Dear Members of the County Commission and the Community:

When you invest public funds, you want to know that those funds are making a real difference – that the program has value to the public. And in these tough economic times, you especially are interested in programs that create and retain jobs. Fortunately, that is exactly the case with your investment in University of Missouri Extension programs.

Here are just a few examples:

- The **FastTrac NewVenture** course creates new jobs by providing tools to those who want to start their own business. Entrepreneurs determine the economic feasibility of their business concept, design a business model that matches their personal vision, and create a business plan to communicate the opportunity to investors.

- **Pasture-based Dairies**, modeled on MU Extension’s rotational grazing systems, have generated 1,100 jobs and added more than $124 million to Missouri’s economy.

- The Office of Social and Economic Data Analysis works with the Missouri Department of Economic Development to provide an online career exploration tool, which provides information about promising employment arenas.

- **Eat Well Be Well with Diabetes** provides practical information and skills to self-manage the disease and promote optimum health. Employees who have better control of their blood glucose levels have reduced rates of job absenteeism.

- **4-H science, engineering, math and technology projects**, such as robotics and computing, are preparing youth for jobs of the future. Teens are learning how to be team players, to be lifelong learners, and to approach problem-solving with confidence.

- **Leadership education** for steelworkers, pipe fitters and other union workers prepares shop stewards and others to understand how global issues affect today’s workforce and how to secure jobs using practices that reflect joint employer-employee goals.

MU Extension programs are tailored to meet local needs. Visit your local extension center or go online to learn more about the MU Extension programs that create and retain jobs in your community.

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**
How We Improved People’s Lives During 2010 – Cole County Highlights

What we do and why:
To improve people’s lives, communities and economies by providing relevant, responsive, and reliable research based education.

University of Missouri Extension is a partnership with the University of Missouri campuses, 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.

Business Development - Statewide Economic Impacts Exceed $1 Billion!
Cole County Impact:
• 150 new or retained jobs
• $240,851 in increased sales
• $11,059,047 in government contracts
• $606,767 in business loans and investments
• $607,023 in acquired assets
• 4 new business
• 72 clients received counseling
• 173 Cole County residents attending training
• Partnered with the Jefferson City Area Chamber of Commerce to offer the Small Business Academy and conduct the Business Plan Competition

Family Nutrition Education Programs
• Combating childhood obesity by reaching 1,633 low-income participants with nutrition education.

4-H & Youth Development
• The Cole County Sheriff told the Extension Council his department has never had to arrest a 4-H member
• Increased participations by 37% with 307 youth learning life skills through 4-H participation
• 1,050 youth exhibits at the county fair
• 3,806 participated in School Enrichment programs
• Increased the number of adult volunteers by 165

Family Financial Education
• 84 individuals received $162,745 in federal and $12,836 state income tax refunds from the no-cost assistance they received preparing & filing their taxes
• 37 attended programs addressing the inheritance of non-titled property, thereby helping to avoid conflicts at a very emotional time.

Master Gardeners (MG’s)
• 180 Master Gardeners saved local organizations over $310,000 by donating 16,000 hours of labor
• 41 graduated from the Master Gardeners program

Safety
• 262 enrollments in Extension’s Fire and Rescue Training Institute were from Cole County
• 17 enrollments in Extension’s Law Enforcement Training Institute were from Cole County
• 199 Cole County medical professionals received continuing education through Extension programs
• 98 youths learned the safe and proper use of firearms through 4-H shooting sports programs

Horticulture & Natural Resources
• Responded to 840 contacts concerning natural resource issues such as identifying plant disease and insects
• 197 Cole County participants attended educational trips or events conducted by the Cole County specialist

Human Development
• 51 citizens improved their health through regular exercise by participating in Extension programs
• 10 individuals with diabetes improved their quality of life and health by learning to how to improve their diets
• Reduced in impact of divorce on children

County Extension
• “Touched” over 15,000, or 20%, of Cole County Citizens with programs or information
• Responded, on average, to a customer contact every 15 minutes of every business day
• Processed 644 soil tests
• Provided a testing location for 48 students enrolled in correspondence courses
• Tested 21 private pesticide applicators as required by law; hosted commercial pesticide applicator testing monthly
• Planned, prepared, and conducted the 34th Fall Festival with over 3,200 attending
• Coordinated all youth development activities at the Cole County Fair
Dear Citizens, Legislators, Commissioners and Others:

As required by Missouri Statute 262.617, we present you with our annual report for the Cole County Extension Center. Please find detailed information about our programs and the events that took place during 2010.

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

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

Ann Bax, United Way President

For the Extension Council Secretary,

Chris V. Thompson
County Program Director
Cole County Extension Center

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

EQUAl OPPORTUNITY/ADA INSTITUTIONS

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**Extension Staff**

*Chris Thompson, County Program Director & Business Development*
*Julie Royse, Family Nutrition Education Program (FNEP) Coordinator*
*Jamie Thompson, Family Finance Education*
*James Quinn, Horticulture*
*Jenny Flatt, 4-H Youth Development*
*Jane Kempker, Admin Assistant - Council*
*Diane Temmen, Admin Assistant - 4-H*
*Debbie Wieberg, Admin Assistant - FNEP*
*Mary Studer Logsdon, Administrative Clerk - FNEP*
*Monica Haaf, Nutrition Education Assistant*
*Mark Stewart, Interim Regional Director/Livestock*
*Lynda Zimmerman, Nutrition & Health Education*
*Kathy Dothane, Human Development*
*Jim Jarman, Agronomy*

*Denotes headquartered in Cole County Office*

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**2010 Council**

<table>
<thead>
<tr>
<th>Larry Bishop</th>
<th>Colleen Meredith</th>
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<tbody>
<tr>
<td>Larry Brandhorst</td>
<td>Mae Oehring</td>
</tr>
<tr>
<td>Mike Broker</td>
<td>Carol Pleus</td>
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<tr>
<td>Paula Bryan</td>
<td>Frank Richards</td>
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<tr>
<td>Bill Case, Chair</td>
<td>Marilyn Schmutzler</td>
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<tr>
<td>Dick Crader, Treasurer</td>
<td>Liz Strobel</td>
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<tr>
<td>Greg Gaffke, Vice-Chair</td>
<td>Jeff Suthoff</td>
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<tr>
<td>Jeff Hoelscher</td>
<td>Harry Thompson</td>
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<tr>
<td>Dave Kiesling</td>
<td>Rich Wekenborg</td>
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<tr>
<td>Kris Leech</td>
<td>Walter Wilbers</td>
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<tr>
<td>Tom Loethen</td>
<td>Matt Willis</td>
</tr>
<tr>
<td>Alice Longfellow, Secretary</td>
<td>Marguerite Young</td>
</tr>
</tbody>
</table>
Jenny Flatt
4-H Youth Specialist

4-H Camp Helps Campers and Counselors Grow
“I learned that teamwork is important and that you can’t do everything on your own. Sometimes when you use teamwork you can get done with things faster and sometimes find an easier way,” said one camper. Setting a new record with 35 campers and 13 counselors from Cole County, 4-H camp was held June 7-10 at Camp Clover Point in Kaiser MO.

Camp is a unique experience that allows youth 8 to 12 to apply the essential elements so important to the mission of 4-H, these being independence, belonging, mastery, and generosity as part of a group other than their family. 97% of Cole County campers felt that 4-H camp helped them to be responsible for their own actions.

Guiding this experience were trained camp counselors ages 14 to 18. The counselors are mentored by the camp staff and 4-H specialists. Some of the challenges these young counselors help campers adjust to include homesickness, getting along in groups and ensuring a positive experience at camp.

- 83% of campers felt that their counselors enriched their camp experience.
- 89% of campers reported that their cabin counselors were friendly and helpful.

This is a wonderful testament to the screening and training process that occurs months prior to camp.

Learning By Doing, The Fair Reinforces Life Skills
The Cole County Fair provides youth an opportunity to solidify the skills they have learned through their projects. In addition to discussing their projects with judges, they also developed such skills as keeping records and goal setting.

The Cole County Fair includes shows for livestock, shooting sports, fashion, horses, domestic animals and public speaking.

Exhibition provides youth an opportunity to demonstrate that they have mastered a project that stretched many past their comfort zone in a safe environment which promotes growth and learning. This year’s 1,050 exhibits included everything from robots to cakes. The 2010 exhibits or entries included:

- 92 in Beef Cattle (open & youth)
- 17 in Fashion Revue
- 86 in Horse Show
- 138 Market Animal Entries
- 86 Open Exhibits
- 94 Poultry
- 4 Public Speaking
- 41 Rabbit
- 53 Small Animal/Bucket Calf/Pee Wee livestock
- 98 Shooting Sports
- 23 Swine Show
- 15 Goat Show
- 42 Sheep Show

The fair is successful only through the dedication of well over 100 volunteers whose roles ranged from superintendents to judges.

It All Starts With Club Participation!
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. Members learn by doing under the guidance of trained 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.

307 Cole County youth (230 members; 35 Clover Kids) participated in 4-H through 8 multiple project community-based clubs, a horsemanship club and a special interest club. In addition 3,806 youth participated through School Enrichment programs.

4-H members in Cole County were supported by 267 adult volunteers.

Special Activities Expand The Learning Experience
Junior Leaders participated in “Art in the Park”. One Cole County Teen Exchange member and one chaperone traveled with Osage County youth to Stanford, Montana.

The robotics project under the leadership of Annette Alberts participated in several contests and showcases, building awareness about the project.

Shooting sports is the fastest growing program in the county. The club’s State Shooting Sports Team included 32 club members. The results were:

- 2nd Place Small Bore Rifle – Standard 4 position, Jr. Team
- 2nd Place Archery – Compound Release, Jr. Team
- 12 youth placing in the top ten in their events

The Senior Horse Bowl team also advanced to the State Competition.
Learning about the governmental process at the Legislative Academy were Izabella Michitsch & Megan Anderson. Participating at the State Congress were Izabella Michitsch, Emily Stumpe, Megan Anderson and Alejandra Ulecia.

Missouri Citizenship in Action (MCIA)-The Capitol is one of the best examples of the 4-H philosophy of “Learning by Doing.” Youth have the opportunity not just to learn about citizenship, but to practice citizenship too.

In June, Jefferson City hosted 40 4-H members from around the state who had the opportunity to experience state government “hands on.” Members were able to attend hearings on bills and later vote on these bills in the actual locations where state legislators work during the session.

Several state legislators assisted the youth to learn just how the state’s laws are passed. Other youth played the roles of judge, jury, lawyers and witnesses as they role-played various types of trials.

While these youth were experiencing the Judicial and Legislative branches of the government, other youth were conducting interviews, videotaping and writing news stories as they participated in the media track of MCIA-The Capitol.

Scholarships - Another Benefit
Kelsea Scott, Libby Beetem and Melissa Hoehn received college scholarships totaling a combined $2,000.

How Many Participate?
According to 2009 US Census Data, approximately 33% of the youth in Cole County between the ages of 5 and 19 participated were in some type of 4-H program (including club and school enrichment programs) during 2010.

Business Development
Chris Thompson
Business Development Specialist (BDS)

Our Value - Over $1,000,000,000 In State-wide Impact!
Extension’s Business Development Program (BDP) provides enterprising Missourians with information and training to successfully start, run and expand businesses. This increased business activity creates jobs, increases consumer demand, promotes economic development and generates tax revenue for the public’s welfare. As entrepreneurs and innovators, Missouri’s small businesses are becoming a more diverse group that continues to make the state’s economy productive. The approximately 500,000 small businesses in Missouri account for 98 percent of all businesses with employees.

So What Does That Really Mean?
During 2010 business development program specialists served 173 Cole County citizens and their companies with business start-up and management counseling, training and other assistance. In addition, entrepreneurs and business owners in Cole County reported the following economic impact as a result of the services provided by the MU Extension’s Business Development Program:
- 70 new jobs
- 80 jobs retained
- $240,851 in increased sales
- $11,059,047 of awarded government contracts
- 4 new businesses
- 1 business purchased
- $606,767 in loans or investments
- $607,023 of acquired assets
- 72 clients/companies receiving counseling
- 101 business training attendees and conference participants

Across the entire state, Extension’s BDP served 25,096 people and their businesses resulting in the following impact:
- 12,939 new jobs
- 3,324 jobs retained
- $514,599,270 in increased sales
- $67,172,568 of awarded government contracts
- 265 new businesses
- $204,073,294 in loans or investments
- $88,254,348 in acquired assets
- $47,083,591 of research proposals submitted
- $8,457,408 awarded to commercialize technology
- 3,096 clients/companies received counseling
- 22,000 business training attendees and conference participants

Business Counseling Produces High Levels of Results & Satisfaction
Business counseling allows individuals to receive confidential, personalized assistance at no cost to the individual. Counseling contributed to the impacts listed earlier. Counseling topics are numerous and included:
- Market research
- Financial analysis
- Financial projections
- Business plan development and review
- Measurement systems
- Job descriptions
Satisfaction with the counseling provided by the Cole County BDS is measured by surveys which revealed:

- Overall satisfaction was rated as 6.67 on a 7-point scale with 7 being excellent.
- 100% of respondents said they:
  - Received prompt attention
  - Had their assistance needs met
  - Would recommend the counseling services

Educational Programs Are Frequent and Successful

52 programs in 13 different subject areas had 518 attendees during the year and contributed the reported economic impacts. Programs range from the very basic, such as Starting a Small Business, to more advanced subjects and concepts, such as Building a Balanced Scorecard. Nearly 12% of the local attendees became counseling clients. Educational program survey results revealed:

- Satisfaction with the Cole County BDS’s instruction was rated a 6.54
- Satisfaction with the program overall was rated a 6.48
- 99% of attendees would recommend the training to others.

The Small Business Academy Helps Grow Business

Two-thirds of the 2009 Small Business Academy graduates reported business growth in 2010, to include increases in sales as well as jobs created and retained. Ten business leaders graduated from the 2010 Academy. Conducted in partnership with the Jefferson City Area Chamber of Commerce, the Academy provides existing small business owners the knowledge and skills needed to successfully grow their business. Using a curriculum developed by the Kauffman Foundation of Kansas City, participants attended 11 weekly 3-hour sessions. The Academy combines lecture, guest speakers, practical exercises, new techniques and peer learning. Attendees reported a nearly 38% increase in their skills.

Comments about the value of the Academy from the 2010 graduates include:

- “Excellent program and the only one that I have found geared toward small business.”
- “Great class, every business owner should take”
- “Renewed my confidence to continue to grow my business. The material…was very beneficial…in the day to day operation and the long term goals.”

After class survey results revealed:

- Satisfaction with the instructor was rated 6.72
- Satisfaction with the program content was rated 6.67
- 100% would recommend the Academy to others.

Family Nutrition Education Programs

Julie Royse
FNEP Coordinator

Fighting Childhood Obesity

University of Missouri Extension Family Nutrition Education Programs (FNEP) reached 1,633 participants with nutrition education in Cole County during 2010. FNEP provides information on nutrition, food safety, and physical activity for lifelong health and fitness.

Monica Haaf, nutrition program assistant, presented the Eat Smart, Be Active nutrition education curriculum to participants at the Salvation Army and Cole County Health Department’s WIC program. Topics addressed included dietary quality, food safety guidelines and the importance of physical activity.

Children Learn Healthy Eating Habits

Show Me Nutrition Education for youths provides information in kid-friendly terms and lessons with hands-on activities. Activities include opportunities for taste-testing healthy foods and practicing skills that lead to good health. At each of the seven lessons taught, a newsletter goes home to the family. It provides a summary of the lesson, sometimes using a game or puzzle as an interactive way for parents to discover what their student learned. Monica Haaf, provided classes to students at Blair Oaks Elementary, East Elementary and Thorpe Gordon Elementary.

In August, Food Power Round-Up, a nutrition education assembly performance, was presented to Thorpe Gordon Elementary students. Puppetry, music and audience participation encouraged students to make positive food and physical activity choices.

In November, Belair Elementary hosted Food Power Adventure, a K-5th grade program that teaches students the importance of healthy eating. This interactive exhibit and experience takes children to the farm to learn where food comes from and then into the human body to learn how it gives them energy to grow and play.

Show Me Nutrition Education Displays updated teachers and staff on nutrition and health information. Teachers use this information in the classroom or by modeling healthy behaviors to their students. With these exhibits we are “training trainers” to deliver good nutrition messages.

The table on page 8 summarizes the numerous positive impacts for youths who participated in FNP. Additionally, 3,138 teachers gave us feedback.

- 44% have participated in FNP for 3 or more years
- 99% (3,103 teachers) reported one or more changes in students after FNP.
It Is Never Too Young To Plan!

Who Gets Grandma’s Yellow Pie Plate? is a program to help families avoid conflict over the inheritance of non-titled property, saving Missouri families court costs and easing the strain on probate courts.

Almost everyone has personal belongings to transfer and many have a special meaning to either individual or their survivors. What happens to these personal belonging when someone dies? How do we make decisions on who gets what? These are issues that are often ignored until a crisis occurs. The best decisions can be made while a person is still living; this program explored how best to make these decisions now and have peace of mind.

In 2010, twenty-nine women and eight men, including one estate attorney seeking to improve his skills, participated in Who Gets Grandma’s Yellow Pie Plate?.

Participant comments about what they learned or how they felt about the program included:

- “I need to do my homework so that I can give some serious thought to how I want to start.”
- “A few suggestions for handling distribution of goods that I had not considered. The importance of doing this ahead.”
- “Many conflicts may arise that I haven’t anticipated. There are different ways to handle conflicts.”
- “I learned different methods that can be used to distribute personal property. I need to work on my own personal property and figure out how and when I want to distribute my property.”
- “The importance of establishing a plan prior to the crisis whether sickness, accident, or death – which is totally unknown. Also learned that people have feeling about items of material.”
- “Very impressive program.”

Free Money - Really!
The MoTax Education Initiative provides financial education where it can have the greatest impact. By providing a gateway to financial education through taxpayer education, clients are given the tools and resources to change their lives.

MoTax assists people by preparing and electronically filing their income tax returns at no cost along with providing financial education to help families maximize their tax refunds.

### Teachers’ Changes (self-reported)

<table>
<thead>
<tr>
<th>Behavioral change</th>
<th>% of teachers who made change</th>
<th>% of teachers practicing behavior</th>
<th>% of teachers model/talk about behavior in front of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>More aware of nutrition</td>
<td>52%</td>
<td>46%</td>
<td>90%</td>
</tr>
<tr>
<td>Make healthier meal and/or snack choices</td>
<td>53%</td>
<td>42%</td>
<td>88%</td>
</tr>
<tr>
<td>Eat breakfast more often</td>
<td>36%</td>
<td>53%</td>
<td>76%</td>
</tr>
<tr>
<td>More willing to try new foods</td>
<td>43%</td>
<td>47%</td>
<td>82%</td>
</tr>
<tr>
<td>Improved hand washing</td>
<td>34%</td>
<td>64%</td>
<td>90%</td>
</tr>
<tr>
<td>Improved food safety other than hand washing</td>
<td>37%</td>
<td>58%</td>
<td>70%</td>
</tr>
<tr>
<td>Increased physical activity</td>
<td>41%</td>
<td>41%</td>
<td>81%</td>
</tr>
<tr>
<td>Make/offer healthier food choices for students</td>
<td>52%</td>
<td>34%</td>
<td></td>
</tr>
</tbody>
</table>

### Student changes reported by teachers

<table>
<thead>
<tr>
<th>Student changes</th>
<th>% of teachers who observed student change</th>
<th>% of teachers whose students talked about change</th>
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</thead>
<tbody>
<tr>
<td>More aware of nutrition</td>
<td>93%</td>
<td>87%</td>
</tr>
<tr>
<td>Make healthier meal and/or snack choices</td>
<td>66%</td>
<td>76%</td>
</tr>
<tr>
<td>Eat breakfast more often</td>
<td>46%</td>
<td>50%</td>
</tr>
<tr>
<td>More willing to try new foods</td>
<td>75%</td>
<td>72%</td>
</tr>
<tr>
<td>Improved hand washing</td>
<td>86%</td>
<td>79%</td>
</tr>
<tr>
<td>Improved food safety other than hand washing</td>
<td>36%</td>
<td>40%</td>
</tr>
<tr>
<td>Increased physical activity</td>
<td>61%</td>
<td>64%</td>
</tr>
</tbody>
</table>

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

### Financial & Emergency Management

Jamie Thompson
Family Financial Education Specialist

In 2010, twenty-nine women and eight men, including one estate attorney seeking to improve his skills, participated in Who Gets Grandma’s Yellow Pie Plate?.
In 2010, 84 tax returns were prepared with $162,745 in federal and $12,836 in state refunds going to low income citizens of Cole County.

Satisfaction with the program is easy to judge by the comments we received.

- "I am a repeat customer. It is easy, I’m a widow and there are nice people here."
- "This’ll really help me. I’m a widow and have my 2 girls to take care of."
- "I come every year [60+]"
- "I bought a new car last year [2009] and the place I went to could not do my taxes. They told me to come here."

The resulting actions and impacts are both immediate and long-term

- "I need to check my credit report. I’m afraid it’s not good."
- "I always wanted to check my credit. I didn’t know about this ‘annualcreditreport.com’"
- "I went to the IRS and they told me to come here. Last year I went to [another business]. I got $200 back and it cost me $200. How can they do that?"
- "I’m going to save the money. Now that I have so little money [retired and disabled] I’m going to save it."
- "I’m getting new dentures with my refund. I really need them."

Comments from participants included:

- "What should be included in a disaster plan and what items would be valuable and in what quantities in a kit."
- "Start in earnest preparing my home/car kits."
- "I need to do a lot to get my house in a better and safer condition."
- "How to work with a partner."
- "As a result of this course, I’m going to get rid of old cords and outlets in my home."
- "Schedule Fire Safety refreshers for my administration office and field offices."
- "I want to join."

Jennifer Black, Financial Education Coordinator, Terri Roberts, Social Services; Andrew Zumwalt, MoTax coordinator for Extension; and Jamie Thompson, Family Financial Education Specialist supported the Cole County MoTax program for 2010.

Emergency Management Activities Strengthen The Community
By participating in Community Emergency Management, communities, businesses, schools, and residents reduce a community’s disaster recovery period. This action saves lives and countless dollars in emergency recovery operations and avoids job loss. Additionally, the whole community builds a greater sense of cohesion.

The Cole County Community Emergency Response Team (CCCERT) educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization and disaster medical operations. Using the training learned in the classroom and during exercises, CCCERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help. CCCERT members also are encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community.

Ten female and 14 male CCCERT members are currently active and received training in psychological first aid, pipeline safety, and chemical suicide.

These team members participated in various community outreach activities occurred during the year.

Ready in 3, an approach to preparing for a disaster, was used by CCCERT members at the Russellville Engine event and the Jefferson City Chamber’s Business Showcase. CCCERT members were very active in helping to prepare for a potential H1N1 outbreak. Working with the Cole County Health Department in several sites throughout Jefferson City CCCERT members distributed Preparing for Pandemic Flu throughout the county.

Two courses were offered during the year, one in February and another in October. In total, thirty-seven participated in the 24 hours of training. CERT Organization, Disaster Preparedness, Fire Safety, Disaster Medical Operations, Disaster Psychology and Terrorism, Light Search and Rescue Operation, Course Review and Disaster Simulation were included the training.

Home Horticulture Improves the Environment and the Quality of Life
Gardening is the most popular hobby in the U.S and the benefits of gardening add to quality of life. Cole County Extension Center had over 840 requests for service; these citizens received high quality horticultural information that is unbiased and research-based.

Proper fertilization was one often requested topic. Individuals were instructed on the best way to fertilize their garden, be it turf, vegetable, flowers, shade trees or other. Proper fertilization improves plant performance, generally reduces fertilizer expense and reduces water runoff pollution. More than 160 soil samples for horticulture were submitted in 2010.

Horticulture

James Quinn
Horticulture Specialist

Most of the University of Missouri Horticulture Extension program impacts were in 3 programs. Over 1,200 Cole County citizens were reached.
To maximize pest control efforts, over 56 citizens requested diagnostic assistance. Sometimes they were seeking positive identification of a pest, sometimes optimal control measures, and sometimes both. Providing diagnostic assistance is a wonderful learning opportunity and MU publications are consulted and provided in this process.

Over 625 citizens sought home horticulture assistance, such as tree pruning, plant variety selection or lawn maintenance. MU resource publications were the primary way of providing education; two display racks of no-cost publications are available at the office.

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 program.

The beginning curriculum series of the Master Gardener program provides 30 or more hours of horticultural training. Participants learn how to garden more effectively. Topics include landscaping, lawns, vegetables, flowers and fruit. This prepares them for their volunteer service. Master Gardeners are expected to answer frequently asked gardening questions as part of their volunteer service.

Two class series were conducted with 41 graduating. Twenty-two recent graduates completed their volunteer hours in 2010, thereby attaining ‘active status’.

The impact of the volunteer activities can be assessed in several ways:
- CMMG maintains 11 local beautification sites
- Over 16,000 volunteer hours were contributed, which has an estimated value of $310,000
- 180 active Master Gardeners
- Raised over $30,000 with the annual plant sale that reached over 1,300 residents; the revenue supports the CMMG beautification and other educational activities

Commercial Horticulture Creates Missouri Grown and Community Food Systems Programs
The climate, soils and population base of Missouri are conducive to growing of certain high value horticulture crops such as tomatoes, berries, melons, wine grapes, and peaches. Providing growers with unbiased and research-based information to make better decisions will help them be successful with commercial production and marketing of their crops. MU Extension provides this information through workshops, newsletters, field days, farm tours, grower conferences and other methods.

Over 185 adults and 12 youth from Cole County were educated through activities such as:
- Two high tunnel construction field days. Interest in using these lightweight plastic covered structures to protect high value crops surged last year because the Natural Resource Conservation Service added this application to its list of conservation practices. One high tunnel was funded in Cole County.
- The largest vegetable farm tour in the state was held in the adjoining counties of Morgan and Moniteau.
- A horticulture presentation for a FFA (Future Farmers of America) field day at a research farm.
- A Cole County greenhouse was featured on an Agritourism and Small Fruit Conference tour in February.
- The monthly newsletter Ag Connections is sent monthly to over 80 Cole County residents.

Programs in Cole County conducted by Specialists from other counties

Lynda Zimmerman
Nutrition & Health Education Specialist

Older Adults Are Staying Strong and Staying Healthy!
Stay Strong, Stay Healthy is a ten-week exercise program developed for middle-aged and older adults. This age group often is inactive or does not get enough physical activity to provide important health benefits. Research has shown that older adults who strength train regularly increase muscle mass, strength, bone density, and balance. This type of exercise also relieves arthritis pain, controls blood glucose, maintains weight, manages stress, reduces depression, and enhances sleep. Overall, strength training improves quality of life.

The improvements gained from strength training reduce the risk of falls and chronic illnesses such as heart disease, diabetes and osteoporosis. These health benefits decrease the likelihood of a participant’s need for major medical care, resulting in financial benefits for the health care industry, employers and ultimately families. Participants also have less chance of entering a nursing home, which costs on average $24,455 per year in Missouri. The money saved benefits others with more discretionary income within the community as well as lower health care costs.
Fifty-one people enrolled in 2010 Stay Strong, Stay Healthy classes held in Jefferson City. After the last session, participants completed a fitness assessment and class evaluation. The results show:

- All of the survey respondents were very satisfied with the class and would recommend it to someone else.
- For 97%, their health was better and they felt stronger
- 95% felt more flexible and that they had more energy
- 92% improved in at least three measures of strength, flexibility and balance, while 84% improved in four or five measures.
- Of those who had painful joints before the class, 63% felt they had less joint pain.
- For those respondents who had previously experienced sleep difficulties, 85% felt the class helped improve their sleep.
- 84% did the exercises at home at least one or more times per week.
- 65% were confident or very confident they would be able to continue doing the exercises on their own. This is important so participants do not lose the improvements made during the program.
- The social support and network that develops among the participants is a significant aspect of Stay Strong, Stay Healthy. More than half of the participants noted social interaction as a motivating factor in signing up for the class, as well as commenting that this was one way the program had improved their lives.

**Eat Well, Be Well with Diabetes**

Diabetes education helps individuals acquire the knowledge and skills needed to make decisions about daily self-management. Research shows that people with diabetes who have good control of their blood glucose will delay or prevent long-term complications, including diseases of the heart, kidney, eyes and nerves. With fewer complications, people with diabetes are less likely to need major medical care. This results in financial benefits for families, employers, and the health care industry. The money saved benefits everyone by not only lowering health care costs, but also by having more discretionary income to spend in the community.

Ten people participated in the 4-session program, Eat Well, Be Well with Diabetes held in Jefferson City during 2010. Results of the pre- and post-assessments show:

- On the pre-test just 57% knew that 15 grams of carbohydrate equals one carbohydrate serving. On the post-test 100% did.
- Before the class 60% could correctly identify foods that contained carbohydrates from those that did not. After the class 100% could do so.
- The percentage of those who said they used the nutrition facts label most days of the week when choosing what to eat increased to 70% from 40%.
- Prior to class none of the participants indicated their level of knowledge, skills or understanding of diabetes as “a lot” or “a great deal.” After the class, 90% rated themselves at that high level.

All of the participants indicated they would recommend the program to others. Being more aware of carbohydrate foods, portion sizes, and meal planning were noted most frequently by survey respondents as ways the program had changed their lives.

**Parents Learn Effect of Divorce and Separation on Children**

**Kathy Dothage**

Human Development Specialist

"To realize what my kids are going thru really opened my eyes" and "It helped me as a parent to see how each and every aspect of my separation is affecting my daughter, from how I feel and act when not around my Ex to how I feel and act around my Ex" were comments provided by participants in the Focus on Kids program. In 2010, over 135 parents participated in the 12 seminars offered in Callaway County, of those, 6 participants were from Cole County.

**Focus on Kids** is a 2-1/2 hour program developed by the University of Missouri-Columbia Human Development/Family Studies Department. Individuals with children 18 years of age and under who are divorcing, filing a motion to modify or obtain custody are mandated to participate in this parent education program.

Objectives and goals of the program include:

- Convey the importance of sustained, supportive, and nurturing involvement by both parents
- Provide information on children’s and adolescents’ developmental needs, abilities and common reactions to divorce
- Suggest specific things to do (e.g., supporting other parent’s involvement) and not to do (e.g., criticizing other parent in front of children)
- Provide information on community resources

Focus on Kids will possibly be offered in Cole County once a month in 2011. The Cole County Circuit Court currently does not have a program that is offered locally.

**Integrated Pest Management**

**Jim Jarman, Agronomist**

Integrated Pest Management (IPM) has been a county program since the mid-1980s. The adoption of IPM by farmers and the introduction of transgenic crops eliminated the need for Extension sponsored crop scouting. IPM benefits counties by reducing the number of applications and amount of pesticides applied and also increases the effectiveness of pesticide applications.

Pheromone traps are used to survey for insects during the growing season. Adjacent crop fields are used for insect and disease surveys. Results are sent to the University of Missouri IPM program and reported in the weekly IPM post cards along with management suggestions. Survey information is also used in radio programs, weekly newspaper articles and individual contacts.
Weekly IPM post cards were sent to approximately 150 producers in Audrain, Callaway, Cole, Osage, and Boone Counties as a quick and timely way to inform of pest occurrences and pest related issues. Over the years, respondents liked the post cards with 90%+ rating it good to excellent and that the information made a difference in their pest management planning. Comments included “thanks”, “excellent” and “right on target”.

**Stink Bugs - More Than A Bad Smell**

Stink bugs are becoming an economic pest in Missouri. In response a special monitoring project to trap and survey for stink bugs was conducted during the growing season. Three different traps (one type shown below) and two different pheromone lures were tested.

Stink bugs have become an economic pest in Missouri. In response to the monitoring project, a special monitoring project to trap and survey for stink bugs was conducted during the growing season. Three different traps (one type shown below) and two different pheromone lures were tested.

**Dung beetles and native pollinating bees have become subjects of special interest in Cole County.** These beneficial but misunderstood insect groups were the focus of recent field days and workshops each attracting approximately 100 people.

**Private Pesticide Applicator Training - It's the Law**

Since 1978, farmers must be trained and certified as private applicators to purchase, apply and supervise the application of Restricted Use Pesticides (RUP). This training educates farmers in the safe and proper use of RUP. The certification process demonstrates that farmers can handle, apply and store agricultural pesticides properly.

Some of the subjects covered are proper pesticide handling, personal protective equipment, pesticide regulations, storage considerations, worker protection, endangered species and environmental protection, pesticide laws and application record keeping.

A private applicator certification class was held during February in Cole County. Twenty-one Cole County residents were certified or recertified. Program evaluation results revealed that participants had become aware to very aware and familiar with laws and regulations.

**Test for Soil Fertility**

Missouri soils are highly variable with a tendency toward low phosphorus and low pH or acid soils. The levels of fertility and subsequent fertilizer recommendations have to come from soil tests.

Low pH, acid soils do not release nutrients in the soil and tie up applied fertilizers. Easily available agricultural lime, applied at recommended rates, neutralizes the soil acidity releasing nutrients for crop growth.

Applying fertilizer without an analysis will either not supply sufficient nutrients for proper crop growth or provide excess nutrients leading to less economical production, polluting surface or ground water and possibly crop injury.

During 2010 644 past soil tests were processed for Cole County residents. This does not include soil tests that were recalculated for different crops or different levels of crop yield or production. All soil tests are reviewed by a horticulture or agronomy specialist before the test results are forwarded.

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**the office…**

Jane Kempker
Administrative Assistant for the Council

**Cole County Extension Council and Office**

The Cole County Extension Center is an extremely busy office as depicted on page 3. A few of the Council’s hi-lights for 2010 follow.

**2010 Elections:**

Three thousand ballots were mailed to local registered voters in Cole County in January 2010. Local residents were asked to choose who should represent their interests on the Council. The County is divided into three districts and nine seats were up for election in the three council districts. All nine seats were filled.

**Annual Dinner:**

The Extension Council held its annual dinner on Thursday, February 4 at the Cole County Extension Center. At the annual dinner, outgoing council and staff were recognized for the support given over the years as well as welcoming new members who were appointed or elected to the council.
The dinner is also a chance thank those that have made a difference and recognize legislators for their continued support.

Century Farms:
The Missouri Century Farm Program’s history dates back to 1976 as a result of the Missouri Committee for Agriculture. The committee’s purpose was to organize the American Revolution Bicentennial celebration in Missouri. One activity that was initiated by the committee was the “Centennial Farm” project which awarded certificates to persons owning farms that had been in the same family for 100 years or more. Interest in the program continued after 1976.

In 1986 the program was renamed the “Century Farm” program. This program has continued as a yearly event with over 100 farms recognized each year.

In 2010, seven Cole County families were awarded “Century Farms”. For more information on this program, please visit: http://extension.missouri.edu/centuryfarm/

Building Addition:
The Extension Center located at 2436 Tanner Bridge in Jefferson City was completed in the fall of 1994. The center contains 9 offices, a small conference room, a reception area and a large meeting room. Soon staff found they were running out of storage space and two small sheds were obtained to help with storage. As programs continued to grow so did the need for storage space.

In 2009 the Extension Council accepted bids to add a 500 square foot addition to the back side of the Extension Center. This project was completed in the spring of 2010. Staff found the addition very beneficial and will soon be able to remove one of the storage sheds, freeing up a parking spot.

Cole County State Fair Farm Family:
Farm Family Day at the Missouri State Fair, is sponsored and supported by Missouri Farm Bureau, Missouri Department of Agriculture, Missouri State Fair, University of Missouri Extension and the University of Missouri College of Agriculture, Food and Natural Resources.

Fair Director Mark Wolfe believes it is important to recognize those who do so much to support Missouri. "These families are involved in agricultural activities, active in their community and participate in local outreach and extension educational programs such as 4-H and FFA," he said. "As the showcase for Missouri agriculture, the Missouri State Fair is most certainly the appropriate place to honor these Missouri families."

Tim and Tina Kauffman represented Cole County at the 2010 State Fair Farm Family Day.

34th Annual Fall Festival
Each year, a large craft festival is held at the Jefferson City Jaycee’s Fairground on the Saturday after Labor Day. The craft show, also known as the Fall Festival, has been sponsored by the Cole County Extension Council for the last 24 years.

In 2010, the Fall Festival was held on Saturday, September 11. The council saw an increase of 30 vendors over 2009 with a total of 160 selling crafts and products from across the United States and an increase of 500 more adults attending the event bringing the total up to 3,200.

The monies from the Fall Festival are used for upkeep to the Extension Center and its programs.

| 2010 Operating Budget | | |
|-----------------------|-------------------|
| Appropriations/Revenue | $132,688 |
| County Appropriations | $90,082 |
| United Way | $8,000 |
| Council Contribution | $7,500 |
| Program Income | $27,106 |
| Total Appropriations/Revenue | $132,688 |

| Expenditures | | |
|-----------------|-----------------|
| Salaries/Wages/Benefits | $63,834 |
| Area Staff Travel | $13,000 |
| Misc. Expenditure | $9,254 |
| Telephone Service | $3,000 |
| Telephone Tolls | $2,000 |
| Supplies/Service | $20,000 |
| Contract Service/Janitorial | $8,000 |
| Council Operations | $1,500 |
| Equipment Lease/Purchases | $5,000 |
| Utilities | $4,400 |
| Insurance | $2,700 |
| Total Budgeted Expenditures | $132,688 |