**Family Nutrition Program Report**

University of Missouri Extension’s Family Nutrition Program (FNP) reached 1,163 participants directly and 324 indirectly with nutrition education in Scotland County during 2012/13 a significant percentage of which were low income. FNP provides information on nutrition, food safety, and physical activity for lifelong health and fitness by working with qualifying schools, community groups and agencies.

Youth from Pre-school to 8th grade learned through kid-friendly, hands-on lessons and activities. Activities include opportunities for taste-testing healthy foods and practicing skills that lead to good health. Education for adults also includes nutrition, food safety, and physical activity, as well as food resource management.

Nutrition Program Associates (NPA’s) go into the schools and interact with community members to help them make healthier choices and build healthy habits. They see the difference the program makes in people’s lives. Wendy Ray, who serves Scotland County, reported the following successes.

*I have started doing classes in Scotland County Elementary. Of course, the first thing that the students ask me when they see me is if I brought any food with me for them to taste. I am pleased that they are excited about the taste tests especially since the foods are nutritious and good for their growing bodies.*

*With the new lunch program, the cooks are asked to serve more fruits and vegetables which is sometimes a challenge with some of the students. I know that they are serving some different foods than they have in the past such as asparagus, beets and cooked spinach. Since I eat lunch at the school at the same time as some of my older students, I go talk with them about trying some of the different foods on their plates. I may not get them to eat everything but, I have gotten a few of the students to try some new foods.*
The Family Nutrition Program (FNP) brought $7,653,958.00 in Federal funds to the state of Missouri.

These funds were used to provide nutrition education to 1,069,104 food stamp recipients and food stamp eligible citizens of Missouri. Of these, 1,487 participants reside in Scotland County. It also funds fourteen full-time jobs in the Northeast Region with quality benefits plus expenses for making the programming available to qualified schools and agencies in the county.

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 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 in reduced public healthcare benefits and insurance premiums.
**Pesticide applicator Training:**

Alix Carpenter provided training for 112 private (producer) pesticide applicators in 2013. These producers were from throughout the northeast region, as well as several surrounding areas. Nine three-hour long training sessions were held in 2013, in Adair, Clark, Lewis, Marion, Monroe, Ralls, Pike, Schuyler, and Scotland counties. The courses covered a variety of safety, calibration, and pest management issues associated with proper and safe pesticide use. Through this course, agricultural producers were able to obtain certification or recertification of a private pesticide applicator’s license. Those who were not able to attend these meetings were provided the opportunity to review the same information and become (re)certified on a walk-in basis. Those certified at these meetings include 13 Scotland county producers.

**Producer consultations**

Alix Carpenter made farm visits and/or consulted via telephone and email with producers in Adair, Clark, Lewis, Marion, Monroe, Ralls, Pike, Randolph, Schuyler, and Scotland counties this year. The majority of farm visits and consultations revolved around the drought’s effects on forages and feeds: provided education on how to make hay from a soybean crop; advised producers on methods to determine the feed and economic value of silage; provided data on estimating nutrient removal from a field when harvesting/removing not grain only, but the entire plant; advised producers on methods of mitigating the risk of nitrate poisoning when feeding drought-damaged corn/sorghum/sorghum-sudangrass to livestock; Provided data on herbicide restrictions to grazing or haying soybeans; Provided methods for estimating corn and soybean yield; advised producers on means of assessing prussic acid and aflatoxin risk.

**Horticulture**

Four Master Gardeners provided 104.5 total hours: 34.5 education hours and 70 service hours, which has a value $2313.63 using the 2012 value of $22.14 per hour from the Independent Sector. Master Gardeners continually learn about new plant varieties, landscaping methods, insects and diseases and their control, integrated pest management, lawn care, pruning, among many other areas of horticulture.

The Master Gardeners maintained several beautification projects in Scotland county including the O’Rourke garden and New Testament Church in Rutledge. They planted flowers in barrels around the Memphis courthouse and at the Downing House in Memphis.
A Master Gardener researched and prepared for a program on colonial gardens to be presented to local Daughters of the American Revolution (DAR). A Master Gardener repaired and planted the planters at Presbyterian Church and at Senior Center in Memphis and cared for them during the growing season. When you support MU Extension’s Master Gardener program public awareness of unbiased, research based gardening information is promoted and increased. The Scotland County Master Gardeners assist in the community through beautification projects, by helping to disseminate research based information.

Spring Forward Gardening Workshop: 6 hours of community education. Correctly having a pest identified allows homeowners to make better choices about pest control. After taking a soil test, some homeowners properly amended their soil before planting vegetables, fruits or a new lawn. Before buying trees and shrubs for their landscape, some homeowners received information on landscape plants so they could make better choices and place the right plant in the right spot. By supporting MU Extension’s Home Horticulture program, citizens receive high quality horticultural information that is unbiased and research-based.

AG

Three persons from Scotland County participated in the Beef Producer’s Seminar and were provided 3 hours of instruction. This seminar was facilitated by Zac Erwin and Karisha Devlin. Guest speakers included Dr. Ron Plain, and Dr. Kelly Nelson. Dr. Plain, MU Extension agricultural economist, discussed the current trends in beef production, trade, domestic supplies, demand factors, and price and profitability prospects for the coming year. Dr. Nelson, research agronomist at Greenley Research Center, discussed using cover crops for forage production. Evaluations were used to determine the knowledge gained from the seminar. On a scale from 1 to 5, with 5 being the highest, participants rated the following:
- Usefulness of material presented (4.5)
- Information gained (4.7)
- Quality of overall seminar (4.6)

Comments:
- Very interesting information.
- Both speakers fluent and knowledgeable.
- Very good seminar! This information aided producers in making decisions regarding marketing and feeding their cattle.
Producers and rural communities benefit from improved profitability of livestock operations, in turn, this contributes to Missouri’s agricultural economic strength.

**Beef Cattle Rations**

The regional livestock specialist worked individually with 8 Scotland Co. beef producers in developing rations. The use of by-product feeds was a major emphasis in many of these cases. Forage analysis was also done in several cases. By including the by-product feeds, producers are able to lower their ration costs. MU Extension’s by-product research and education assists beef producers in effectively storing and utilizing co-products as cattle feed. This results in improved producer sustainability and greater local use of co-products. Rural communities benefit from improved profitability of both the livestock and ethanol industries contributing to Missouri’s agricultural economic strength.

**Greenley Research Field Day**

The regional livestock specialist presented and submitted material to the field day proceedings at the Greenley Research Field day on alternative annuals for forage production and the use of grazing wheels for strip grazing. There were 300 area producers who attended the event. Public funding supports on-farm research that helps growers and consultants learn how to objectively evaluate products and management practices leading to improved risk management enhanced agricultural profitability and environmental sustainability. This benefits Missouri as a whole by improving farm businesses and rural community viability, protecting water quality, and assuring plentiful grain production for food, feed and fuel demand.
MISSOURI LIVESTOCK SYMPOSIUM HUGE SUCCESS AGAIN

The 14th Missouri Livestock Symposium was held December 6 & 7, 2013 in Kirksville, MO. Although attendance statistics and 2013 evaluations have yet to be summarized, it appears the event was once again a big draw. It is estimated that over 2,000 people attended the one and one-half day program. Those attending came from all over the Midwest and from Missouri counties statewide. The Trade Show was as good as ever with some businesses turned away for lack of space. Educational speakers on horses, beef cattle, forages, stock dogs, sheep, meat goats and food safety were faced with standing room only crowds and all available chairs in the Middle School were utilized. The program was well received by local, regional and statewide media and more than one speaker commented that, “we wish we could do something like this in our state.” Many trade show exhibitors commented that this was one of the best trade shows they attended—if not the best! The Missouri Livestock Symposium planning committee is made up of 20 individuals who work on the event year round. Committee members are from Adair, Macon, Sullivan, Knox, Schuyler, Scotland and Clark counties. The 2014 Missouri Livestock Symposium is scheduled for December 5 & 6 and program updates can be found during the year at missourilivestock.com.
Livestock Symposium!
Artificial Insemination School

The fifth artificial insemination school for beef cattle was held at the Greenley Research Center at Novelty, MO. Producers attended a 3 day class learning about artificial insemination techniques, anatomy and physiology of the reproductive tract, synchronization methods, semen handling, and equipment functions. The artificial insemination school provides valuable information and training to producers. This research-based program provides tools that help producers obtain a competitive advantage in the management of their beef operations making them more sustainable and efficient. Producers who graduate from this program are better able to manage their livestock resources adding benefits to them, their communities and to the state of Missouri. Financially successful producers provide a basis for successful communities and those communities build into a successful state economy that helps provide for all Missourians. Nine area beef producers, one from Scotland County, were certified to artificially inseminate cattle.

Take Control of Your Finances

Take Control of Your Finances was presented March 26, August 22, and November 18, 2013 at the Missouri Career Center in Kirksville. Sixty-two (62) individuals who were unemployed and seeking employment participated in the workshop with 8 individuals from Scotland County. A packet of materials entitled “When You Lose Your Job, Don’t Panic: Take Control of Your Finances,” was provided to participants to assist them in reviewing resources, developing a budget, setting priorities for debts, contacting creditors, stopping credit purchases. As a result of participating in this workshop, an evaluation concluded: 96% will track their spending; 88% will develop a budget; 76% will analyze their debts and 74% will communicate with creditors. As a result of the Taking Control of Your Finances, participants are more able to get and stay current on bills, and develop skills to survive during the period of unemployment. Participants are better able to gain control over their spending, develop a spending plan thus reducing the reliance on public assistance, reducing theft and lowering banking fees.
**Family Financial Education Programs**

Family Financial Management programs are designed to assist individuals and families learn skills to assist them in providing for a more secure financial future. Programs include Making Money Count, When Creditors Are Predators, and Safeguard Your Savings; these assist families in learning money management skills and avoiding risky lenders. Individual questions are answered on a variety of financial management topics including 47 direct, individual requests in 2013. Information was provided to the Scotland County Head Start and Community Action Agency for their clients. Program tools included materials to assist them in tracking and recording expenses, how to develop a spending plan and how to check their credit report. Program materials were also provide on predatory lending practices. Evaluations showed that participants had learned the dangers of predatory lending. When participants learn how predatory loans work and what they cost and who they target, they are better able to reach their financial goals and increase family stability. The community benefits by decreasing the number of predatory lender operating in Missouri and helping families get and stay current on their debt, thus creating fuel for the local economy. Financial management programs assist communities by lowering cost for public assistance programs and increasing financial stability of limited resource families.
BUSINESS DEVELOPMENT AND GOVERNMENT PROCUREMENT

There were 6 individuals that took individual counseling sessions on a consistent basis. There were a number of training offerings that were offered during the year, in neighboring counties, however no one in Scotland County participated.

They learned either how to start a business or utilized other tools that the University of Missouri Extension offers in Resources for business’s. Other resources could be human resources, financial acumen or other essential tools to have a successful business in Adair County. There was a direct correlation of government contracting from a woman owned business that is established in the county of Scotland. There was a total of $72,454 award dollars that went into Scotland County from the Missouri Procurement Technical Assistance Overall; the University of Missouri’s Business Development Programs (BDP) served 21,983 people and their businesses state-wide. The total impact for all businesses assisted by the BDP was:

- New jobs: 1981
- Sales increases: $194,194,820.31
- Government contracts: $218,500,000
- New businesses: 252
- Jobs retained: 3514
- Loans and investments in business: $217,050,115.01
- Acquired assets: $63,048,551
- Total Research Grant Proposals
- $32,251,750
- Clients/companies receiving business counseling: 4,374
- Business training attendees and conference participants: 18,840
- Export Awards 7
  Amount of Awards $1,571,662

The business development faculty is contributing to these business successes are from the programs identified above. These staff: have regional and statewide assignments and work with businesses in all counties across the state.
2013 4-H Youth Development Programs
Scotland County

Scotland county 4-H Youth Development programs is a community of one hundred twenty-two youths building life skills, engaging in science and connecting to community.

One of every five Missourians between the ages of 5 and 18 participated in a University of Missouri Extension 4-H Youth Development program in 2013.

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

Missouri 4-H Members are twice more likely to have been on a college campus than their non-4-H peers. The University of Missouri Columbia campus is by far the campus most frequently visited and 4-H is the second most reported reason to be on the MU Campus (Lerner, 2008). In 2011, the University of Missouri Extension 4-H Youth Development programs connected 8,500 young people age 8 to 18 to University of Missouri campuses and faculty. Participating in activities on campus is a predictor of youth going on to higher education. (Hoover, 2006)

4-H Community Clubs
4-H participants = 90 Scotland County Youth

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

4-H Special-Interest Programs
4-H participants = 16 Scotland County Youth

Scotland County 4-H special-interest programs include conferences, distance learning programs, day camps and other educational activities. Six 4-H parents and leaders planned and presented a day camp for Scotland County 4-H Clover Kids. 4-H Clover Kids the 4-H Clover Kids Club Program is designed to introduce 5 to 7 year-olds to a variety of 4-H experiences. Sixteen Scotland county 4-H Clover Kids enjoyed playing organized games, handcrafted a tool box and made gifts to present to their Mother’s or a special lady for Mother’s Day.
**4-H School Enrichment Programs**

4-H participants = 16 Scotland County Youths

Scotland County 4-H school enrichment programs are short-term educational experiences that supplement learning in the classroom. Most are led by teachers or 4-H volunteers. The most popular 4-H school program in Scotland County is Hatching Chicks in the Classroom. Scotland County R-1 is a long time participant of the Hatching Chicks in the Classroom program. Pat Wiggins, 4-H Youth Education Assistant provides ongoing training and information for the classroom teachers that participate in the Hatching Chicks program. The following outcomes were gathered from the classroom teacher’s program evaluations.

**Knowledge**
- Students learned chicks hatch from eggs,
- Students understand all eggs laid do NOT become chickens.
- Students learned it takes 21 days for a chick to develop & hatch.
- Students learned the life cycle of a chicken as compared to other living creatures.
- Students learned the importance of washing hands after handling eggs and the live chicks.

**Skills**
- Students became adept at observing and journaling about what they saw.
- Students understand what an incubator is, what it is used for and how to incubate chicken eggs.
- Students improved non-fiction reading skills to learn more about chicks.

**Behavior**
- Students became more responsible as they learned to care for the eggs and eventually the hatched chicks.
- Students were more responsible and quieter in the classroom while the Hatching Chicks program was being conducted.
- Students also advised guests of the classroom about being quiet and washing hands after handling chicks.

**4-H Members supported by 42 youth and adult volunteers**

Volunteer time for Scotland County valued at $79.8 million.

Volunteers create, support and are part of the 4-H community. Missouri 4-H volunteers responding to a survey report they contribute on average 100 hours per year. Valuing their time at $19 per hour, based on average Missouri incomes, the contribution of Scotland 4-H volunteers is worth more than $79.8 million in 2013! More importantly, these adults serve as mentors for our youth helping them transition into healthy adulthood, priceless!
Scotland County 4-H - Growing Future Scientists
4-H Participants = 70% of Members rerolled

4-H members are more likely to pursue future courses or a career in science, engineering or computer technology. Scotland county 4-H members were enrolled in 295 science related projects this past year. This means that 70% of our members were enrolled in Science, Engineering and Technology projects.

Scotland County 4-H Achievement Event
4-H Participants = 39 Scotland County Youths

A committee which included both youth and adult volunteers planned and implemented this year’s Scotland county 4-H Achievement event. The committee included: Tasha, Taylar and Kristy Eggleston-Wood, Dawn Triplett, Heidi Triplett and Julie Blessing

39 4-H members and 4-H Clover Kids attended this annual, county-wide event.

Thirty-six of the members participated in judging events, sixteen members participated in either Public Speaking or Extemporaneous Speaking and nineteen members presented demonstrations. More than half of those present participated in Skill-a-thons.

The following outcomes were gathered from various comments and observations made by volunteer judges, parents and members who participated in the various Achievement day events:
Knowledge
- Demonstration, Extemporaneous and Public speaking contest participants increased knowledge on a specific subject matter.
- Both youth and adults increase their knowledge on specific subject matters while watching youth present their demonstration, extemporaneous and public speeches at the Achievement event.

Skills
- 4-H youth increase their self-confidence by participating in the various events offered at the Scotland county 4-H Achievement day.
- Both Extemporaneous and Public speaking contest participants improved their ability to answer questions spontaneously.
- 4-H youth increased their decision making skills by participating in the 4-H judging event.
- Judging event participants increased their communication skills by sharing their reasons for class order with an adult judge.
- 4-H youth increased their organizational skills while planning and presenting their Demonstrations, Extemporaneous and Public speeches.
- 4-H participants have a greater understanding of the importance of being prepared for the various events offered at Achievement day.

Behavior
- 4-H youth are respectful of their peers by listening and remaining quite during the various events conducted throughout the day.
- 4-H youth and adults increase their appreciation for the time, preparation and dedication required by youth to prepare a speech, table setting, demonstration, etc. for Achievement day.

The Achievement event was followed by a 4-H Council Meeting with 45 youth and adults in attendance.
**Annual Carry-in Supper and Swimming Party**
4-H Participants = 60 Scotland County Youths and Adults

The Scotland county 4-H Council combines the July council meeting with a carry-in supper and a swimming party. 4-H members from all of the Scotland county 4-H clubs attend the supper, meeting and enjoy swimming afterwards. Sixty 4-H members and parents attended this annual event in 2013.

![Image of people at a swimming party]

**4-H Recognition Event**
4-H Participants = 40 Scotland County Youth
And 34 Scotland County Adults

The Scotland County 4-H Recognition Event was a big success in 2013 with 40 members and clover kids and 34 parents and grandparents in attendance. Year pins were awarded to those members who filled out project records. Twenty seven members received awards from the state Shooting Sports Contest. Eleven members filled out report forms and received awards and medals. Awards are also given to those members who participate in table setting, demonstrations and speaking contests. Special Awards are given for Junior Achievement, Senior Achievement and the outstanding 4-H member and the Outstanding Club. The 4-H Council presents friend of 4-H plaques to a business and a person who has supported 4-H in the past. In 2013 these awards went to the Exchange Bank and to Kristy Eggleston-Wood. The 4-H Recognition Event is combined with a soup supper and a 4-H council meeting.
The Scotland County fair is represented by two groups, the Scotland County Agricultural Society officers and board members and the 4-H and FFA Superintendents group. The Fair board handles all of the expenses, contracts the carnival and the entertainment.

The 4-H & FFA Superintendents group takes responsibility for the youth shows and events conducted during the annual county fair. This group schedules and conducts the various livestock shows and Art Hall exhibits. They also apply for grants for the purpose of improving and repairing the buildings & structures at the fairgrounds in order to keep them in good condition.

4-H Superintendents completed the application process and was awarded a $6,000 Kemper Grant. Both the Scotland county FFA Chapter and the Scotland county 4-H Council agreed to use a portion of the funds received from the Farmers award Pioneer Grant for fairground improvements.

The Superintendents group has worked using the consensus method of decision making in the past. As more shows (small animal, shooting sports, and goats) have been added the process ceased functioning well and the group has decided to organize with officers and by-laws.
Community Service

One of the criteria for the highly coveted Scotland County Outstanding Club Award is participation in community service projects. 4-H community clubs are awarded up to 250 points for participating in at least five different community service projects. That is 50 points for each community service project.

Together all Scotland county 4-H community clubs help in cleaning the fairground both before and after the fair which is conducted annually in July. This effort is not one of the projects counted in the community service points listed above.

Scotland County 4-H Clubs take great pride in being known as an organization that gives back to their community through the various county-wide and 4-H club community service projects.

During the 2012-2013 4-H program year Scotland county 4-H Clubs reported a total of 372 hours, 88 youth and 72 adults participated in 4-H Community Service projects. That’s a savings of $7086 for Scotland County tax payers.

Nutrition

The nutritionist provided Chronic disease self-management education with partner Missouri Arthritis Foundation, providing direct education for two hours each week for six weeks. Dealing with Chromic disease conditions can be very costly, and research has shown that individuals who take and enroll in this program, improve their healthful behaviors, improved their health status, and decreased their days in the hospital. There were 8 participants for the 6 weeks, and each stated they learned at least one new way to help manage their pain.

Canning is a way to help conserve on food dollars and promote more fruits and vegetables in the diet. The nutritionist provided one day canning and freezing classes and answered questions throughout the class and throughout the summer about safe canning procedures and recipes. The nutritionist also provided at no cost a pressure check of each canner that was brought in to the class or the office, as each canner should be checked each year for safety. Participants responded very well to the one time session, and stated they had learned at least one new thing about canning and that it dispelled at least one myth about canning.

Radio and newspapers are a great way to keep the community informed and up-to-date on programs and classes being offered, the nutritionist wrote several articles on a variety of nutrition related topics and talked with the local radio on several occasions to promote extension as well as up-coming programs.
The new Healthcare Law is in effect and has an effect on every Missourian. The University asked if any specialists would help be trained to go out into the communities simply to educate and inform our local community members about what it is and how they can find help. This is called the Health Education Initiative and the nutritionist volunteered to help. Along with Specialist Darla Campbell, they provided two sessions in Scotland County, providing researched nonbiased information to help educate our community members.

Micro greens are a very popular topic and one that is easy and fun for all ages. Micro greens are very nutritious and easy to grow. There was a tremendous outreach in Scotland County about this subject, in collaboration with Jennifer Schutter the Horticulturist, there was a class with 35 participants, and then the nutritionist provided a second class with 7 participants, and then provided a workshop for the summer program at the Memphis Library for kids, with over 30 kids being present. They were all able to pick out the seeds they wanted to grow and plant them in a container and take them home. The kids were super excited and couldn’t wait to see them grow and try them.

Providing economical nutrition education to families in Scotland County benefits everyone. The nutritionist works with Head start and provides nutrition education during parent teacher conferences. Participants learn how to save money at the grocery store and how to fix quick healthy meals, with recipes.

Community gardens help individuals who cannot afford their own garden or do not have a place for a garden. The nutritionist has worked with the First Baptist church, with the Healthy Lifestyle Initiative to provide education and support for the garden and those who participate in the gardens. Gardens can help supplement ones grocery bill and provide fresh economical fruits and vegetables. Studies show that young people who participate in gardening are more familiar with vegetables and fruits and more likely to try them.
Services Provide by Scotland County MU Extension

Soil Testing, Insect I.D., Consultations, Plant Identification, Pesticide Applicator License & re-certification, Publications, and pressure gauge testing.

Budget Summary 2013

Revenue
County Appropriations 15,000.00

Expenditures 23,966.00
Salaries 15,866.00
Travel 2,400.00
Communications 1000.00
Maintenance 2,800.00
Insurance 100.00
YPA fund 1,200.00
Other 600.00
Total Expenditures 26,966.00