The Lincoln County Extension Council is using this 2012 Annual Report to highlight a few of the educational programs conducted for the citizens of Lincoln County.

Lincoln County Extension Center

MU Extension in Lincoln County is your one-stop source for practical education on almost anything. We extend the research-based knowledge and problem-solving resources of the University of Missouri to focus on high-priority needs of people in our community. MU Extension programs make contributions in terms of jobs with small business training and consultation, working with community organizations to create a jobs friendly environment; sustaining, creating jobs in production agriculture and agribusiness, maintain a healthy workforce through nutrition and fitness programs, preparing young people with job-related attitude, skills and self-esteem, and providing continuing education to keep professionals skilled in their jobs and allow people to update their skills while still being employed.

During the 2012 year, records show over 14,000 educational program contacts were made with Lincoln county citizens. In addition 1884 people called the Lincoln County Extension Center for educational information, 2819 folks visited the center with questions 5114 people used the Extension center meeting room and our website content grew.

The Extension Center is also where citizens can take their soil to be tested for nutrients or to have diagnosis done on plants. 248 soil tests were processed for farmers, gardeners, and home owners. Private pesticide applicator certifications/ re-certifications were also administered for crop producers. Numerous newsletters were mailed or emailed to individuals, families, and farmers.

The Lincoln County MU Extension web site provides information on a wide variety of topics including agriculture, natural resources, lawn and garden, home and consumer life, nutrition and health, families and relationships, communities and leadership, business and careers, and emergency management.

The present Lincoln County Extension Center was made possible by a donation from John and Lorene Creech. The center has become a location for extension related groups like the county 4-H clubs, the Lincoln County Family and Community Education (FCE) organization, as well as many agricultural related meetings. The meeting room facilities are also used by state agencies.
4-H Youth Development Programs
Program contact: Rhonda Shafer, shaferr@missouri.edu

4-H is a community of young people across America learning leadership, citizenship and life skills. 4-H clubs offer long-term educational experiences where members learn to work with others under the guidance of adult volunteers. 4-H prepares members for the future while they make new friends and memories that will last a lifetime. 4-H also prepares members to make a real difference in their communities through numerous leadership opportunities. During the 2012 4-H year, Lincoln County had 442 members and 146 adult volunteers enrolled in 12 4-H clubs. The top five 4-H projects for Lincoln County were shooting sports, arts & crafts, swine, photography and wood science.

COUNCIL COMMITTEE WORKSHOP

4-H clubs are assigned to various committees by the Executive officers of the 4-H Council. All clubs are expected to serve on at least two committees for the program year. A council committee workshop is held annually in January to allow clubs to go through past event notes and to make changes or updates for future events.

Diane Suchland is 2012 4-H Hall of Fame Inductee

Diane (McNealy) Suchland began her 4-H career as a member of the Moscow Mills Willing Works 4-H Club in Moscow Mills for nine years. Diane had to choose only one project. She chose foods until she could finally have two projects, when she added sewing about age 12.

As you can imagine, Diane has served in many capacities for 4-H. From her years as a member, to being a 4-H parent and now, as a 4-H grandparent, Diane has remained a steadfast supporter of the 4-H being involved with the Keelstone-Creech 4-H Club in recent years. With 29 years as a 4-H volunteer, projects through the years have ranged from cake decorating, crochet, crafts, creative arts for textiles and wool, clothing, swimming and rescue, foods and Junior Leadership. Diane currently serves as an assistant club leader and 4-H council representative. She has also served as a 4-H council officer for several years. In these roles, she has participated on countless county 4-H council committees.

Diane was recognized for her dedication to 4-H by being named as a Frank Graham Award recipient in 2012. Diane has been a very dedicated 4-H volunteer, working to enhance the lives of the members of her 4-H club. She strives to provide quality 4-H experiences so members reach their full potential. She is always there when needed and truly believes in the program.

CAMP STUDY

Lincoln County participated in a camp study to determine the value of camp. Surveys were very positive and showed a high number of perceptions in the following areas: developing social skills, learning to learn skills, teamwork skills, and self-responsibility skills. Both youth and parent respondents were highly positive about the overall camp experience and parents felt strongly that their child’s self-confidence improved and they were glad they sent their child to 4-H camp.

GROUP ASSESSMENTS

Annually, 4-H members are asked to take a group assessment of their 4-H club. Members answered with “agree or strongly agree” to the following statements about their clubs: youths develop leadership skills in this program or organization; youths are actively engaged in their own learning through practical, hands-on activities; the program provides a safe environment where you can learn and play; you can choose your own level of involvement in the program and there are many ways to experience a sense of success in the program.

WORLD SERIES TROPHY APPEARANCE

Because of the great partnership with 4-H and the St. Louis Cardinals, the 2011 World Series Trophy made its way to the Lincoln County Extension Office. Members, volunteers and others were able to get up close and take pictures of the official trophy of Major League Baseball!
The Lincoln County Master Gardeners officially organized in January of 2012 following a Level One Training session in the fall of 2011. With an original roster of 17 people, the group has taught community classes, had a plastic pot recycling day, had 4 community outreach events with public speakers and gardening information, held a plant sale, had two work days at the Extension office, and offered another Level One Training with 17 enrollees. JoAnn Hill represented the organization at the State Master Gardener Conference in Sedalia while certified organic farmer Desiree Rutherford has written several gardening articles for county newspapers. The group has also agreed to provide gardening expertise and supervision for a summer reading program grant through the Troy School District if the funding is granted.

The group has donated a total of 1,529.40 service hours, 220.35 Continuing Education hours, and 8 hours of Advanced Training for a grand total of 1,757.75 hours donated to the community. Total contacts made during the organization’s first year were 1,274.

Currently the group consists of 17 certified Master Gardeners and 16 interns working towards certification. Plans are underway for a community garden in Winfield to grow fresh produce for the Bread for Life Food pantry, community classes, and a speakers bureau. The Second Annual Plant Sale will be held on April 28 at The Plaza in front of Valvoline.

Lincoln County was one of the first county organizations in the state to actively enroll all certified master gardeners into the newly organized Missouri Master Gardeners Association, Inc. The state association is a 501 (c) 3 organization and Lincoln County has already filed official documents to operate under the Association’s charitable status thereby making all contributions to the Lincoln County Master Gardeners tax deductible. Program contact is Blanche Kelly at dan252@centurytel.net.
Focus on Kids is a court-approved educational program for parents who have filed a motion in Family Court. The program explains how divorce affects children and how parents’ actions during and after the divorce can have long-term effects on the children involved.

In 2012, 223 parents attended Focus on Kids. Session evaluations reflected the following results:

- 81 percent said the program helped them think of new ways to resolve conflicts about the child(ren) with the child(ren)’s other parent.
- 82 percent learned ways to support their children’s relationship with both parents.
- 85 percent gained useful ideas for reducing stress for children.
- 78 percent thought the program should be required for divorcing or separating parents.

In addition, when asked about the most helpful part of the Focus on Kids program, parents comments included:

- “I believe using the strategies introduced by the program ‘to put the children first’ will keep their suffering as minimal as possible.”
- “Realizing that what goes on at the other parent’s house might be different than how I interpret it.”
- “Learning how to talk with my children about their feelings concerning the divorce.”

Family Nutrition Education Programs

Program contact: Chris Merritt at merrittc@missouri.edu; Linda Rellergert at rellergertl@missouri.edu; Heather Eoff at eoffh@missouri.edu; Sue Willie at willies@missouri.edu

Cooking Matters for Kids at Elsberry Elementary

Elsberry Elementary requested nutrition programming from University of Missouri Extension for their afterschool program. The Cooking Matters for Kids curriculum was selected to be taught by Chris Merritt, Heather Eoff and Linda Rellergert. Chris led one series for the fourth and fifth grade students. Linda led the series for second and third grade students. Heather assisted with both groups. This report focuses on the second and third grade series.

Twenty-seven second and third graders attended one or more of the sessions, although only 18 were officially counted as participants. Parent permission and waiver forms were not received for the remaining nine students to officially enroll them.

The second and third graders completed pre- and post-class surveys to assess their attitudes about preparing and eating healthy foods. The biggest changes according to survey results were the following:

Before the class 19% were not able to make a fruit snack all by themselves. After the class all were able to do so.
Before the class 33% could help make healthy choices at the grocery store. After the class 83% could.

The percentage of children who reported really liking to eat vegetables went from 33% before the class to 50% after, and those who don’t like to eat vegetables dropped from 29% to 11% after participating in the class.

Similar results were seen with choosing drinks low in sugar. Before the class, just 24% really liked to choose them; after the class 44% said they did.

All but one student indicated they liked coming to class.

When asked their favorite part of class, most comments were about the making and eating of one or more of the recipes such as whole grain pretzels and grape juice drink.

Some behaviors and attitudes did not change. For example, all of the students liked fruit before the class and after taking the class, and the percentages of students who did not like whole grain foods stayed about the same as well.

In addition to surveying the students, teachers were asked about changes they observed in the students behavior. Both teachers indicated the students were more aware of the importance of good nutrition, make healthier meal and/or snack choices and improved their hand washing. For themselves, the teachers felt they were more aware of the importance of good nutrition and were personally making healthier food choices.

University of Missouri Extension (UME) Family Nutrition Education Programs (FNEP) reached 986 low-income participants with nutrition education in Lincoln County elementary schools during 2012. FNEP provides information on nutrition, food safety, and physical activity for lifelong health and fitness.

Nutrition education for youths provides information in kid-friendly terms and lessons with hands-on activities. Activities include opportunities for taste-testing healthy foods and practicing skills that lead to good health. Education for adults includes nutrition, food safety, physical activity, and food resource management.
Dealing with Drought

The historic drought in 2012 was a huge concern for area livestock and grain farmers. Producers saw their pastures, crops and ponds suffer from the heat and lack of rain. University of Missouri Extension in Lincoln County offered a number of services, resources, and educational information to help deal with the drought. As a result, producers were better prepared to make informed decisions regarding feeds, forages, crop use and livestock management. Some turned to their drought-stricken corn as a feed source, either as green chop or silage, but it oftentimes showed elevated nitrate levels which can be toxic to livestock. Some started feeding hay early this summer, cutting into supplies needed for winter. Feed prices rose and forage supplies were tight, making most every alternative option expensive. Water was also an issue for some and the situation continued to worsen through fall.

Numerous questions were handled on the phone, over email, on the farm, in office visits and with producer meetings. A nitrate “spot” test as well as a moisture level was provided for producers, free of charge, to help them gauge nitrate levels in their corn. That information was vital in determining safe options - whether it could be fed as green chop or needed to be ensiled to help reduce the nitrate levels. Materials for quantitative testing of nitrate - where actual levels of nitrate are determined as a percentage - through a commercial lab were also provided as well as consultation on the results. Numerous questions dealt with nitrates in forages, corn silage, alternative feeds such as corn hay, corn stalks, soybean hay, and Conservation Reserve Program (CRP) hay.

This fall, recommendations were made to seed annuals such as wheat, oats, rye or turnips and fertilize fescue. A timely rain in September brought some relief and forage growth. Many questions have been answered about testing silage for nutrients, ration formulation, how to stretch forage supplies to get through the winter, limit feeding hay, and sorting and culling cows on production records.

Cover Crops

The promotion of cover crops in other parts of the country and by the USDA has led to the need for education for Missouri crop producers and government agency personnel. Building on research done in regional plots and demonstrations, regional programming is incorporating these results in addition to an ISE and webinar for regional staff and other agency personnel. Curriculum developed is focused on the seeding of cover crops and timeliness. This is providing tools for producers to make choices on what cover crop to use and on establishment choices. Curriculum developed includes:

- Incorporating Missouri data into the Midwest Cover Crops Council database.
- The use of on-site soil pits to evaluate cover crop root growth and soil structure changes.
- ISE on cover crops for Extension field staff in November 2010.
- Webinar series on seeding methods, management and yield benefits of cover crops.
- Series of posters showing different cover crop species and characteristics.

Impacts from Cover Crop Programming Include:
- Missouri membership in the Midwest Cover Crop Council
- Demonstrations of successfully inter seeding cover crops into standing corn and soybeans to provide adequate fall growth of the cover crop and shifting the seeding workload to a more opportune time.
- Demonstrating up to a 15% yield increase in corn through the use of cover crops.
- Demonstrating up to 40% yield loss due to the improper use of cover crops.
- Through the use of research farm field days, on-farm field days, service provider meetings and webinars over 600 farmers in Missouri and the upper Midwest have been instructed on the potential benefits and management required for using cover crops.
- Developing management strategies to capture an additional $100/acre in income while preventing a potential loss of over $300/acre.
- Measurements of long term soil property changes including penetrometer readings, bulk density changes, winter survivability and shifts in organic matter.
Agriculture Programs
Program contact: Wayne Shannon, shannons@missouri.edu
Charles Ellis, ellisce@missouri.edu

Show Me Quality Assurance
Food safety is a major concern for consumers and this program teaches our youngest livestock producers how they play an important role in ensuring that the meat they produce is a safe and wholesome product. University of Missouri Extension developed a multi-species quality assurance program in 2006. 4-H and FFA youth enrolled in livestock projects are required to complete the Show-Me Quality Assurance (SMQA) certification. The program teaches food quality assurance and includes fun, hands-on activities. The SMQA program consists of a set of learning modules and activities covering food safety and animal care issues. For training in Lincoln County, poster board/information stations covering the various points were used and taught with assistance from volunteers. Presentation points cover information on daily care and management; animal handling; farm/animal identification; reading feed labels; withdrawal times; biosecurity (disease prevention), HACCP; animal health products; proper injection locations; carcass quality and carcass value. Post tests indicated participants understood that food safety issues can arise and implementing good management practices can prevent problems. Youth and adults learned care, vaccination, handling, food safety, meat quality, nutrition and consumer awareness issues. Youth realized their care and management of their livestock impacted a food product and accepted responsibility for their role.

Youth Livestock Projects
Youth livestock projects help young people develop responsibility, caring, self-esteem, and a work ethic in addition to animal husbandry skills. In 2012, 363 Lincoln County 4-H and FFA members successfully completed livestock projects. Project animals included swine, horses, lambs, beef, rabbits, and poultry. The annual Lincoln county Fair includes one of the largest and best youth livestock shows in Missouri. The program is conducted with the assistance of many volunteers, parents, grandparents and MU faculty and staff.

Show-Me-Select Replacement Heifer Program
The Show-Me-Select program focuses on increased adoption rate by farmers in Missouri of management practices that offer potential to improve long-term reproductive efficiency of their beef herds and resulting profitability. Marketing opportunities are also increased which add value to Missouri-raised heifers with the creation of reliable sources of quality replacement heifers in terms of genetics and management. Four beef producers in Lincoln County are enrolled in the Missouri Show-Me-Select Replacement heifer program. Three of the producers sold 60 heifers in the Show-Me-Select Heifer Sale held in December, where 312 head of heifers sold for an average price of $2,097.

MU Continuing Education
In 2012, 541 Lincoln county citizens enrolled in MU Continuing Education courses. Enrollments were in MU Extension’s Fire and Rescue Training Institute, the Law Enforcement Training Institute, the Missouri Training Institute for business and industry, nursing, and conferences. Citizens also enrolled in Mizzou Online courses. During the year, 16 correspondence exams are administered in the office. Those interested in learning more about what is offered to continue their education will find helpful information by contacting Mizzou Online at cdis.missouri.edu or 1-800-609-3727.
AWARDS & RECOGNITION
Lincoln County Recognizes Over 500 Years of Farming
With Missouri Century Farms

Ives-Hall Farm
Established 1844
Pictured are (left to right) Bennie & Kay Hunter Hall (front of Kay), Crystal, Scott, Maddie and Christy.

The Fanning Farm
Established 1882
Pictured left to right are Frank, Anna, and Ellen Schowengerdt

The Duncan Farm
Established 1893
Pictured are (left to right) Reed Millard, William Eugene Duncan, Jeanne Duncan, Sharon Keim and Buddy Cox.

The Maher Farm
Established 1883
Pictured are (left to right) front row:

Additional Century Farm photo and other recognition on following page.
Lincoln County faculty and staff

Charles Ellis, Natural Resource Engineer
Wayne Shannon, Livestock Specialist / County Program Director

Regional faculty serving the county

Ken Bolte, Agriculture Business Specialist
Rich Hoormann, Agronomy Specialist
Dean Larkin, Community Development Specialist
Chris Merritt, Nutrition & Health Education specialist

Rhonda Shafer, 4-H Youth Specialist
Elizabeth Schlueter, Administrative Assistant

Nathan Brandt, Horticulture Specialist
Linda Rellergert, Nutrition Specialist
Teresa Mareschal, Human Development Specialist
Lynette Watson, Business Development Specialist

John & Vera Wells Farm
Established 1902

Pictured are: first row: Madelyn Housewright, Alexandria Black, Carolyn Black, Emma Housewright; Second row: David Housewright, Chrissy Housewright & Carolyn Black; Third row: Genevieve Black, Alaina Black, Doran Black, Larry Black and Grant Black. The family accepted the award on behalf of Vera Wells Placker.

Missouri State Fair Farm Family

Pictured are: (left to right) first row Terry, Sharon, Jeni and Michael Mudd; second row Marc Limit, Associate Dean, Office of Research & Extension, Steve Luecker, Missouri State Fair Commission, Lowell Mohler, MSFC, Dennis Baird, Deputy Director, Missouri Department of Agriculture, Mark Wolf, Director, Missouri State Fair, Ted Sheppard, Missouri State Fair Commission, Blake Hurst, President, Missouri Farm Bureau.

2012 Leaders Honor Roll Recipients

Pictured are Rhonda Shafer, 4-H Youth Specialist, Leaders Honor Roll recipients Chrystal Schuermann and Nick Reisinger, Charles Ellis, Natural Resource Engineer and Wayne Shannon, County Program Director / Livestock Specialist
Impact on Lincoln County, Missouri

The County at a Glance
- UM Students: 373
- UM Alumni: 1,256
- UM Employees: 27
- Population: 52,566
- UM Salary & Retirement Income: $981,522
- UM State Tax Revenue: $32,593
- UM Federal Tax Revenue: $138,854

UM Students from the County in 2012
- 373 students
  - 191 - MU
  - 8 - UMKC
  - 52 - Missouri S&T
  - 122 - UMSL
  - 331 - Undergraduates
  - 42 - Graduates
  - 277 - Full-time students
  - 96 - Part-time students

UM Alumni Residing in the County in 2012
- 1,256 alumni
  - 580 - MU
  - 26 - UMKC
  - 120 - Missouri S&T
  - 530 - UMSL
  - 421 Selected School Alumni
  - 3 - Medicine
  - 64 - Nursing
  - 15 - Health Professions
  - 7 - Dentistry
  - 2 - Pharmacy
  - 3 - Optometry
  - 18 - Veterinary Medicine
  - 152 - Agriculture
  - 140 - Engineering
  - 17 - Law

UM Employees and Retirees Residing in the County in 2012
- 27 people employed by UM
  - 15 - MU
  - 1 - UMKC
  - 1 - Missouri S&T
  - 8 - UMSL
  - 2 - UM Health Care
- 13 UM Retirees and Beneficiaries

UM Services Received in the County in 2012
- 222 patients seen at UM Health Care, with $82,884 of uncompensated care.
- 13 patients seen at the UMSL Center for Eye Care with an average of $85 per patient in uncompensated care.
- 14,828 contacts with MU Extension through MU Extension events held in district counties.

UM Alumni Teaching K-12 in the County in 2012
- 123 teachers
- 22% of all county teachers
- 10 principals and administrators
- 31% of all county principals and administrators
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