What Extension does and why:
Extension improves communities and people’s lives by providing relevant, responsive and reliable research based education.

The University of Missouri Extension is a partnership between the University of Missouri, the people of Missouri through county extension councils, the Cooperative State Research, Education and Extension Service of the U.S. Department of Agriculture and other partners and stakeholders.

Cole County Extension
2436 Tanner Bridge Rd, Jefferson City MO
573-634-2824
coleco@missouri.edu

2012 Extension Council:
Bill Case, Chair
Greg Gaffke, Vice-Chair
David Kiesling, Treasurer
Alice Longfellow, Secretary
Dennis Bening
Larry Bishop
Larry Brandhorst
Jean Frank
Jeff Hoelscher
Kris Leech
Colleen Meredith
Doug Moeller
Leonard Muenks
Mae Oehring
Carol Pleus
Dan Rice
Frank Richards
Marilyn Schmutzler
Liz Strobel
Jeff Suthoff
Ross Terry
Harry Thompson
Walter Wilbers
Wayne Yokley
Marguerite Young

Staff headquartered in Cole County:
Laura Ancell
Jenny Flatt
Jane Kempker
Julie Royse
Diane Temmen
Chris Thompson
James Quinn
Lynda Zimmerman

Staff serving Cole County:
Kathy Dothage
Monica Haaf
Jim Jarman
Vivian Mason
Stacy Robb
Mary Sobba

Interim Regional Director:
Mark Stewart
Business Development
Cole County clients assisted by the Business Development Program reported these impacts:
- 24 new jobs
- $1,541,890 in increased sales
- $2,025,892 in government contracts
- 5 new businesses
- 301 jobs retained
- $1,328,143 in business loans and investments
- $192,924 in acquired assets
- 79 clients received business counseling
- 102 training program attendees or conference participants
- Partnered with the Jefferson City Business and Entrepreneurial Support Team to conduct the Start Up Jeff City Business Plan Pitch Contest

Family Nutrition Education Programs
- Combed childhood obesity by reaching 1,904 youth or adults with nutrition education

4-H & Youth Development
- 343 youth participated in 4-H clubs, a 14% increase
- 283 adult volunteers served as club or project leaders, a 13% increase
- 503 horse, dog and livestock exhibits at the county fair
- 3,009 participated in 4-H sponsored enrichment programs in their schools

Health and Fitness Education
- A new specialist was assigned to Cole County
- 41 citizens improved their health through regular exercise classes
- 11 diabetics enhanced their quality of life by learning how to better manage diabetes
- 49 families learned to reduce their food budgets through food preservation

Master Gardeners
- 168 Master Gardeners saved local organizations over $250,000 by donating more than 13,000 hours of labor
- 17 graduated from the Master Gardener program

Agriculture
- 17 female farm owners were trained in risk management
- 10 learned the complexities of Missouri’s fencing laws

Horticulture & Natural Resources
- Responded to 808 contacts concerning natural resource issues such as identifying plant diseases and insects
- 156 commercial horticulture participants
- Protected the environment and improved crop yields by training 49 private pesticide applicators and interpreting 480 home and field soil fertility tests
- 12 attended the Landscaping Class Series

Safety
- 393 enrollments in Extension’s Fire and Rescue Training Institute were from Cole County
- 51 enrollments in Extension’s Law Enforcement Training Institute were from Cole County
- 220 Cole County medical and veterinary professionals received continuing education through Extension programs
- 133 youths educated in the responsibilities of using firearms along with their safe and proper handling through 4-H shooting sports programs led by 33 adult volunteers

Human Development and Family Financial Education
- Lessened the impact of divorce on children through parental training
- 600 participated in financial education programs or received individual counseling
- Reach 33% more families with financial education than in 2011

County Extension
- “Touched” over 13,700, or 18%, of Cole County citizens with programs or information
- Responded, on average, to a customer contact every 22 minutes of every business day
- Processed 480 soil tests
- Provided a testing location for 24 students enrolled in correspondence courses
- Hosted monthly commercial pesticide applicator testing
- 422 events scheduled for our conference rooms
- Planned, prepared, and conducted the 36th Fall Festival with 3,000 attending
- Coordinated all youth development activities at the Cole County Fair
- Using only Council generated funds major improvements were made to the Extension Center
December 2012

Dear County Commissioners and Associated Friends of MU Extension:

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

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

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

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

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

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

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

Sincerely,

Michael D. Ouart
Vice Provost and Director

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

EQUAL OPPORTUNITY/ADA INSTITUTIONS
Dear Citizens, Legislators, Commissioners and Supporters:

As required by Missouri Statue 262.617, we present you with our annual report for the Cole County Extension Center. Please find detailed information about our programs and events that took place during 2012.

We would like to extend a special thanks to the Cole County Commission and United Way for their continued support to the Cole County Extension Center.

Marc Ellinger, Presiding Commissioner
Chris Wrigley, Western District Commissioner
Jeff Hoelscher, Eastern District Commissioner

Ann Bax, United Way President

We would also like to thank all of our volunteers who are too numerous to be named. The Cole County Extension Office couldn’t operate to its full ability without your help.

Sincerely,

Bill Case
Cole County Extension Council Chair

Alice Longfellow, Cole County Extension Council Secretary

Chris Thompson, County Program Director

University of Missouri, Lincoln University, U.S. Department of Agriculture and Local Extension Councils Cooperating equal opportunity/ADA institutions
### Impact on Cole County, Missouri

#### UM Students from Your County in 2011
- 736 students
  - 590 - MU
  - 51 - UMKC
  - 82 - Missouri S&T
  - 13 - UMSL
  - 561 - Undergraduates
  - 175 - Graduates
  - 610 - Full-time students
  - 126 - Part-time students

#### UM Alumni Residing in Your County in 2011
- 4,324 alumni
  - 3,537 - MU
  - 242 - UMKC
  - 411 - Missouri S&T
  - 134 - UMSL
  - 1,652 Selected School Alumni
    - 87 - Medicine
    - 149 - Nursing
    - 129 - Health Professions
    - 34 - Dentistry
    - 24 - Pharmacy
    - 2 - Optometry
    - 31 - Veterinary Medicine
    - 315 - Agriculture
    - 569 - Engineering
    - 312 - Law

#### UM Employees and Retirees Residing in Your County in 2011
- 444 people employed by UM
  - 240 - MU
  - 6 - UMKC
  - 5 - Missouri S&T
  - 7 - UMSL
  - 172 - UM Health Care
  - 14 - UM System
- 56 UM Retirees and Beneficiaries

### Tax Revenue and Income Generated by UM Employees and Retirees Residing in Your County in 2011
- $688,506 in Missouri State Taxes
- $3,139,638 in Federal Taxes
- $18,000,826 in Salary and Retirement Income returning to the county

#### UM Services Received in Your County in 2011
- 10,278 patients seen at UM Health Care with $2,915,189 of uncompensated care.
- 1 patient seen at the UMSL Center for Eye Care.
- 25 patients seen at the UMKC School of Dentistry with an average of $37 per patient in uncompensated care.
- 13,739 educational contacts with MU Extension through MU Extension events held in your county.

#### UM Alumni as K-12 Teachers and Administrators in Your County in 2011
- 187 teachers
- 25% of all county teachers
- 15 principals and administrators
- 47% of all county principals and administrators
4-H

Jenny Flatt, 4-H Youth Specialist

A community of 343 4-H youth participants are building life skills, engaging in science and connecting to community. This is an increase of 42 youth, or 14%, from participation in 2011.

4-H Connects Kids To College And A Higher Quality Of Life

Being on a campus is a predictor of youth going on to higher education. Missouri 4-H members are two-times more likely to have been on a college campus than their non-4-H peers. The University of Missouri (MU) in Columbia is by far the campus most frequently visited. 4-H is the second most reported reason to visit one of the MU campuses; connecting 8,500 young people to MU in the past year.

- 12 Cole County young people ages 5-18 participated in 4-H events on the MU Campus
- These students are more likely to go to college and:
  - Have increased financial success for themselves and their offspring
  - Become better consumers
  - Have improved quality of life through more opportunities for leisure and hobbies
  - Have improved health for themselves and their children
  - Are more likely to vote as adults
  - Are more likely to contribute to their community
- Youth earning a bachelor’s degree increase their lifetime earnings by $2.01 million. If 70% of the Cole County 4-H members participating in 4-H events on the MU campus earn a bachelor’s degree, 4-H would have helped these young people earn $16.9 million more over their lifetime.

4-H Clubs Provide Experiential Learning

Cole 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. The 343 club 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.

Incubation And Embryology Reaches 3,009

This Cole County 4-H school enrichment program provides short-term educational experiences that supplement classroom learning. The program is led by teachers and 4-H volunteers.

A 13% Increase In Adult Volunteers

Volunteers are a critical part of the 4-H community. As the number of participants and programs grow, so does the demand for volunteers to lead, guide and mentor the youth. Volunteers average a 100 hours per year working with the program. Valuing their time at $18.80 per hour, based on average Missouri incomes, the contribution of Cole County 4-H volunteers was worth more than $532,040 in 2012! More importantly, the guidance and mentorship provided by these volunteers to help youth transition into healthy adulthood is priceless.

The Success Of Two Programs

Shooting sports involves a total of 133 youth along with 33 adult volunteers; 39 of these youth participated in 47 different events at the Shooting Sports State Match. Here are the results:

**Shotgun**
- Senior Doubles: Austin Gerloff-7th place, Logan Gerloff-9th place
- Senior Singles Team: 10th place
- Intermediate Trap Novice: Ben Wibberg-1st Place

**Archery**
- Junior Compound Release Team: 3rd Place
- Compound Fingers: Intermediate: Cole Sandbothe-5th Place, Kail Walther-8th Place
- Compound Release: Intermediate: Cole Sandbothe-4th Place
- Traditional: Intermediate: Shianne Walther-5th Place
- FITA: Senior: Logan Gerloff-3rd Place

**Muzzle Loading**
- Intermediate: Travis Roensch-7th Place

**Air Pistol**
- Intermediate: Leanna Schwartz-2nd Place

**Smallbore Rifle**
- Junior Standard: Jason Haselhorst-10th Place
- Junior Aperture: Claire Russell-4th Place, Eleanor Bax-5th Place

**All Participants**
Austin Gerloff, Logan Gerloff, Paige Fuller, Austin Golden, Issac Kirchner, Wyatt Nelson, Josh Horn, Caleb Golden, Kaitlyn Sandbothe, Lucas Easterhold, Jason Haselhorst, Devin Koelling, Brody Eads, Dennis Harris, Cole Sandbothe, Kail Walther, Jennifer Hassler, Cassie
Business Development

Chris Thompson, Business Development Specialist

It Is Still All About Jobs

Jobs continue to dominate the economic news. Clients of MU Extension’s Business Development Program (BDP) created or retained 325 jobs in Cole County and 9,315 jobs across the state. In addition, Extension’s BDP also helped their clients improve sales, start businesses, and obtain government contracts, all of which contributes to creating and retaining jobs and improving the local economy. BDP clients can be either exiting businesses or those wanting to start a business; either way they can access confidential counseling, coaching, training, and other services.

How We Make A Difference

During 2012 BDP specialists served 79 Cole County residents and their companies. These entrepreneurs and business owners reported the following economic impacts:

- New jobs: 24
- Sales increases: $1,541,890
- Government contracts: $2,025,892
- New businesses: 5
- Jobs retained: 301
- Loans and investments in business: $1,328,143
- Acquired assets: $192,924
- Clients/companies receiving business counseling: 79
- Business training attendees and conference participants: 102

Across the entire state the University of Missouri Extension’s BDP served 22,350 people and businesses. The reported state-wide impact was:

- New jobs: 6,531
- Sales increases: $237,046,646
- Government contracts: $198,200,000
- New businesses: 303
- Jobs retained: 2,784
- Loans and investments in business: $245,575,470
- Acquired assets: $32,205,965
- Investment in commercialization: $19,417,970 of research proposals submitted with $7,494,246 in research awards received
- Clients/companies receiving business counseling: 8,452
- Business training attendees and conference participants 22,981

Activities

In accomplishing these achievements, the Cole County Business Development Specialist delivered 99.5 hours of classroom instruction in 29 individual programs. Total attendance, including those not residing in Cole County, was 117. This number includes individuals who attend multiple programs. Counseling activities involved 827 hours of individual contact and preparation, with 34% of clients reporting impact. Additionally, the local business specialist received coaching training by the Blue Mesa Group and was certified as a professional coach during 2012.

Start-Up Jefferson City

In addition to the counseling, coaching, and training programs, the local business specialist assisted in the Start-Up Jefferson City effort. Designed to help smaller entrepreneurs develop the plans and confidence to start their business, this effort conducted four separate events during the year to inspire, educate and allow entrepreneurs to pitch their idea to a panel of business professionals. At the last event one entrepreneur was selected to receive a small cash prize. At the final session, 12 different businesses presented their business concept for the panel’s review.

As more entrepreneurs take advantage of the Missouri Business Development Program, the impact in Cole County will continue to grow.

Visit the Cole County website at http://extension.missouri.edu/cole/ or the state website at www.missouribusiness.net to see a full listing of Business Development Program services.
Family Nutrition Education Programs

Julie Royse, Family Nutrition Program Coordinator

The Program
University of Missouri Extension Family Nutrition Programs (FNP) reached 1,904 low-income participants with nutrition education in Cole County during 2012. FNP provides information on nutrition, food safety, and physical activity for lifelong health and fitness.

For The Kids
Nutrition education for youths provides information in kid-friendly terms and lessons with hands-on activities. Activities include taste-testing healthy foods and practicing skills that lead to good health.

During 2012, Monica Haaf, the Cole County nutrition program assistant, provided classes to students at Jefferson City High School, East Elementary, Thorpe Gordon Elementary, Lawson Elementary, Blair Oaks, and West Elementary. A complete program consists of seven lessons and a newsletter for each lesson goes home to the family. It provides a summary of the lesson, a game, puzzle or recipe and serves as an interactive way for parents to discover what their child learned.

Special programming was also provided to the Salvation Army, Pathways, Center of Hope, and Rape and Abuse Crisis services.

For The Adults
Education for adults includes nutrition, food safety, physical activity, and food resource management. Adults were reached in Cole County using the Show Me Nutrition displays and contacts at Food Pantries with recipes and information on low cost food preparation and physical activity tips.

How The Program Is Funded
The FNP brought $10,420,125 of Federal funds to the state of Missouri. These funds were used to provide nutrition education to 315,326 food stamp recipients and food stamp eligible Missouri citizens.

The Payback
Participants in FNP become more aware of nutrition, make healthier meal and snack choices, eat breakfast more often, are more willing to try new foods, increase their physical activity and in general make healthier food choices. Those who practice healthy eating and activity behaviors are more likely to enjoy a high quality of life as an adult and continuing into old age. A healthy labor force is critical to attracting and keeping jobs in Missouri. In addition, this important programming effort serves to reduce healthcare costs over the participant’s lifetime, saving taxpayers’ money by reducing insurance premiums and publicly funded healthcare.

FNP also funds one full-time job with quality benefits plus expenses for making the programming available to qualified schools and agencies in the county.

Evaluations from teachers working with Monica include statements like:
- “Students benefit greatly from the information. They really enjoy being introduced to new fruits”
- “Very good, hands-on activities”.

Teachers reported on changes observed in their classes. Results are summarized for the state revealed:
- 3,635 teachers gave us feedback.
- 54% have participated in FNP for three or more years.
- 99% reported one or more changes in students after FNP.

### Student changes reported by teachers

<table>
<thead>
<tr>
<th>Student changes</th>
<th>Teachers who observed each type of student change</th>
<th>Teachers whose students talked about this change</th>
</tr>
</thead>
<tbody>
<tr>
<td>More aware of nutrition</td>
<td>90%</td>
<td>86%</td>
</tr>
<tr>
<td>Make healthier meal and/or snack choices</td>
<td>65%</td>
<td>76%</td>
</tr>
<tr>
<td>Eat breakfast more often</td>
<td>45%</td>
<td>50%</td>
</tr>
<tr>
<td>More willing to try new foods</td>
<td>77%</td>
<td>74%</td>
</tr>
<tr>
<td>Improved hand washing</td>
<td>83%</td>
<td>76%</td>
</tr>
<tr>
<td>Improved food safety</td>
<td>37%</td>
<td>39%</td>
</tr>
<tr>
<td>Increased physical activity</td>
<td>62%</td>
<td>64%</td>
</tr>
</tbody>
</table>
### Teachers’ Changes (self-reported)

<table>
<thead>
<tr>
<th>Behavioral change</th>
<th>Teachers who made each type of change</th>
<th>Teachers already practicing the behavior</th>
<th>Teachers who model or talk about the behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>More aware of nutrition</td>
<td>51%</td>
<td>48%</td>
<td>89%</td>
</tr>
<tr>
<td>Make healthier meal and/or snack choices</td>
<td>51%</td>
<td>45%</td>
<td>87%</td>
</tr>
<tr>
<td>Eat breakfast more often</td>
<td>34%</td>
<td>55%</td>
<td>74%</td>
</tr>
<tr>
<td>More willing to try new foods</td>
<td>42%</td>
<td>49%</td>
<td>82%</td>
</tr>
<tr>
<td>Improved hand washing</td>
<td>32%</td>
<td>66%</td>
<td>88%</td>
</tr>
<tr>
<td>Improved food safety other than hand washing</td>
<td>35%</td>
<td>61%</td>
<td>68%</td>
</tr>
<tr>
<td>Increased physical activity</td>
<td>40%</td>
<td>44%</td>
<td>80%</td>
</tr>
<tr>
<td>Make/offer healthier food choices for students</td>
<td>49%</td>
<td>38%</td>
<td></td>
</tr>
</tbody>
</table>

Evaluation data was collected on students who participated in a variety of curricula from Pre-Kindergarten through Grade 12.

Adults who participated in FNP also made significant improvements in each area addressed.

### Dietary Quality and Physical Activity

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Respondents reporting improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Think about healthy food choices when deciding what to feed your family</td>
<td>51%</td>
</tr>
<tr>
<td>Use the “Nutrition Facts” label to make food choices</td>
<td>62%</td>
</tr>
<tr>
<td>Consume something within 2 hours of waking</td>
<td>53%</td>
</tr>
<tr>
<td>Consume the equivalent of 3 cups of milk, yogurt, and cheese each day</td>
<td>50%</td>
</tr>
<tr>
<td>Eat more than one kind of vegetable each day</td>
<td>56%</td>
</tr>
<tr>
<td>Eat more than one kind of fruit each day</td>
<td>59%</td>
</tr>
<tr>
<td>Exercise for a total of 30 minutes each day</td>
<td>51%</td>
</tr>
</tbody>
</table>

### Food Safety

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Respondents reporting improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let meat and dairy foods sit out for more than 2 hours</td>
<td>45%</td>
</tr>
<tr>
<td>Thaw frozen foods at room temperature</td>
<td>64%</td>
</tr>
</tbody>
</table>

### Food Resource Management

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Respondents reporting improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan meals ahead of time</td>
<td>61%</td>
</tr>
<tr>
<td>Compare prices before bought food</td>
<td>42%</td>
</tr>
<tr>
<td>Shop with a grocery list</td>
<td>46%</td>
</tr>
</tbody>
</table>
Financial Management

Vivian Mason, Family Financial Education Specialist

Expanding Workshops Results In Better Financial Education and Performance

During 2012, 600 Cole County residents attended one or more of our financial education classes. Enrollment throughout the Central Missouri region increased 33% in 2012 when compared to 2011.

How This Makes A Difference

Financially stable families make economic activity in the county and state more sustainable. In addition to improving personal finances, the community benefits from a reduction of predatory lending, less reliance on publicity funded assistance programs, reduced debt discharged in bankruptcy and increased productivity in the workplace.

Our Workshop Efforts

Drs. Vivian Mason and Cynthia Crawford teamed up or individually taught a variety of financial education workshops and provided a limited amount of financial counseling throughout the year. Financial workshops offered included:

- Financial Game Plan
- Money U
- Homebuyer Education
- Missouri Saves
- Take Control of Your Finances
- VITA (Volunteer Income Tax Preparation Assistance)
- United Way Resource Fairs
- Small Steps to Health and Wealth

What Workshop Participants Learn

While content varies from one financial workshop to another, participants learn the importance of written goals, the impact of a bad credit report, and how to:

- Balance income and expenses
- Reduce financial stress
- Increase their success in reaching financial goals
- Make more informed financial decisions
- Improve communications and reduce financial conflict
- Save an emergency fund to reduce predatory lending
- Monitor and plug spending leaks

Follow-up evaluations show that a majority of workshop participants exercise a greater control over their finances.

Family Financial Education Is Available 24/7/365 At www.extension.missouri.edu/cole

During annual planning in the fall of 2011, all 13 Extension Councils in the Central Missouri region identified financial management as a program that needed to expand. While recognizing that financial education is critical was no surprise, Extension Financial Education Specialists were challenged to match this acute programming need with the limited existing resources. No additional specialists were available to increase the number of workshops or offer more financial counseling. Making resources available on the web was the best option available. As a result of the family financial specialists’ efforts, county websites throughout Central Missouri now provide visitors with:

- Available financial workshops and how to enroll
- How to make a financial plan
- Workshops that can be scheduled for groups
- Financial steps to take if you lose your job
- How to check your credit report and how to avoid the fee-based and rip-off sites
- How to protect your credit report
- Financial management for students
- Financial preparedness and disaster recovery
- How to replace important financial documents
- How to contact a family financial education specialist

Horticulture

James Quinn, Horticulture Specialist

Improving The Environment And The Quality Of Life For 808 Cole County Citizens

Gardening is the most popular hobby in the U.S. and adds to the quality of life. The Cole County Extension Center responded to over 808 assistance requests with high quality, unbiased and research-based horticultural information.

Greener Plants And A Greener Earth

Proper fertilization was a common request. Individuals were instructed on the best way to fertilize; be it turf, vegetables, flowers, shade trees or other plants. Part of this effort included the submitting 129 soil samples for testing and then analyzing the results. Proper fertilization improves plant performance, generally reduces fertilizer expense and reduces water runoff pollution.

To maximize their pest control efforts, over 133 citizens requested diagnostic assistance. Sometimes they were seeking positive identification, sometimes optimal control measures were the focus of the
request, and sometimes both. Providing diagnostic assistance is a wonderful learning opportunity and MU publications are consulted and provided in this process.

Over 337 citizens sought home horticulture assistance, such as tree pruning, plant variety selection or lawn maintenance. Most often Extension resource publications provided the needed answers. In addition, 209 county citizens attended either the 2nd Annual Spring Garden Seminar, held at Lincoln University’s Carver Farm or presentations at the Missouri River Regional library.

Master Gardeners - Making Things Look Great While Helping Organizations Save Money
Central Missouri Master Gardeners (CMMG) is the official name of the local Master Gardener group. They are 168 volunteer members who maintain 11 beatification sites in Cole County. Master Gardeners worked over 13,000 hours, valued at $250,000, saving site owners both time and money.

Master Gardeners Grow Their Own
Seventeen new Master Gardeners were “grown” during 2012. Becoming a Master Gardener requires the completion of 30 or more hours of horticultural training. Topics include landscaping, lawns, vegetables, flowers and fruit. This prepares them for their volunteer service.

Strengthening Commercial Horticulture - Missouri Grown, Community Food Systems and Nursery/Greenhouse/Lawn Service
The climate, soils and population base of Missouri are conducive to growing high value horticulture crops such as tomatoes, berries, melons, wine grapes, and peaches. Providing growers and businesses with unbiased and research-based information allows them to make better decisions; improving both the production and marketing of their crops. Over 127 adults and 29 youth from Cole County were reached in 2012 through workshops, newsletters, field days, farm tours, grower conferences and other methods.

Programs in Cole County Conducted by Specialists from Other Counties

Reducing And Managing Diabetes
More than 23 million Americans have been diagnosed with type 2 diabetes and an estimated 79 million are considered pre-diabetic. If current trends continue, 1-in-3 people in the U.S. will develop diabetes by 2050. Lifestyle Habits is a 2-hour program on research-based recommendations to prevent and manage type 2 diabetes through healthful eating and regular physical activity. The class helps participants learn to:
- Identify risk factors of type 2 diabetes
- Understand healthy levels of blood glucose and hemoglobin A1C
- Plan meals using carbohydrate counting and the plate method
- Locate resources for additional learning and support

In six central Missouri counties, Lifestyle Habits reached 103 people during 2012, 11 Cole County residents attended the Jefferson City offering.

Participant surveys completed at the end of the program showed:
- 94% felt the program met their needs
- 95% learned new information or acquired new skills
- 73% believed they were better prepared to care for themselves and will choose healthier foods
- 73% rated their level of knowledge, skills or understanding of diabetes as “a lot” or “a great deal” after the program, compared to just 13% at the start of the program

Safely Preserving Food At Home
In recent years there has been resurgence in preserving food at home, along with an increased interest in local foods and gardening. Having the most current, research-based recommendations are critical for even the most experienced home food preservers, as methods learned in the past may not necessarily be safe methods today.

University of Missouri Extension worked collaboratively with Common Ground and Grace Episcopal Church to conduct three 2½ hour food preservation workshops in Jefferson City. A total of 49 people attended. Together the three workshops provided safe and reliable recommendations for water bath canning, pressure canning, freezing, and dehydrating food, as well as procedures for making jams and jellies, salsa and pickles.

Participants completed evaluations at the end of each session, which showed:
- 100% had better knowledge of how to safely preserve food
- 87% planned to preserve food as a result of the session they attended
- 78% would use tested recipes from reliable sources
Most participants considered knowing proper and safe procedures and strictly following tested recipes as the most important things learned.

**Taking Care of You: Body-Mind-Spirit**

Many people cope with stress by using unhealthy behaviors like overeating, smoking, self-medicating and being inactive. Stress also is a contributing factor in depression and many chronic diseases.

Taking Care of You: Body-Mind-Spirit is an eight-week program that teaches participants practical strategies to manage stress and take care of their physical, mental and spiritual health; leading to better stress management, healthier lifestyles and improved health. This ultimately leads to fewer health care costs, saving taxpayers’ money by reducing both public health care expenditures and insurance premiums. Further, higher work productivity levels contribute to a healthier labor force and stronger economy.

In Cole County, 11 people participated in the 8-week program, one of 107 such offerings through the entire state during 2011 and 2012. Program evaluations revealed:

- 77% described their knowledge, skills or understanding of food preservation as “a lot” after the sessions, compared to just 13% at the start of the program
- 46% were going to share food preservation information with other people

Participants in both programs increase their physical activity and may improve strength, balance and flexibility; resulting in reduced risk of falls, better overall health and greater independence. These health benefits decrease the likelihood of a participant entering a nursing home, which costs on average $51,465 per year in Missouri. The money saved benefits the community by keeping more discretionary income in circulation. It also keeps people active, independent and contributing to society longer.

A total of 41 people participated in three Stay Strong, Stay Healthy and two Advanced Stay Strong, Stay Healthy programs in Jefferson City during 2012. Participants’ pre- and post-program fitness assessments and program evaluations showed:

- 100% would recommend the program
- Participants said they gained:
  - Improved health (96%)
  - Increased strength (100%)
  - Greater flexibility (89%)
  - More energy (93%)
- 96% improved in at least three of five measures of fitness
- 82% improved in four of five measures
- 68% improved in all five measures
- 74% did the exercises at home one or two additional times per week
- 78% added other regular physical activities to the exercises

A three-month follow-up survey of participants revealed:

- 79% continued to lift weights at home, in a group, or at a gym
- 76% reported that their ability to do everyday tasks has improved
- 78% said their health had improved

**Programs by Kathy Dothage, Human Development Specialist**

**Helping Children During A Divorce By Educating Parents**

Focus on Kids is an Extension Program designed to ensure the stress and conflict the often accompanies a divorce does not impact the children. This program has been mandated in Missouri since 1998.

Five Cole County parents participated in the program during 2012. Since the nearest program offered is in Callaway County, judges often waive mandatory participation. The result is the low attendance by county residents. Some attorneys continue to encourage their clients to participate. The possibility of offering a class in Cole County in 2013 will be explored.
Participant responses to the program are overwhelmingly positive.

- “This was more helpful than I had anticipated.”
- "It was a good program!"
- “This was a good program and I don’t know if it is or not but should be available to anyone not just divorcing parents.”

Focus on Kids enables divorcing parents to be more cooperative and therefore reduce the stress on their children and themselves. With reduced stress children and parents are more productive in school, work and home.

Beyond the positive impact on the family, this program reduces the number of parents seeking court action to modify their original divorce decree. This saves money and time for the parents, the courts and therefore the community.

**Programs by Mary Sobba, Agriculture Business Specialist**

**Annie’s Project – Educating Farm Women To Better Manage Risk**

Annie’s Project is an educational program that was created specifically for farmwomen. Program participants gain farm management and communication skills needed to make better business decisions, resulting in more profitable farms and more money being spent in the local community. Missouri citizens benefit from the creation of more vibrant and sustainable rural economies.

Eight Annie’s Project and two Annie’s Project II (Managing for Today and Tomorrow) programs were conducted in 2012, the closest being in Fulton. Seventeen residents from Cole, Callaway and Osage counties attended. Statewide, 98 women participated in Annie’s Project and 21 participated in Annie’s Project II.

The instruction addresses risk management, record keeping software, ownership of property, insurance, financial statements, spreadsheets, writing a business plan, estate planning, leases, communication issues, personality traits, and marketing. Annie’s Project II focuses in-depth on succession, business, estate and retirement planning. These programs enable farmwomen to become better managers and partners, and in turn, increase the viability of their farming operation. It also gives farmwomen an opportunity to network and interact with other women involved in agriculture.

Approximately six months after the completion of the programs, participants were evaluated to see what actions had been taken.

- 50% indicated they understood the financial scorecard and had used it
- An additional 21% said they plan to use it
- 96% said they had shared the information with other people
- 36% said they had already made changes and/or reviewed their farm leases
- An additional 36% said they are planning to review their leases

Funding for these programs in 2012 was from a USDA Risk Management Agency grant. Annie’s Project will continue and MU Extension will be offering about ten classes next year in various locations throughout the state. Future class locations can be found online at [http://extension.missouri.edu/annie](http://extension.missouri.edu/annie).

**Fence and Boundary Law Issues Never End**

Missouri’s Fence and Boundary Law remains one of our more confusing state laws since there are two different laws are enforced in the state. A large influx of recreational land owners and those without a direct Ag connection have made this issue even more of a hot button here in Missouri. The state fence law can be difficult to interpret and few if any attorneys and judges stay current on rural legal issues. Fence and boundary law education remains a critical area of need and is requested numerous times throughout the year.

The program educates landowners about each law and their impacts. This knowledge enables landowners to avoid conflicts with their neighbors and costly legal fees. This helps Missouri by lessening court overcrowding and allows citizens to make informed, educated decisions based on facts and not on beliefs.

On March 21, 2012 a class was held in Jefferson City via interactive TV, with ten participants from Cole, Osage and Callaway counties. Statewide, 119 individuals attended programs discussing Missouri’s fence and boundary laws during 2012.

Evaluations of this program indicate over 90% of participants now know there is more than one fence law in Missouri (an especially critical fact for the 16 local option counties in our state) and 87% know which law covers the land they own.
Programs by Jim Jarman, Agronomy Specialist

Drought Response
Several mid-Missouri agronomy projects were replaced with efforts to assist with drought related issues. The biggest issue causing concern among area farmers was the lack of livestock forage and the buildup of nitrates in grass crops. When these crops, especially corn, do not appear to be productive enough to produce grain, alternative use as forage is considered. High levels of nitrogen fertilization with drought stressed plants means the nitrogen taken into the plant for growth is accumulated. High levels of accumulated nitrogen make the crop toxic to livestock.

Extension specialists have a quick test to alert farmers to this danger. Plus, the University of Missouri has further tests to rate the level of toxicity. Surveys of farmers using Extension nitrate testing were all thankful for the test even though it did not give the hoped for results that the crops were safe to feed. One farmer was especially thankful since he needed all his calves to live to pay his farm mortgage. Also there was information handed out on the many aspects of nitrate toxicity, safe alternative uses of drought damaged crops and forages and other drought issues. This fall, winter and spring educational programs include information on handling drought related management for the coming season.

the office...
Jane Kempker, Extension Administrative Assistant

The Cole County Extension Center keeps busy from January through December; this was especially true in 2012 with the warm winter, the summer heat and the drought. The unseasonably warm winter generated a lot of early soil tests and calls about insects. During the spring we answered lots of questions about fruit and vegetables ripening earlier than usual.

Along with the above average number of assistance requests involving insects, as the summer progressed, calls on how to deal with the impact of the drought on lawns, trees, flowers and gardens were common. Vivian Mason, our Family Financial Education Specialist, was transferred to Callaway County where she also assumed responsibilities as County Program Director. She will continue to provide programs in Cole County. Lynda Zimmerman, a Nutrition Specialist, was assigned to Cole County, but she will continue to provide support in her previously assigned counties. The preparations and conduct of 4-H Camp and the Cole County Fair kept us busy during June and July. Although planning and preparation for the annual Fall Festival takes place all year, July, August and September are the months when most of the activity occurs.

This year’s Festival, the 36th, was very successful. All booth spaces were sold, a few more had to be created and 3,000 local residents came to purchase items from the 164 vendors that occupied the 234 booth spaces.

After 17 years of hard use, the Cole County Extension Council approved many upgrades and improvements to the center. The need for the updates had been recognized for several years, but the Council wanted to ensure sufficient financial reserves were available before starting the project. The updates included a new roof, carpet and tile. The old wallpaper was removed and the entire interior painted. Additionally a new water softener and phone system were installed. The CMMGs paid for a drip irrigation system for the Extension Center grounds. The office staff was very excited to see all of the changes.

Since 2010 the council has spent over $100,000 to upgrade the Extension Center. No county funds were used for any of these projects. The fall festival revenues were the primary source of funding for these improvements. Other projects are being considered for the future.

2012 was a successful year for Cole County Extension Center. The support from the community makes it possible.

<table>
<thead>
<tr>
<th>2012 Operating Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appropriations/Revenue</strong></td>
</tr>
<tr>
<td>County Appropriations</td>
</tr>
<tr>
<td>United Way</td>
</tr>
<tr>
<td>Council Contribution</td>
</tr>
<tr>
<td>Program Income</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
</tr>
<tr>
<td>Salaries/Wages/Benefits</td>
</tr>
<tr>
<td>Area Staff Travel</td>
</tr>
<tr>
<td>Misc. Expenses</td>
</tr>
<tr>
<td>Telephone Services</td>
</tr>
<tr>
<td>Supplies/Service</td>
</tr>
<tr>
<td>Contract Service/Janitorial</td>
</tr>
<tr>
<td>Council Operations</td>
</tr>
<tr>
<td>Equipment Lease/Purchase</td>
</tr>
<tr>
<td>Utilities</td>
</tr>
<tr>
<td>Insurance</td>
</tr>
</tbody>
</table>