Healthy Yards for Clear Streams

This program is an educational effort to help landowners and businesses become more environmentally responsible with lawn and landscape practices. The goal of this program is to promote lawn care practices that creating beautiful lawns and gardens while reducing unnecessary use of pesticides and fertilizers that may run off and contaminate local streams. Partners of the Healthy Yards for Clear Streams include University of Missouri Extension, Missouri Department of Natural Resources, the City of Rolla, Missouri Department of Conservation, and Grow Native.

Equine Education Workshop

This series of workshops was implemented to address equine management and provide owners with the knowledge and skills necessary to improve their farm management practices for horses. The curriculum

focused on pasture management for the horse and includes the following topics: Soil Fertility Management, Weed Control, Equine Nutrition Management and Training and upkeep of horses.

Grazing Wedge-SARE Grant Project

The Grazing Wedge is a forage management tool that has been utilized primarily by Dairy Graziers to better manage, utilize and understand forage growth and quality. In 2011, MU Extension/MU Commercial Agriculture Program was awarded a SARE Grant to help implement Grazing Wedge strategies on Missouri beef operations. This was done by selecting “pilot” farms to take weekly forage measurements and forage quality samples of their grazing system and apply that data to the Grazing Wedge management system. As part of this pilot project two field days were held highlighting the benefits and improved pasture productivity of two farms participating in this project. These included the University of Missouri Wurdack Farm in Crawford County and the Denny and Mary Beth Pogue Farm in Phelps County.

Private Pesticide Applicator Training (PPAT)

Private Pesticide Applicator Training is a program which trains Missouri farmers and landowners proper safety and use of different chemicals, and enables them to purchase and use on their operations restricted use pesticides and herbicides. In 2011, 30 Maries County residents received PPAT and either were newly certified or received re-certification for their enterprises.

Forage and Beef Conference

This conference, held annually in Cuba, MO in February, provides education on current management practices and techniques regarding forage/grazing/livestock production for the north central Ozarks. In 2011, this event attracted **over 200** participants from more than 15 counties, and featured numerous speakers, as well as a trade show. The Forage and Beef Conference is made possible through partnerships with not only University of Missouri Extension, but also area Soil and Water Conservation Districts, Natural Resources Conservation Service, and numerous other local businesses and organizations that financially sponsor the event.

MU Wurdack Farm

Nearly **800** agriculture students from around Missouri took part in an extensive farm field day and approximately **125** producers attended the annual Fall Field day. Additionally, the farm hosted a Dung Beetle Field Day, featuring speakers on the benefits and managements strategies related to improved dung beetle populations on grazing operations. The farm also hosted several educational programs/tours including the Advanced and Basic Grazing Schools, as well as programs for local schools, organizations, clubs, and organizations, highlighting the ongoing projects, demonstrations and programs at the farm.

Management Intensive Grazing School

This series of workshops teach livestock producers how to improve management of their forage resources for improved profits of their farming operation. Concepts regarding soil fertility, plant health, forage species and suitability, animal requirements, water resources, fencing, system design, and grazing economics are included in this course. Four Grazing Schools were held locally in 2011, at MU Wurdack Farm, Houston, Rolla, and **Vienna**.

Grazing Study at MU Wurdack Farm

In recent years, increases in feed costs and improved markets for heavier weight feeder cattle has spawned increased producer interest in finding methods of adding weight to farm raised feeder cattle. This study, completed during the summer of 2011, evaluated four different grazing systems for optimal animal performance, cost of gains and returns per acre. To see a summary of this research please visit <http://aes.missouri.edu/wurdack/>

Winter Grazing Workshop

This program is designed to provide education and training for livestock producers to extend their grazing season by utilizing stockpiled tall fescue as their primary winter feed. Topics covered included how to properly grow stockpiled tall fescue, nutrient requirements of differing classes of livestock during

winter, fertilization options for growing stockpile, and allocation and strip-grazing of stockpile. Additionally, participants toured two farms where beef cattle were currently being managed on stockpiled tall fescue as the primary winter feed. **Twenty-one producers attended the Maries County program on October 27, 2011.**

Quality Systems Assessment (QSA):

This program, developed by the Missouri Department of Agriculture and the U.S. Department of Agriculture, gives beef producers the opportunity to access domestic and foreign export markets that specify cattle must be source and age verified by a third party. The role of MU extension in this program is to serve as the supply evaluator, whereby, on-farm audits are conducted and producers are qualified allowing feeder cattle to be eligible to be sold as “source and age verified”.

South Ozarks Premier Beef Marketing Program (SOPBM):

SOPBM allows producers to cooperatively market beef calves in 50,000 lb semi-truck loads, and receive performance and carcass data which allows them to make management decisions about their cowherds. To date, fifty-two producers have back-grounded twenty-four groups and 10,895 head of cattle in the program. In 2011, producers enrolled a total of 321 head of steers and heifers for the spring and fall commingling groups. Producers involved in SOPBM learn advanced marketing and management techniques for their beef operations, and improve profits from their beef enterprise.

Show-Me-Select Replacement Heifer Program

The Show-Me-Select Replacement Heifer Program improves herd reproductive efficiencies and farm profitability through increased added value for Missouri-raised heifers. In 2011 a total of 1,129 heifers in Missouri were sold through the Show-Me-Select program grossing over \$1.9 million in revenue and averaging over \$1,700 per head. In 2011, seven producers from this region enrolled one hundred fifty-four heifers in the SMS program. Two farms from the South Central Region consigned thirty-four heifers in either the Spring or Fall Southwest Sales with the heifers averaging \$1,412. A growing number of producers have been utilizing the program to raise quality replacement females for retention on the farm to improve the productivity of their herd.

Missouri Show Me Quality Assurance

This program is designed to teach young livestock producers the importance of quality assurance, consumer acceptability and demand for meat products. Topics covered include food safety, proper animal handling, and good management practices for their livestock enterprise. **Maries County 4-H and FFA youth are required to take this workshop to show and sell at the county fairs.**

Maries County Beef Meeting

Forty-five area producers from ten communities attended the Maries County Beef Meeting on February 21 at the Farmers Café in Vienna. Ted Cunningham, Extension Livestock Specialist and Will McClain presented timely information to help beef producers increase herd efficiency, profitability and improve forage production. The dinner meeting was co-sponsored by Maries County Bank and South Central Livestock Market.

Weed and Brush Control

Maries County has lots of noxious weed that are toxic to cattle. Ted Fry, Agronomy Specialist presented a workshop on Weed and Brush Control. This was held at the Vichy Firehouse on May 5. Producers learned what toxic weeds may be in their hay fields and pastures and how to eradicate them.



Attendees at the MU Wurdack Research Center had the opportunity to examine a wide range of forest products. In a 2006 study, it was estimated that the Missouri Forest Product Industries annually contribute \$4.32 billion to Missouri's economy. "In addition to wood products, trees also produce foods we enjoy eating and help clean the air-they are one of our nation's great renewable resources," said Dusty Walter, MU Agroforestry Research Specialist.



Maries County FFA students had a tour stop at the FFA Field Day at Wurdack Farms on Electrical and Power Line Safety. If only one life is saved because of these educational efforts, it was all worth it. Other stops educated youth on Safe Driving, Protecting our Watersheds, Preparing for College, Careers in Agriculture, Technology on the Farm, Using dogs to manage and move livestock, Entomology, Forages and Grasses, Forestry and Silvopasture, Livestock and many others.

HUMAN ENVIRONMENTAL SCIENCES

Family Development, Housing, Youth Development, Nutrition, Financial Management ~ Families are the heart and soul of our communities.

Family Nutrition Education Program



University of Missouri Extension (UME) Family Nutrition Education Programs (FNEP) reached 1,968 low-income participants with nutrition education in Maries County during 2011. FNEP provides information on nutrition, food safety, and physical activity for lifelong health and fitness. Dawn Hicks is the Nutrition Program Associate in Maries County. Pat Snodgrass serves as Coordinator for the program in South Central Region.

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. Education for adults includes nutrition, food safety, physical activity, and food resource management. Back-to-school and other health fairs were also featured this year.

During 2011, both youth and adults were served through schools, community groups and agencies. The following is a list of the locations where participants were served:



Schools: Maries R-1 Elementary, Junior High and High Schools, Maries R-II Elementary and Middle Schools.

Agencies: Dixon Senior Center, MOCA, Faith Church Food Pantry, First Baptist Church Food Pantry, Loaves and Fishes Food Pantry.

The Pyramid of Power Program was highlighted for both Belle and Vienna elementary students. Both teachers and students thoroughly enjoyed this program and learned about the Food Guide Pyramid and My-Plate. They learned soda and candy are “sometimes” food and exercise is important.

In summary, it has been a successful year in Maries County for FNEP.

Eat Well, Be Well with Diabetes

In 2011, the first Eat Well, Be Well with Diabetes program was held in Maries County. This four-session program is designed to provide self-management tools to those with Type 2 diabetes, their caregivers, friends, and family members. By acquiring skills and knowledge needed to manage their condition, we are able to help participants control their blood glucose and in turn delay or prevent complications of the heart, eyes, kidneys, and nerves. **Nine** people participated in the first class held in Vienna, MO. Results of the post-assessments from this program showed:

- Only 57% of the participants knew that 15 grams of carbohydrate equals one carbohydrate serving on the pre-test. After the program 100% of participants knew this.
- The percentage of participants that ate whole grains on most days of the week increased to 43% to 100%.
- 86% of participants reported using the Nutrition Facts label on packaged foods most days of the week at the completion of the program as compared to 14% before the program.

Chronic Disease Self-Management Program

This is a six session program that teaches individuals to manage their chronic conditions through relaxation, physical activity, healthy eating, communication, and working with health care providers. The

group engages in learning activities, goal setting, and group discussions. A total of **9 participants** attended at least one of the six classes, with an average attendance of 5 participants at each class. All participants indicated that they learned new information and are more confident after attending this class that they can manage their chronic condition.

Building Better Child Care

One child care provider training was held in Maries County in 2011. There were **11 participants** in attendance at the “Building Relationships with Children and Youth Who Challenge Us” Class. In this professional development class child care providers took an honest look at children in their care and what their feelings may be about each child. Exploration was then conducted what they can do to build positive relationships with all children—even the children that may challenge them. All of the participants reported that they learned something that they were going to use in their daily work with children.

Creating a Healthier Home

More than 26 citizens received information on indoor air quality, mold issues and control measures in the home. Asthma and allergy rates are among the highest in South Central for the state.

Maries County Youth Learn about Hazardous Waste and Protecting our Watersheds

Maries County FFA students from Belle and Vienna participated in the annual FFA Field Day at Wurdack Farm Research Center in Crawford County. Pat Snodgrass, Extension Housing Specialist, demonstrated the Environscape. This presentation focused on household hazardous waste such as paint, cleaning products, cosmetics, lawn and garden chemicals, oil and gasoline that are used everyday in our homes. Proper use and disposal was emphasized. “Every year, several youth tell us they dispose of the used motor oil from their vehicles on the ground,” said Snodgrass. This creates an 8 acre oil slick in the watershed. “If we can do anything, we want to educate our youth to be good environmental stewards of the land and protect the safe and abundant water supply we hold dear in the Ozarks.” Teachers and students rank this as a highly valued program at this event and they learn something.

Podcast puts MU Extension in the palm of your hand

Access to University of Missouri Extension expertise is now mobile. A new weekly podcast called “Extension on the Go” brings self-improvement advice, resources, tips and interviews with MU Extension Specialists from around the state. The five-to-10 minute podcasts offer expertise in a user-friendly, mobile format that is available on iTunes. MU Extension specialists, program directors and regional directors will share advice on families and relationships, nutrition and health, home and consumer life as well as lawn and garden tips. For more than 85 years, MU Extension has used science-based knowledge to help people gain practical knowledge adapt to change and make informed decisions. “Extension on the Go” complements those efforts by providing information that you can take with you wherever you go. Listeners and subscribers are encouraged to submit questions, comments and suggestions. Through this interaction, Show-Me State residents will craft the future tone and direction of “Extension on the Go.” Check out “Extension on the Go” at <http://www.radiodeege.com/Podcasts>. Listen, subscribe, share and participate in making this podcast your own.

4-H IN MARIES COUNTY 2011

A community of young people learning leadership, citizenship and life skills.

2011 4-H in Maries County

A community of 130 Maries County 4-H youth building life skills, engaging in science and connecting to community. One of every four Missourians between the ages of 5 and 18 participated in a Missouri 4-H program in 2011.

Maries County 4-H clubs offer long-term educational experiences in which members learn life skills such as decision making, public speaking and working with others. Members learn by doing under the guidance of adult volunteers, who teach projects ranging from aerospace and arts to veterinary science and sport fishing. Clubs also involve children and teens in community service, camping and educational trips.

4-H Connects Kids to College and a Higher Quality of Life

Missouri 4-H Members are twice more likely to have been on a college campus than their non-4-H peers. MU is by far the campus most frequently visited and 4-H is the second most reported reason to be on the MU Campus (Lerner, 2008). Being on a campus is a predictor of youth going on to higher education (Hoover, 2006)

- Maries County young people ages 5-18 participating in 4-H events on the MU Campus
- These students are more likely to go to college and enjoy
 - increased financial success for themselves and their offspring
 - be better consumers
 - improve quality of life through more opportunities for leisure and hobbies
 - improve health for themselves and their children (Porter, 2003)
 - more likely to vote as adults
 - more likely to contribute to their community (Lerner, 2009; Zaff et al, 2003)

Youth, who earn their bachelor's degree, increase annual earnings by \$2.01 million over their lifetime (Porter, 2003). If 70% of the Maries County members participating in 4-H events on the MU Campus go onto earning their Bachelors, 4-H would help young people earn \$21.10 million more of lifetime earnings.

Volunteers are Essential to 4-H Youth Development

In 2011, Maries County recruited, trained, supported and rewarded 35 adult volunteer leaders to work with the 4-H members.

Volunteers create, support and are part of the 4-H community. Missouri 4-H volunteers responding to a survey report they contribute on average 100 hours per year. Valuing their time at \$18.70 per hour, based on average Missouri incomes, the contribution of Maries County 4-H volunteers was worth more than \$74,800 in 2011! More importantly, these adults serve as mentors for our youth, priceless.

4-H Embryology Project: Hatching Chicks in the Classroom

Hatching chicks in the classroom teaches children math and science. Children have a natural sense of curiosity about living things in the world around them. Building on this curiosity, students can develop an understanding of biology through direct experience with living things, their life cycles and their habitats. The Hatching Chicks in the Classroom Project helps children to learn the scientific methods of listening, observing, experimenting and applying their knowledge to real-world situations. They also learn responsibility by turning the eggs until they hatch, checking the humidity level and temperature in the incubator daily and then taking care of the chicks once they hatch.

Maries County R-I school in Vienna purchased three incubators and three dozen pre-incubated eggs in order to hatch chicks in three of the classrooms. Each classroom had 25 students making a total of seventy five students participating in the program. One incubator was in the kindergarten room and the

other two incubators were in both 6th grade classrooms. The eggs were pre-incubated for 14 days, so the students had to mark the eggs and turn the eggs two times a day until they were 20 days old. They had a wonderful hatch with an average of 9 eggs hatching per dozen. They were excited to do the activity again next year.

Maries County Government Day

Maries County Government Day was held on May 2, 2011 at the courthouse in Vienna. Thirty two high school students from Maries County R-I in Vienna and thirty two high school students from Maries County R-II school in Belle attended.

The goal of Government Day was to introduce youth first hand to local government and the role the local government plays in the community and in the county. The youth were in the courtroom during law day and experienced prisoners being sentenced for crimes such as stealing, bad checks or drug usage. Other civil cases were also brought before the court that day as well. After law day adjourned, the prosecuting attorney and the circuit clerk talked to the students and debriefed with them what happens in the courtroom on any given law day.

After that, they visited all the county offices including a visit with the County Commissioners. They also visited the county Sheriff's department, where the deputies talked about the day to day tasks of being a deputy. The youth also enjoyed a luncheon prepared by the County Extension Council. The luncheon was sponsored by Maries County Bank, Mid America Bank, G & W Foods, The Butcher Shop, Fick Distributing and South Central Regional Stockyards.

Maries County 4-H Members Gain Life Skills at County Achievement Day

More than 35 4-H members and adults participated in the 2011 Maries County 4-H Achievement Day on June 30, 2011, held at the First Baptist Church in Belle. The Hawkeye 4-H Club and the Highgate 4-H Club sponsored the event.

Participation in judging, demonstrations, public speaking and fashion review helps youth to learn leadership, citizenship and life skills for the future. One youth gave a demonstration on how to test the chlorine levels in your swimming pool and the importance of testing your swimming pool before using it. There were also a variety of skill-a-thons available, such as how to read an ear notch on a pig, how to sew on a button, fish identification and a livestock judging station. Although youth were not physically judging live animals at the time it was good practice. They had four pictures of a species to evaluate and place in order from 1 to 4 and they had to give a short explanation of placing order.

Decision making skills and the ability to logically and clearly express one's self are prized attributes in many careers today.

4-H Camp at the Lake of the Ozarks

4-H Residential Camp is a four-day residential camp for 8 to 13 year old youth. Maries County had seven 4-H members and two 4-H counselors attend this residential camp along with other 4-Hers from Gasconade, Miller, Morgan and Moniteau counties. The University Extension faculty and staff worked together to develop educational curriculum for campers, train permanent staff on duties and responsibilities, teach camp counselors how to work with younger children, secure special resource people for special events and marketed the camping program, collected registrations and ordered necessary supplies.

4-H Camp curriculum included the following topic: Swimming, Canoeing, Campfires, Flag Ceremonies, Campfire Programs, Crafts, Dancing, Environmental Programs, Group Games, Theme Nights, Character Education Discussions, Skits, Storytelling, Singing, Archery, Electricity Education, Confidence Course, Volleyball, and Trust Building Activities.

4-H Camp is also a chance for young people to experience a camp setting where they will have the opportunity to make new friends, be a part of a group and share in memorable moments with other 4-Hers. There are sixteen campers in each cabin. Two 4-H counselors (youth 14 -18) are assigned with each



Stockmasters' 4-H members attended 4-H camp at Camp Clover Point at the Lake of the Ozarks this summer.

cabin group. There is a special two-day counselor camp prior to residential 4-H camp that focuses on training youth to be camp counselors. Children are grouped by age and gender and counselors work hard to make all children have a special time at camp. The 4-Hers practice life skills by learning cooperation through shared work and fun. Everyone gets a chance to help wash dishes, clean cabins and pick-up the campgrounds.

The themes for the 3 days were Crazy Day Dress (Monday), Hillbilly Night (Tuesday) and Dress like a Nerd Day (Wednesday). Evening recreation programs included a variety of games and relay races planned by the 4-H Camp Counselors. This is a great leadership opportunity that is both fun and rewarding for the teenage counselors.

Residential 4-H Camp was conducted for 75 campers with 75 surveys being received. Youth were asked to tell us at least one thing they learned NEW this year at 4-H Camp. 4-Hers reported that they learned there are new activities to learn, how to do a home energy audit and how to build a solar powered hot dog cooker, learned where heat is lost in the my home, that

appliances use energy even though they are not turned on, how to caulk around windows, how to save electricity, how to make an extension cord, that LED light bulbs are super energy efficient, how to be a good counselor and how to watch over 8-9 year olds. Youth also reported that it's scary when you don't know anyone at camp, but when you step out of your comfort zone, you can meet some great people and make new friends as well as keep your old friends.

4-H Shooting Sports Program in Maries County

The focus of the Missouri 4-H Shooting Sports program is the human growth and development of the young people. From this experience the 4-Hers learned patience, hard work and dedication. It took many hours of practice and teaching for the youth to be prepared for competition. They also learned to set goals regarding scores. They met 4-H members from all over the state and were able to share ideas to build and expand the program.



Shooting sports members wait their turn to shoot at a match in Linn Creek Gun Club.

In 2011, the Maries County 4-H Shooting Sports Program had approximately 14 active Shotgun members and 3 active Air Pistol members. The group participated in fundraising efforts to purchase new equipment and help them participate in more regional and statewide competitions. They also hosted their own county shoot on April 15th at the Vienna Gun Club. Members from Phelps, Maries, Pulaski and Cole County attended. They hosted another shoot in October, but only Maries and Phelps County attended. Next year the members have decided to host just one big shoot in late spring and

early summer. Also, this year we had 10 members participate in the State Trap Shoot Match in Linn Creek, MO and 1 participate in the State Air Pistol Match in Columbia, MO. They also participated at the Cole County Shooting Sports Match in July and did really well. It was a busy summer for the 4-H Shooting Sports members, but they are ready to plan for another busy year in 2012.

Livestock Judging Rewards Youth in Maries County

Livestock Judging is a great opportunity for young people to learn decision making along with learning how to communicate and defend those decisions with oral reasons. The 2011 Belle Fair Livestock Judging Contest was held on Thursday, July 14 with fourteen youth from Maries County and one from Gasconade County participating. They judged four classes of beef, swine, sheep, goats and gave oral reasons on two of the classes.

In the junior division, Dalton Price won overall high score, in second place there was a tie between Brock Feeler also of Maries County and Lance Price of Gasconade County. Connor Templeton of Maries County won high individual reasons score. All were 4-H members in their respective counties. In the senior division, Taylor Honse won overall high score with Mason Price coming in second and Paul Shanks in third all from Maries County 4-H. Paul Shanks also received high individual reasons score. Taylor received a \$500 scholarship for winning the completion sponsored by MACE Supermarket in Belle when she graduates from High School. After the county contest, Taylor Honse, Paul Shanks, Mason Price and Jesse Kelly represented Maries county 4-H in the senior division at the State Livestock Judging contest and Dalton Price represented Maries county 4-H in the junior division.

The 2011 Belle Fair Livestock Judging was sponsored by Mace Supermarkets, Belle State Bank, Mid-America Bank, and Legends Bank. Chris and Nick Mertz from the Belle FFA Chapter and Carole, Zech and Will Moore with the Hawkeye 4-H Club assisted with the Belle Fair Livestock Committee with planning and conducting the event. Robin Kliethermes with the University of Missouri Extension also assisted.

Maries County Recognizes 4-H Members

Maries County Recognition day was held on October 30th at the Livestock buildings at Belle Fairgrounds. The County awards included a plaque for Best Secretary's Book that went to Makayla Keene with the Hawkeye 4-H Club, Best Scrapbook that went to the Hawkeye 4-H Club and Best Treasurer's book that went to Brock Feeler with Stockmasters 4-H Club. The State Shooting Sports and State Livestock Judging Teams were also recognized. We also recognized 4-H volunteers for their years of service to the county 4-H program. The program would not be as strong as it is without the help and support of the many 4-H volunteers.

The event was sponsored by the Hawkeye and Highgate 4-H Clubs and many events followed, including a light meal and a haunted maze that was put together by 4-H volunteers. There were approximately seventy-five youth in attendance.



BUSINESS DEVELOPMENT PROGRAM

Small business, jobs and government drive the economy

As entrepreneurs and innovators, Missouri's small businesses are becoming a more diverse group that continues to make the state's economy productive. There are approximately 500,000 small businesses in Missouri. Nearly 98 percent of all businesses with employees are categorized as small businesses. In assisting the owners and managers of those businesses, MU Extension contributes to a county's economic development through growth in jobs, sales, innovation, technology development and commercialization.

In Crawford, Dent, Gasconade, Maries & Phelps Counties, during 2011, business counselors served 316 people and their companies with business start-up and management counseling, training, and other assistance. In addition, entrepreneurs and business owners in those counties reported the following economic impact and activity as a result of the services provided by the MU Extension Business Development Program:

Overall, the University of Missouri's Business Development Programs (BDP) served 17,207 people and their businesses state-wide. The total impact for all businesses assisted by the BDP was:

COMMUNITY DEVELOPMENT CONTINUING EDUCATION

The MU Extension Community Development program works collaboratively with communities to foster economic development, leadership development, community decision making, community emergency preparedness, and inclusive communities. Sarah Hultine-Massengale, Community Development Specialist, serves Maries County.

Non-Profit Assistance

The Maries County CIA (Community Information and Awareness), an informal networking organization composed of local social service organizations, churches, volunteers and health agencies, began meeting monthly in 2009 to share resources, build new partnerships and address gaps in health and wellness services in the county. MU Extension meets regularly as a partner in this organization, and shared statistics from the Office of Social and Economic Data Analysis about annual measures of the health and wellness of Maries County residents. This data assists the organization in assessing progress and needs in improving the health and quality of life for Maries County residents. Sarah Hultine-Massengale, Community Development Specialist works with this group.

MU Extension Trains Volunteer Firefighter and Law Enforcement



University of Missouri Extension provides comprehensive continuing professional educational and training to Missouri's fire service and emergency response personnel. Many of the firefighters are from volunteer departments. Sixteen Maries County Firefighters received training from MU Extension. In addition, the MU Extension Law Enforcement Training Institute provides professional training.

Maries County Citizens Increase Education

Forty Maries County citizens increased their education by enrolling in MU High School and Continuing Education courses for credit and non-credit programs. MU Direct continues to meet the needs of adult learners by providing high quality courses students can take on-line. Local pharmacist, Rachel Martin received her degree from Creighton University, on-line, in the Crawford County Extension office.

A Tradition of Innovation Extension 'Firsts'

For more than 85 years, University of Missouri Extension has been an innovator in helping people make their lives better.

Rural Electrification

Extension agents helped citizens organize non-profit cooperatives that were authorized to construct electricity generating plants and transmission and distribution lines, funded by the Rural Electrification Act of 1936.

Rural Telephones and Library Districts

In some counties, extension personnel assisted citizens in forming rural telephone companies and library districts.

Hot Lunch for Rural School Children

Extension home economists organized volunteers in the late '30s and early '40s, who cooked soups and nutritious meals at home and brought them to rural schools where they were warmed on pot-bellied stoves and served to schoolchildren.

Soil Conservation

Technical planning for on-farm soil conservation practices, including waterway layout, terracing and no-till cropping evolved from the partnership of extension agents and Soil and Water Conservation Districts, beginning in the 1930s and continuing to the present.

Balanced Farming

Families, beginning in the 1940s and continuing through the 1960s, paid a membership fee to be enrolled in a program to improve farm and home business skills and incomes.

Non-Traditional Extension Programs

Missouri was the first land-grant university in the nation to make field faculty available to citizens at county extension centers in non-traditional disciplines—continuing education, community development, engineering, and business and industry—in addition to the well-known areas of agriculture, home economics and 4-H.

Early Childhood Education

In many locales, extension was the first administrator of the Head Start program—responsible for hiring, training and supervising employees working with children in Head Start centers.

War on Poverty

In the early '60s, Missouri extension became involved in the War on Poverty by being the first state in the nation to organize community action agencies, which reflected the racial, ethnic and socioeconomic diversity of the local populations. Missouri extension also was among the first states to hire local citizens without degrees to serve as paraprofessionals to deliver educational programs in nutrition, youth development, agriculture and gardening. This practice continues today.

Urban Development

Extension played a primary role in involving the university in urban problem-solving. In 1967, the Extension Division began offering non-credit programs for St. Louis area businesses and credit courses for teachers. Nursing courses in local hospitals followed. Extension also was instrumental in establishing degree programs in early childhood education, administration of justice, gerontology, optometry and community education. In 1976, extension and the political science department established the Asian Resource Office to promote greater understanding of Asian cultures and history. UMSL campus extension continues to be a strong advocate for establishment of academic programs to meet the needs of residents in the metropolitan area.

Humanities Programs

In the late '60s and early '70s, under a National Endowment for the Humanities initiative, extension brought the fine arts to out-state Missouri. Professors and performers taught art, theater, music, literature and dance in schools and community centers. For many Missourians, this was their first exposure to the arts.

Pre-school Screening

In the mid-1970s, extension home economists administered developmental screening tests to preschool-aged children, assisted by extension homemaker club members, Retired Senior Volunteer participants, church women's groups, PTAs and others. This activity was taken over by the Parents as Teachers program.

Programs for African-American and Underserved Audiences

In 1972, Missouri became the first state to offer educational programs under a cooperative agreement between two land-grant institutions—the University of Missouri and Lincoln University. Citizens continue to benefit from agriculture, nutrition, horticulture, 4-H youth and community development programs.

Storytelling Festival

The St. Louis Storytelling Festival, begun in 1980, brings storytellers from around the world to the Gateway Arch and area schools to pass on the oral tradition. The UM-St. Louis College of Arts and Sciences continuing education-extension sponsors the four-day festival.

Independent Studies via Computer

In 1974, the UM Center for Independent Study initiated a computerized lesson grading system—the first of its kind in the nation. High school students review lessons and study for exams electronically. Now independent study students also take courses via the Internet.

After-school Child Care

Begun in 1987, the 4-H Adventure Club was established as a national model for after-school study and care of elementary school children. Now, 15 clubs serve 525 children. In addition, Missouri 4-H, as part of a USDA project, provides assistance to the U.S. Army on school-age and teen programs around the world.

Career Transition Skills

The Career Options/Dislocated Worker program begun in 1987 helped 7,689 adults in 293 communities obtain job-search and career transition skills. The Worker Reentry/Career Information Hotline fielded 22,214 calls.

Pest Management

The first school on crop inspection for pests took place in Southeast Missouri. Missouri now has the most comprehensive crop scouting school in the nation, held at the Delta Center near Portageville each spring.

Missouri Arts and Crafts

The Best of Missouri Hands catalog, first published in 1986, and related seminars helped Missouri artisans market their crafts. After successfully initiating Missouri Hands, University Extension turned the project over to a non-profit organization, Missouri Artisans Business Development Association, which still publishes the catalog.

On-site Septic Systems

Soil percolation testing in 1996 and other programs for homeowners, Realtors, lenders and contractors to help them deal with state regulations concerning household waste were instituted in Missouri. A demonstration center for on-site systems is open to the public at the Bradford Farms Research Center near Columbia.

Missouri TeleCenter Network

In 1993, the first Telecommunication Community Resource Center opened in Poplar Bluff. This was the first University-community partnership in the state to provide educational programming via interactive video, satellite and Internet communication to citizens where they live and work.

Internet Courses

The nation's first Internet training for solid waste planners, government and health officials, educators and others interested in protecting homes and communities from household hazardous wastes came on line in 1998.

Labor Education

The Labor Studies Certificate Program—the first course offered cooperatively by the UMC, UMKC and UMSL campuses for union leaders, representatives and activists—is taking place today via the UM Video Network.