Return on Investment
2014 Programs of Distinction

A Message from the Vice Provost of the University of Missouri Extension.................................1

University of Missouri Impact on Mercer County ........................................................................2, 3

Extension Council Letter to the Mercer County Constituents ......................................................4

Farm Family Day at Missouri State Fair .........................................................................................5

2014 Financial Report ..................................................................................................................6

Mercer County Staff and Extension Council ...............................................................................7

Continuing Education through University Extension in Mercer County .....................................8

Agriculture

Agricultural Update ...................................................................................................................... 17

Livestock .................................................................................................................................. 9, 10

Horticulture .................................................................................................................................11, 12

Family Financial Education

Missouri Taxpayer Education Initiative .......................................................................................13

Community Development

Water Festival .............................................................................................................................14

Community Input Program ........................................................................................................17

Family Environmental Services

Family Nutrition Education Programs ........................................................................................15

Farm Safety Day ........................................................................................................................15

Housing and Environmental Design ........................................................................................16

Human Environmental Services

Stay Strong, Stay Healthy .........................................................................................................18

Youth Development

4-H .............................................................................................................................................20

University of Missouri Extension does not discriminate on the basis of race, national origin, sex, sexual orientation, religion, age, disability or status as a Vietnam era veteran in employment or programs.
December 2014

Dear County Commissioners and Friends of MU Extension:

Over the past year, with a theme of *Celebrating the Past and Building for the Future*, MU Extension marked a century of service to Missouri. While the celebrations have come to an end, the focus on building for the future is strong. The university’s commitment to the mission of bringing relevant, reliable and responsive education to improve lives and local economies is alive and well.

To maintain our position as a valued and trusted resource for Missourians, MU Extension continues to strengthen existing programs, build relationships and explore new opportunities to benefit Missourians. For example:

- In the area of agriculture, the Show-Me Select Heifer Replacement program continues to improve the breeding performance of heifers as it helps participants realize record prices for their efforts. Producers from 103 of Missouri’s 114 counties have enrolled heifers in the program. In a record-setting sale, 168 bred replacement heifers sold for an average of $3,033 at the Fruitland (Missouri) Livestock Auction.
- Strengthening communities through art, innovation and creativity, Extension’s Community Arts Program is piloting an initiative in Lexington to help the community enhance its image with art businesses and opportunities that reflect the talent of regional artists and benefit a nine-county tourism alliance. The Community Arts Program is also at work in the St. Louis area, overseeing the Saint Louis Storytelling Festival, which engages approximately 25,000 people each year.
- Knowing the value of dialogue with those it serves, MU Extension has made a concerted effort with the Mizzou Alumni Association to introduce MU Chancellor R. Bowen Loftin to extension programs, participants, key stakeholders and alumni from all corners of the state. These tour events, which will continue into 2015, are designed to foster understanding and support that lead to a stronger local extension effort across the state.

These are just a few examples of MU Extension’s focus on building for the future and continuing to make an impact in local communities.

I thank you for your support of MU Extension and our efforts in your community. I look forward to our continuing partnership and welcome your ideas for improving our partnership.

Sincerely,

Michael D. Ouart
Vice Provost and Director
Impact on Mercer County, Missouri

The County at a Glance

- UM Students: 19
- UM Alumni: 66
- UM Employees: 7
- Population: 3,695

UM Students from the County in 2014

- 19 students
  - 17 - MU
  - 2 - UMKC
  - 17 - Undergraduates
  - 2 - Graduates
  - 18 - Full-time students
  - 1 - Part-time students

UM Alumni Residing in the County in 2014

- 66 alumni
  - 52 - MU
  - 8 - UMKC
  - 0 - Missouri S&T
  - 6 - UMSL
  - 28 Selected School Alumni
    - 2 - Medicine
    - 3 - Nursing
    - 2 - Pharmacy
    - 14 - Agriculture
    - 2 - Engineering
    - 5 - Law

UM Employees and Retirees Residing in the County in 2014

- 7 people employed by UM
  - 6 - MU
  - 1 - UM Health Care

UM Services Received in the County in 2014

- 30 patients seen at UM Health Care, with $21,774 of uncompensated care.
- 7 patients seen at the UMKC School of Dentistry with an average of $123 per patient in uncompensated care.
- 1,570 contacts with MU Extension through MU Extension events held in district counties.

UM Alumni Teaching K-12 in the County in 2014

- 4 teachers
  - 6% of all county teachers
  - 1 principal or administrator
  - 25% of all county principals and administrators

UM Footprint in the County

Mercer County MU Extension Center
Impact on Mercer County, Missouri

UM Research Expenditures Funded by Federal and Private Sources

Between FY2008 and FY2013, UM brought in more than $1.1 billion in federal and private research funds.

Economic Development Highlights

- With $3.2 billion in total revenues in 2014, UM would have been the 16th largest publicly held Missouri-headquartered company in the state in 2013.
- With almost 32,000 employees in the state, UM was Missouri’s 2nd largest employer in 2013.
- In 2012, UM’s $165.2 million in federal research expenditures represented 94.3% of these expenditures at Missouri public universities.
- In 2014, UM’s $31.0 million in National Science Foundation (NSF) awards represented 91% of all NSF awards made to Missouri public universities.
- UM earned $10.8 million in licensing income in 2014.
- UM received 176 new invention disclosures in 2014.
- 4 startups were created around UM technologies in 2014.
- UM was issued 53 U.S. patents and filed 83 new U.S. patent applications in 2014.

Electronic Services to the State in 2014

- The Missouri Research & Education Network (MOREnet) provided internet connectivity and technical services to members that include:
  - 61 higher education institutions with more than 238,000 students.
  - 517 K-12 schools serving more than 846,000 students.
  - 132 public libraries connecting 335 library buildings that serve 5.3 million Missourians.
  - Serving the State Office of Administration, several municipalities and various other eligible organizations.
- MOREnet returned over $15 million in telecommunications expenditures to companies doing business in Missouri.

Financial Aid Provided to UM Students in 2014

- $888.2 million provided to 58,553 total students
  - $444.9 million (28,087 students) - MU
  - $202.2 million (11,887 students) - UMKC
  - $102.2 million (6,819 students) - Missouri S&T
  - $138.9 million (11,740 students) - UMSL

Impact on Education

- UM enrolled 44.8% of first-time undergraduates attending four-year public institutions in 2013.
- UM awarded 50.4% of the 1,210 doctoral degrees earned in Missouri in 2012.
- UM awarded 41.8% of the 1,890 first professional degrees earned in Missouri in 2012.
- UM awarded 53.6% of the 30,793 bachelor’s or higher degrees awarded by Missouri’s four-year public institutions in 2012.

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 2014, based on the best available data. Data Sources include: Missouri Office of Administration • UM IRP • Office of Social and Economic Data Analysis (OSEDA) • Center for Applied Research and Environmental Systems (CARES) • MU • UMKC • Missouri S&T • UMSL • UM System • UM Health Care • MU Extension • US Census Bureau • US Dept. of Health and Human Services • National Science Foundation
January 31, 2015

Dear Mercer County Constituents,

The mission of University of Missouri Extension is to provide relevant, reliable and responsive information to the public. In pursuit of that goal in Mercer County, our office is staffed with a part-time office manager and a part-time Extension Associate (4-H). Additionally, there are a variety of specialists to serve the citizens of Mercer County from county offices across NW Missouri through workshops, consultations and educational programming.

The work represented in this annual report is only a partial listing of the total educational programming that goes on in the county. We take pride in knowing that this is just a sample of the outstanding work generated within the county by extension personnel. From their efforts, citizens of the county learn to be effective in managing time, money and resources when achieving their goals. Workshop participants gain knowledge in agricultural best practices, health and nutrition, communication, family dynamics and youth enrichment activities that will enhance their ability to be life-long learners and productive citizens.

In recognizing the reality of today’s economic climate, coupled with the tightening of county, state and federal budgets, University of Missouri Extension has strived to remain relevant. Extension works to pave the way for citizens to remain the primary focus of their mission by delivering crucial information in programs that build jobs within our rural community, strengthen businesses, improve families and create economic wealth through estate planning and financial planning and instruction.

We hope that you enjoy reading about our mission to provide relevant, reliable and responsive information to the citizens of Mercer County. A huge thank you goes out to the Mercer County Commission, Mercer County 4-H Foundation, City of Mercer and all the businesses and individuals that contributed financially to the success of our well-being.

Sincerely,

Maureen Funk
Extension Council Secretary

Marsha Shew
County Council Chair

Shaun Murphy
County Program Director

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

University of Missouri Extension does not discriminate on the basis of race, color, national origin, sex, sexual orientation, religion, age, disability or status as a Vietnam-era veteran in employment or programs.
University of Missouri Extension's strategic plan is one of three key initiatives adopted by the University of Missouri over the past several years.

**Mission**  
*Our distinct land grant mission is to improve lives, communities and economics by producing relevant, reliable and response educational strategies that enhance access to the resources and research of the University of Missouri.*

**Vision**  
*University of Missouri Extension is a valued and trusted educational solution to improve the quality of life in Missouri, the nation and the world.*

**Values**  
*Respect, Responsibility, Discovery, Excellence and Engagement*

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

- University of Missouri campuses
- 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

---

**Farm Family Day at the Missouri State Fair**

The Park’s family was Mercer County’s 2014 Farm Family Representative to Farm Family Day at the Missouri State Fair. Pictured are (from left to right) Rachelle, Shanin, and Chris. “The Parks’ family is a great example of a strong family committed to the rural way of life,” says Shaun Murphy, 4-H Specialist and County Program Director. “They have been very involved in 4-H, the fair and many other activities related to Extension, 4-H and agriculture. We wish to thank them for their efforts in representing rural America and Mercer County on a daily basis.”
## 2014 Financial Report

<table>
<thead>
<tr>
<th>Income</th>
<th>Expenses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Governmental Appropriations</td>
<td>Payroll Expenses</td>
<td>$5,718.27</td>
</tr>
<tr>
<td>County</td>
<td>Non-Payroll Expenses</td>
<td>6,072.36</td>
</tr>
<tr>
<td>City of Princeton</td>
<td>Travel</td>
<td>1,649.15</td>
</tr>
<tr>
<td>City of Mercer</td>
<td>Postage</td>
<td>427.70</td>
</tr>
<tr>
<td>Gifts/Grants/Contracts</td>
<td>Telephone/Internet</td>
<td>1,084.52</td>
</tr>
<tr>
<td>Resale/Educational Services</td>
<td>Election Expense</td>
<td>156.75</td>
</tr>
<tr>
<td>Postage Fund</td>
<td>Copy Services</td>
<td>504.00</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Supplies/Services</td>
<td>137.41</td>
</tr>
<tr>
<td>Foundation</td>
<td>Other Contract Services</td>
<td>200.00</td>
</tr>
<tr>
<td></td>
<td>Insurance (Surety Bond)</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>Miscellaneous</td>
<td>3,836.20</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td></td>
<td>$14,470.42</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td></td>
<td>$21,238.74</td>
</tr>
<tr>
<td><strong>Net</strong></td>
<td></td>
<td>($6,768.32)</td>
</tr>
</tbody>
</table>

The Mercer County Extension Council and office would like to thank the Mercer County Commissioners and City of Mercer for their support of the University Extension.

Additional thanks to Murphy Brown, the Mercer and Harrison County Soil and Water Districts, Princeton First Baptist Church, and Breadaux Pizza for their support of the Water Festival.
Leaders Honor Roll selections for 2014 were Marsha Shew (pictured) and Debbie Goodknight.

The honor roll recognizes two people each year who have exhibited leadership in the community and given long-term commitment and support to University of Missouri Extension.
Continuing Education through University Extension in Mercer County

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 FY2014, the conference office registered 13,484 Missourians for MU Extension conferences. Participants attended conferences for teacher education in math, science and writing; agricultural lending; plant science; and therapeutic recreation. For more information, visit muconf.missouri.edu.

Continuing Medical Education
The Office of Continuing Medical Education provides rural primary-care physicians with access to education as necessary for them to meet state licensure requirements, learn specialty medicine and for health education. Distance learning via the Missouri Telehealth Network provides access to weekly grand rounds from various School of Medicine departments. In FY 2014, more than 1,800 programs reached 27,322 health care professionals across the state and around the world.

FRTI
MU Extension’s Fire and Rescue Training Institute (FRTI) is charged with providing comprehensive continuing professional education and training to Missouri’s fire-service and emergency response personnel. The institute has a direct effect on the well-being and protection of Missouri’s 24,000 firefighters and the 5.9 million citizens they serve. In addition to preparing them to fight fires, courses prepare firefighters for medical emergencies, hazardous materials response and disaster preparedness and mitigation. In FY 2014, FRTI trained firefighters representing 113 of Missouri’s 114 counties for a total enrollment of 13,958 fire and emergency responders equating to almost 170,000 student instructional hours of training. For more information, see mufrti.org.

LETI
The MU Extension Law Enforcement Training Institute brings state-of-the-art, certified, professional training to law enforcement officers as well as continuing professional education to a wide spectrum of other criminal justice and public safety practitioners. Established in 1948, the institute has been the state’s recognized leader for more than 60 years in providing vital training and education services for Missouri’s 20,000 in-service and 3,000 police recruits annually. In FY2014 LETI conducted 75 programs with almost 64,000 contact hours of instruction. There were almost 800 students from 69 Missouri counties and over 500 from around the United States. For more information, visit leti.missouri.edu.

MTI
The Missouri Training Institute provides continuing education programs in business, custom-designed training programs, and business consulting services for business and industry, public and nonprofit organizations, and educational institutions. Training programs cover human resource management, supervision, management, leadership, team building, effective decision-making, dealing with generational differences and business writing. The institute’s consulting services cover human resources, strategic planning, board development and board retreats. In FY 2014, 14,174 people from all 114 Missouri counties enrolled in the institute’s 510 programs. For more information, visit mti.missouri.edu.

Nursing Outreach
Keeping Missouri nurses up-to-date with the knowledge and skills they need to effectively provide care is a primary goal for MU Nursing Outreach. Nursing Outreach provides high-quality, affordable continuing education programs using face-to-face and Web-based delivery methods, which help them, reach the 88 percent of their audience living in rural areas. Nurses from 85 (75 percent) of Missouri’s 114 counties and the city of St. Louis attended continuing education programs sponsored by MU Extension in FY2014. Solo Nursing Outreach programs saw 1,889 participants, and another 944 nurses partook in co-sponsored multidisciplinary programs. Participants rated the overall quality of their continuing education experience at 1.3 on a 4-point scale, with 1 being the highest, and indicate they plan to change their clinical practices based on what they learned in Nursing Outreach programs.

Osher
The Osher Lifelong Learning Institute at the University of Missouri (Osher@Mizzou) is a membership organization for adults ages 50 and older to enjoy classes, teach, exchange ideas and travel together. The program provides opportunities for intellectual development, cultural stimulation, personal growth and social interaction in an academic cooperative run by its members who volunteer their time and talents. The program focuses on classes developed and led by fellow members and faculty from the University of Missouri, Stephens College and Columbia College.
<table>
<thead>
<tr>
<th>Number of Learners</th>
<th>Topic</th>
<th>What Did They Learn?</th>
<th>How Did Participants Benefit?</th>
<th>How Does This Work Make NW Counties and Missouri Better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>350 Beef Cattle Producers</td>
<td>County Ag Update and Pesticide Applicator Training</td>
<td>Initial training and recertification for private pesticide applicators and update on current agricultural topics.</td>
<td>Applicators completed the legal requirements to obtain or renew their private pesticide applicators license.</td>
<td>In the rural areas of Missouri, a healthy agricultural community is the backbone of economic growth and sustainability. University of Missouri Extension events provide relevant, research-based information that allows producers to make informed decisions. These decisions impact their financial bottom line and ultimately determine whether or not they stay in business.</td>
</tr>
<tr>
<td>700 FFA Students</td>
<td>Focus on Forages VI</td>
<td>How to manage forages for better production, lower cost and improved feed value.</td>
<td>Producers are able to produce more forage on fewer acres.</td>
<td>The average age of the farmer or livestock producer in the United States is continually increasing. The general population is becoming more and more removed from agriculture. Even though a student is enrolled in FFA, it does not mean that they have a farming background. By hosting events such as the Hundley-Whaley FFA day, we are exposing young people to agriculture, the University of Missouri system, and hopefully the resources and education that University of Missouri Extension can provide.</td>
</tr>
<tr>
<td>108 Private Pesticide Applicators</td>
<td>Hundley-Whaley Cover Crop Plot Tour and Information Session</td>
<td>How to incorporate cover crops for agronomic benefit and livestock forages.</td>
<td>Cover crops help reduce erosion and improve soil health. We are trying to demonstrate that they also can provide forage for beef cattle.</td>
<td>Over the past few years, a great deal of northwest Missouri pasture and hay ground has been converted to row-crop production. University of Missouri Extension regional livestock and agronomy specialists are helping producers manage their limited forage resources for increased production and decreased cost.</td>
</tr>
<tr>
<td></td>
<td>Hundley-Whaley Research Center Field Day</td>
<td>New technologies and practices to improve row-crop production and increase forage production.</td>
<td>Attendees are able to see current technologies and assess value in their own farming operations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hundley-Whaley Research Center FFA Field Day</td>
<td>New agricultural production technologies and career options.</td>
<td>FFA students are exposed to cutting edge technology and the potential careers that are available in agriculture.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fall Beef Producers Seminar</td>
<td>Improved parasite management strategies and understanding the cost of replacement heifer development.</td>
<td>Ideas and strategies to reduce costs and improve beef production.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ration Balancing and Nutrition Consulting</td>
<td>Lower cost feed rations that also improve gain and calf performance.</td>
<td>One producer shared that I was able to cut his feed costs in half.</td>
<td></td>
</tr>
</tbody>
</table>
Shawn Deering is also a Pork Quality Assurance (PQA) Plus advisor who can provide guidance and on-farm assessments for enrolled producers.

## Show Me Select Replacement Heifer Program

<table>
<thead>
<tr>
<th>The Program</th>
<th>Program objectives</th>
<th>Eligibility Requirements</th>
<th>What Do They Learn?</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Show Me Select Replacement Heifer (SMSRH) Program is focused on Missouri's farmers and is dependent upon active participation from regional extension livestock specialists and local veterinarians, each of which are critical components of the agricultural sector of this state. This program is unique in that it is an educational program targeted at improving production efficiency through increased use of existing technology, coupled with the marketing component.</td>
<td>The objectives of the SMSRH Program are to:  - Implement a Total Quality Management strategy to on-farm heifer development  - Enhance marketing opportunities for and add value to Missouri-raised heifers  - Provide a reliable source of quality replacements based on management, reproduction, and genetics</td>
<td>Producers must meet requirements in the following areas to take part in the SMSRH program:  - Enrollment  - Ownership  - Prebreeding Evaluation  - Minimum Vaccinations  - Pregnancy Examination</td>
<td>Producers enrolled in SMSRH learn:  - available technology and emerging management practices..  - a fundamental understanding of basic principles regarding animal breeding, genetics, reproductive biology, nutrition, animal health, and economics.</td>
</tr>
</tbody>
</table>

Producers have been educated on the best way to utilize corn stalks as an emergency feed.
## Agriculture – Commercial and Home Horticulture

**Education for Better Crops**

**Program Names:** Missouri Grown
Home Horticulture and Environment
Turfgrass Management/Green Industry

<table>
<thead>
<tr>
<th>Number of Learners</th>
<th>Topic</th>
<th>What Did They Learn?</th>
<th>How Did Participants Benefit?</th>
<th>How Does This Work Make My Assigned Area and Missouri Better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 4500 commercial and home contacts in ten counties</td>
<td>On-site visits with Commercial Ag producers</td>
<td>Identification and control of plant diseases and insects</td>
<td>Commercial producers growing horticultural crops have great potential for profits. However, diseases and insects can act very quickly to wipe out a crop and produce significant losses. By timely intervention, these growers’ crops may be saved.</td>
<td>Keeping the rural economy going means keeping families on the farm, and doing so profitably. Commercial horticultural production has some of the greatest potential for profits in modern agriculture. By keeping these farming enterprises going, and dealing with problems as they arise, the farmer is kept on the farm, and the trickle-down effect of his success is spread across the entire community as he purchases inputs for his farm and conducts everyday commerce with his friends and neighbors.</td>
</tr>
<tr>
<td></td>
<td>Working with Produce Auction</td>
<td>Proper use of pesticides</td>
<td>The proper use of pesticides is critical for both grower and consumer safety. Growers trained in this area learn to safely use these materials, leading to better health.</td>
<td>Producing a good and safe food supply is critical for our nation. Whether it is though the safe handling of pesticides or following Good Agricultural Practices, a farmer who produces high quality and safe food passes on a product that inspires confidence in the consumer. Food such as this is more nutritious, producing better health. This ultimately leads to decreased health care costs.</td>
</tr>
<tr>
<td></td>
<td>Meetings for Commercial Ag producers</td>
<td>Introduction to Good Agricultural Practices and food safety</td>
<td>Commercial fruit and vegetable producers are coming under increasing pressure to conform to the standards of Good Agricultural Practices (GAPs). By offering training in GAPs, Extension helps these growers produce safer food. They are also made aware of the regulatory environment surrounding GAPs, and how to satisfy requirements in this area.</td>
<td>Homeowners, who practice horticulture, whether it is producing food or planting ornamentals, increase the value of their homes. When this is practiced on a community-wide scale, the effect can be remarkable. Communities with poorly-developed landscaping are not as attractive as those where homeowners seek to beautify their properties. Collectively, these improvements lead to increased property values throughout the entire community.</td>
</tr>
<tr>
<td></td>
<td>Educating homeowners for their horticultural needs</td>
<td>Marketing options</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>County Ag Updates and Pesticide Applicator Training</td>
<td>Starting a horticultural farming operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Landscaping for homeowners</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plant care for homeowners</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Helping growers during the growing season is an important part of Horticulture Specialist Tim Baker’s responsibilities. Sometimes the problem can be corrected, but other times it cannot, such as the photos above. The tomato grower had used a brush killer on his land which eventually ended up in his pond. When he irrigated out of his pond, these greenhouse tomatoes took on bizarre shapes with distorted leaves. Since this was irrigation water, some of the chemical ended up in his soil.*
**Program Name:** Master Gardener

**Number of Learners:**
- 20 Active Master Gardeners in 10 counties
- Over 300 volunteer hours
- Over 300 direct contacts

**Topic**
- Master Gardener classes held in St. Joseph and Princeton
- Master Gardener projects provide volunteer service to communities

**What Did They Learn?**
- Basic plant botany
- Soils and fertility
- Plant disease identification and control
- Vegetable crop production
- Insect identification and control
- Home fruit production
- Plant propagation
- Landscape design
- Use of native plants in the landscape
- Turf establishment and maintenance
- Growing woody ornamentals
- Annual and perennial flowers
- Pesticide use and safety
- Continuing education in numerous horticultural topics
- Bees and bee culture

**How Did Participants Benefit?**
Master Gardener class trainees receive 12 weeks of in-depth training on all aspects of horticulture. This instruction benefits them in their private gardens and landscapes, as they apply that knowledge to problems that inevitably arise.

Participation in a local Master Gardener group also benefits that individual through continuing education. Throughout the year, additional horticultural instruction is given periodically. Master Gardener groups offer an important point of social gathering in a community, around a shared topic of interest.

**How Does This Work Make My Assigned Area and Missouri Better?**
Master Gardeners provide a phenomenal amount of volunteer service to the community. This can take many forms. Most groups participate in some kind of community beautification program, where a public area is maintained for beauty and enjoyment. The Daviess County Master Gardeners, for example, participate in the MODot Adopt-A-Highway program for a section of Highway 13 around their flower beds on the north edge of Gallatin. The flower beds were reconstructed in 2010 to include new hardscape features such as boulders, as well as new plants including ornamental grasses. This project has received many positive comments in the community.

**Continuing education is part of the Master Gardener experience. Here, the Daviess County group tours an iris and daylily farm in DeKalb County to learn about different cultivars and how they are produced.**

**The Daviess County Master Gardener group’s beautification project at the intersection of Missouri routes 6 and 13 included designing and creating a “Gallatin Missouri” sign to welcome travelers to town. The Master Gardeners also volunteer time to clean the area through the Adopt-A-Highway program.**
## Missouri Taxpayer Education Initiative

### The Event

The Missouri Tax (MoTax) Education Initiative assists people by preparing and electronic filling of income tax returns and by providing financial education to help families maximize their tax refunds. This educational initiative reaches its audience through the “3 P’s”:

- Promotion of tax credits and free tax services.
- Preparation and e-filing of tax returns.
- Planning for financial stability and wealth building.

### Participants and hours of collective participation

Four (4) FREE income tax returns were prepared in Mercer County, Princeton, between January 27, 2014 and April 15, 2014. All of the returns were from Mercer County residents. Two (2) returns were white couples filing Married Filing Jointly (no dependents). The remaining two returns were white females filing single. Adults on the tax returns consisted of 2 white males and 4 white females. No youth were included on the tax returns. Total refunds for the tax returns prepared in Atchison County were $722. Specific totals: AGI - $20,613 Federal Refunds - $0 Federal Refunds Owed - $0 MO Refunds - $722 MO Taxes Owed - $0 Property Tax Credit - $522 Public Value Statement:

### Program details

Provides assistance to our Missourian taxpayers in preparing tax documents while encouraging planning for the future.

### Public Value

When you support the Missouri Taxpayer Educational Initiative, taxpayers learn basic financial management strategies, leading to families being able to repair or replace a vehicle, which assists in stimulating the local and state economy.

### Program Feature:

**Family Financial Education**

When you support MU Extension’s Financial Education Programs, participants spend and borrow responsibly, save more and gain control over their financial health. These behaviors benefit other community members by reducing predatory lending, reliance on public assistance programs and crime.
### Mercer County Annual Water Festival

<table>
<thead>
<tr>
<th>The Event</th>
<th>Participants and hours of collective participation</th>
<th>Program learning objectives</th>
<th>What Did They Learn?</th>
</tr>
</thead>
</table>
| The Mercer County Annual Water Festival provides concentrated, hands-on learning in a fun and memorable atmosphere, presented by professionals in environmental and natural resource fields. | In 2014, over 150 3rd and 4th graders from Princeton, Spickard, Bethany, Ridgeway, Mercer and Cainsville participated in the five-hour Water Festival. This resulted in over 750 learner hours. Educators included nine MU Extension specialists and two Missouri Department of Conservation professionals. | Help students understand:  
- where our water comes from  
- water pollution prevention  
- ground water, stream table and water cycle  
- soils and soil erosion  
- birds and beaks  
- relationships between human activities and groundwater qualities. | **Short-term**  
All teachers found the program to be very educative and necessary for students. Students also showed increased awareness of water pollution and the amount of water available for human use.  
Average increase in scores from pre-test to post-test was 25 percent, with the lowest increase being 3 percent, and the highest increase being 66 percent.  
Students learn that polluting the ground also pollutes the water, and that once in underground aquifers, it can spread. | **Long-term**  
Real-life demonstrations helped students to increase their understanding of the relationship between water, animals and trees/vegetation. |

Mercer County Extension works in partnership with other community organizations to host the event.

Clockwise from top left:  
- Students learn about water run, water watersheds, and pollution from the Enviroscape.  
- Youth enjoy lunch between sessions.  
- Students examine soil to determine makeup and physical properties.
## Family Nutrition Education Programs (FNEP)

<table>
<thead>
<tr>
<th>The Program</th>
<th>Participants and hours of collective participation</th>
<th>What did they learn?</th>
<th>How does this programming make Mercer County and Missouri better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Nutrition Education Program (FNEP)</td>
<td>Four hundred fifteen adults in Mercer County received nutrition and health education through FNEP.</td>
<td>Participants in FNEP become more aware of nutrition, make healthier meal and snack choices, eat breakfast more often, are more willing to try new foods, increase their physical activity and in general make healthier food choices.</td>
<td>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 health care costs over the participant’s lifetime, saving taxpayers money in reduced public health care benefits and insurance premiums.</td>
</tr>
</tbody>
</table>
| Food Power | Three hundred twenty-nine students in the North Mercer and Princeton R-V Elementary schools received nutrition and health education through the Food Power program. | Evaluation data collected reflects the positive impacts that occur in every county with FNEP. The following are students’ changes reported by teachers after FNEP classes.  
- 91% reported one or more changes  
- 91% reported students are more aware of nutrition  
- 68% make healthier meal and/or snack choices  
- 49% eat breakfast more often  
- 82% are more willing to try new foods  
- 82% improved hand washing  
- 37% improved food safety other than hand washing  
- 65% increased physical activity | |

## Farm Safety Day

<table>
<thead>
<tr>
<th>Number of Mercer County Learners</th>
<th>Total Hours of Collective Workshop Participation in 2014</th>
<th>What Did They Learn?</th>
<th>What Action Did They Take?</th>
<th>How Does This Work Make Mercer County and Missouri Better?</th>
</tr>
</thead>
</table>
| 182 Princeton and Mercer youth. | Youth were engaged in over 728 hours of instruction. | Participants learned about many aspects related to being safe on the farm, at home, and in the community.  
Topics included:  
First Aid  
Animal Safety  
PTO Safety  
Grain Bin Safety  
Poison Look-A-Likes  
Water Safety | MU Extension programs like Farm Safety Day prepare the next generation to be safe, responsible citizens. Youth exposed to courses like Farm Safety Day are more conscious of their surroundings and take steps to reduce risk. | Youth make wiser decisions for themselves and their families. This program also encourages youth to be responsible citizens who are accountable for their actions. |
**HOUSING AND ENVIRONMENTAL DESIGN**
**EDUCATION PROGRAMS AND ASSISTANCE TO CITIZENS**

**Building Strong Families; Rent Smart; Healthy Homes; Energy and Weatherization**

**Serving Andrew, Atchison, Buchanan, Caldwell, Carroll, Clinton, Daviess, DeKalb, Gentry, Grundy, Harrison, Holt, Lafayette, Livingston, Mercer, Nodaway, Ray, Saline and Worth counties in northwest Missouri**

<table>
<thead>
<tr>
<th>Number of Mercer County Learners</th>
<th>Topic</th>
<th>What Did They Learn?</th>
<th>How Did Participants Benefit?</th>
<th>How Does This Work Make My Assigned Area and Missouri Better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six Green Hills Community Action Agency (GHCAA) participants</td>
<td>Renters Rights from the Rent Smart program</td>
<td>Landlord/Tenant rights and responsibilities according to the Missouri Landlord/Tenant Laws.</td>
<td>Participants benefited by learning their rights and responsibilities as tenants and expectations of landlords as outlined in the Missouri Landlord/Tenant Laws handbook. Each participant received a copy of the booklet as well.</td>
<td>It provides a practical education opportunity to help people acquire and keep decent rental housing.</td>
</tr>
<tr>
<td>Money Matters - budgeting</td>
<td>Participants learned how to identify their own personal money styles, practice family resource allocation and learn the importance of a spending plan.</td>
<td>Participants benefited by understanding what motivates personal financial decisions, trade-offs among competing resource demands within the family, increase communication skills within the family and reduce family stress.</td>
<td>Families make fewer demands on community and agency resources. It also reduces the demand for predatory financial products and services.</td>
<td></td>
</tr>
<tr>
<td>Healthy Homes – Green Cleaning</td>
<td>Participants learned how to reduce indoor pollutants by limiting the number of chemicals used and by following three basic guidelines for improving their indoor environment.</td>
<td>Participants benefited by learning how to improve their indoor environment, save money and help conserve natural resources. Participants received recipes and the supplies for making their own cleaning products.</td>
<td>It provides citizens with the information needed so that they can simplify their cleaning, save money and improve their indoor environment.</td>
<td></td>
</tr>
<tr>
<td>Seven Green Hills Community Action Agency (GHCAA) participants</td>
<td>Energy and Weatherization</td>
<td>Measures they can take to save energy and money. Participants learned tips for weatherizing their home.</td>
<td>Participants benefited by learning the importance of an energy audit which the GHCAA provides free of charge. They learned measures they can take to save energy and money by replacing their light bulbs, using caulk, weather stripping and replacing faucets with energy efficient devices. All participants received an energy and weatherization kit from the GHCAA.</td>
<td>By increasing the energy efficiency of homes by including the importance of weatherization and insulation of homes as well as strategies for saving energy and water.</td>
</tr>
</tbody>
</table>
### 2014 Ag Update

<table>
<thead>
<tr>
<th>The Event</th>
<th>Participants and hours of collective participation</th>
<th>Program details</th>
<th>Public Value</th>
</tr>
</thead>
</table>
| The Northwest Missouri Ag-Updates are a chance for agricultural producers to learn about current agricultural topics from several University of Missouri Extension Specialists as well as get the training necessary for their private pesticide applicator licenses. Topics covered in the 2014 program included:  
  - Water Quality with Pesticide Use  
  - Proper use of Integrated Pest Management  
  - Show Me Select Program Benefits  
  - Economic Issues about Farm Employees | In Mercer County 11 people took part in the program. The program lasted for three hours. One resident of Mercer County took part in the training in another location. | Participants learned or were reminded of a number of important agricultural issues including proper use of pesticides, how pesticides affect the water table and how to improve their beef herds.  
As a result of this training in Mercer County 11 people were able to obtain their private pesticide applicator licenses.  
The training in Mercer County in 2014 was especially important as several of those getting licenses were Amish and would not have been able to get their training by watching a video. | When you support the Agricultural Update program you help to insure those who use restricted use pesticides are properly trained, keeping the pesticides out of our water table. Those who attended this program reported that they would consider use of alternatives to atrazine, consider or use broader field boarders and filter strips and use other management practices to control the amount of runoff from their fields. This will result in cleaner drinking water and better environmental conditions for everyone. |

---

### COMMUNITY DEVELOPMENT SPECIALIST

**TRACY MARLO-DAUGHERTY**  
**MERcer COUNTY ANNUAL COUNTY INPUT PROGRAM RELATED TO ENTREPRENEURSHIP**

<table>
<thead>
<tr>
<th>Number of Mercer County Learners</th>
<th>Total Hours of Collective Workshop Participation in 2014</th>
<th>What Did They Learn?</th>
<th>What Action Did They Take?</th>
<th>How Does This Work Make Mercer County and Missouri Better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 participants engaged in the opportunity.</td>
<td>16 hours of collective learning.</td>
<td>Participants discussed barriers and opportunities for entrepreneurs in Mercer County.</td>
<td>MU Extension programs for workforce readiness, business planning, and small business peer support were identified as resources to help Mercer County business start-ups.</td>
<td>Community leaders can identify programs that support business starts, retention, and expansion and refer entrepreneurs to those resources.</td>
</tr>
<tr>
<td>The Event</td>
<td>Participants and hours of collective participation</td>
<td>Program details</td>
<td>Public Value</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------------------</td>
<td>----------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>The Stay Strong, Stay Healthy (SSSH) class meets weekly for ten weeks and incorporates warm-up exercises; simple strengthening exercises, with or without weights; and cool-down stretches. Participants practice safe ways to do these exercises to increase strength and improve the balance and flexibility needed for everyday activities.</td>
<td>Two men and 19 women participated in the class. Nine (9) participants completed both the pre- and post-assessment, using five tools to test strength, balance and flexibility. Of these 9, 100% (9) showed improvement in two or more areas of the assessment: 3 (33%) improved in two measures, 4 (44%) improved in three measures, and 2 (22%) improved in four measures.</td>
<td>Participants also completed a program feedback form at the end of the class to report what they had gained from the program, with the following results: -100% (7 out of 7) feel that their health is better because of the program. -88% (7 out of 8) feel they are more flexible. -88% (7 out of 8) feel physically stronger. -78% (7 out of 9) had or have purchased weights in order to do these exercises on their own. -67% (6 out of 9) have added additional exercises or activities since beginning the class (i.e. walking, swimming/water aerobics, stair stepping). -62% (5 out of 8) feel they have more energy. -57% (4 out of 7 feel they have less joint pain.</td>
<td>When you support MU Extension’s Stay Strong, Stay Healthy program, participants will increase their physical activity and may improve strength, balance and flexibility, resulting in reduced risk for falls, better overall health and greater independence. These health benefits decrease the likelihood of a participant entering a nursing home, which costs on average $51,465 per year in Missouri(^1). The money saved benefits the community by keeping more discretionary income in circulation locally. It also keeps people actively, independently contributing to society longer.</td>
<td></td>
</tr>
</tbody>
</table>

1 The MetLife Market Survey of Adult Day Services & Home Care Costs, 2011
Top: Mercer County Fair Royalty, pictured left to right Hannah Meighen, Natilie Gettings, Gretchen Schroder, Ethan Mathews, Jasimine Mathews, Lauren Cox, and Jacob Schewnneker.
Bottom Left: Mercer County Embryology
Bottom Right: After School Program

Youth Development – 4-H
<table>
<thead>
<tr>
<th>Sample Events</th>
<th>Participants and hours of collective participation</th>
<th>Program learning objectives</th>
<th>How does this benefit Mercer County and Missouri citizens?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4-H Clubs</strong></td>
<td>58 students participate in the four 4-H clubs.</td>
<td>Mercer County 4-H focuses on learning by doing through experiential learning. This learning better prepares youths for jobs – critical for economic recovery. Youths are given the opportunity to put learning into action through opportunities in leadership, citizenship, teamwork, community service and other life skills.</td>
<td>4-H is a great return on investment. For every $1 invested from public resources for Missouri 4-H, the programs leveraged $3.42 for our citizens. According to a Carnegie report, the value of youth development programming provided by MU Extension 4-H faculty and staff is $9,968,600 or a return on investment of $1.47 on the public investment.</td>
</tr>
<tr>
<td>Mercer 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.</td>
<td>440 people participated in the 4-H school programs.</td>
<td>Life skills are defined in a variety of ways. 4-H, in recent years, has given special attention to youths' interest, attitudes and engagement in science, engineering and computer technology. Active 4-H members spend almost ten times more of their out-of-school time engaged in science-based activities than their non-4-H peers. Project work builds important life skills.</td>
<td>County 4-H clubs offer long-term educational experiences in which members learn life skills such as decision making, public speaking, citizenship and working with others. Members learn by doing under the guidance of adult volunteers.</td>
</tr>
<tr>
<td><strong>4-H School Programs</strong></td>
<td></td>
<td></td>
<td>Missouri 4-H volunteers donate an average of 6 to 10 hours/week or 72 to 120 hours annually. The Independent Sector values a Missouri volunteer's time at $21 per hour. Accordingly, Missouri 4-H volunteers are providing $15 to $25 million in volunteer services annually.</td>
</tr>
<tr>
<td>Mercer County 4-H school enrichment programs are short-term educational experiences that supplement learning in the classroom. Most are led by teachers or 4-H volunteers. The most popular 4-H school program in Mercer County is Embryology. Schools that participated in 2014 were Cainsville R-1, North Mercer R-3 and Princeton R-V Schools.</td>
<td></td>
<td></td>
<td>Studies show the youths in programs such as 4-H are 70 percent more likely to attend college and increase their earning potential by $2.01 million dollars over their lifetime. This would create $14 billion of earning potential.</td>
</tr>
<tr>
<td><strong>Show Me 4-H Wares</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Show Me 4-H Wares program is part of the MU Extension 4-H entrepreneurship project, through which youths learn how to start a small business or a social venture that addresses a need in their community. For more information on this and similar programs, see the &quot;Cloverpreneurs&quot; page on Facebook, or visit <a href="http://www.4h.missouri.edu/programs/entrepreneur/">http://www.4h.missouri.edu/programs/entrepreneur/</a>.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Mercer County

Helping youth and adults become lifelong learners while strengthening their community and families.