Extension’s Program Guidance Comes From You

The University of Missouri Extension council and staff would like to thank the Polk County Commissioners for their support and funding during this past year. In turn, the council and staff remain committed to improving people’s lives by helping them meet the opportunities and challenges of the 21st century with research-based education and information.

Current programming efforts focus on agricultural profitability and viability, building family and individual strengths, business, community and economic development, enhancing health and nutrition, environmental quality, and youth development.

The mission of University of Missouri Extension is to: "serve Missouri by extending the unbiased research-based knowledge and problem-solving resources of the University of Missouri to focus on high-priority needs of people throughout the state."

The contents of this report are a brief summary of some of the highlights of our educational efforts during the past year. We hope this report provides a greater understanding of University of Missouri Extension programming efforts in Polk County.

Submitted by,

Shirley Cook  
Council Chairperson

Lanelda Presley  
Council Secretary

Wesley Tucker  
County Program Director
Experienced and Committed Staff

The staff of the University of Missouri Extension office in Polk County represent a wide variety of backgrounds and experiences. Staff members have owned their own farms and businesses, taught at multiple levels of higher education, and bring tremendous knowledge to Polk County.
4-H Youth Development

MISSOURI 4-H: University of Missouri Extension’s youth development program helps create opportunities for young people to be valued and become contributing members of their community. Providing opportunities for youth to develop positive self-esteem, leadership skills, decision-making skills, citizenship and practical life-skills are objectives of Extension’s youth program. Missouri 4-H connects kids with caring adults for learning-by-doing experiences in organized clubs, school enrichment programs, special-interest groups, camps, and school-aged child care programs.

Our state and nation are in need of workers who are highly proficient in science, technology, engineering and math (STEM). Research has shown that 4-H members develop an increased interest in science three times higher than their non 4-H peers. Both non-traditional activities, such as robotics, and more traditional activities, such as livestock judging and food preparation, are doorways to science-related careers.

Polk County 4-H Impact 2016

Polk County Clubs: County 4-H clubs offer long-term educational experiences in which members learn life skills such as decision making, problem solving, public speaking, and working with others. Members learn by doing under the guidance of adult volunteers who teach projects ranging from aerospace and photography to veterinary science and sport fishing. Clubs involve children and teens in community service, leadership & educational trips.

County Clubs for 2016: Eudora, Goodtimes (Halfway), GSBR (Good Samaritan Boys Ranch), Polk County Clover Kids, Rock Prairie (Pleasant Hope), SoPoCo (Pleasant Hope), Sharp Shooters (Bolivar), Purple Eagles (Fair Grove), and Woodlawn.

4-H Volunteers: Polk County 4-H members were supported by 29 Polk County adult volunteers. Youth and adult partnerships are key to the success of every youth development program, and 4-H is no exception!

2016 4-H Enrollment

141 Members and Clover Kids  
9 Community Clubs  
29 Volunteers  
Enrolled in 721 projects  
421 in School Enrichment and special interest projects

Julie Choate was awarded the 4-H Key Award in 2016 along with six other youth state wide.
SCHOOL ENRICHMENT:

Hatching Chicks in the Classroom—The Embryology curriculum brings action and hands-on experience to the classroom using incubators to hatch chicken eggs. Pre-kindergarten through fifth grade students have the opportunity to observe the development of chicks while still in the eggs, view the eggs hatching, and observe chick behavior after hatching. Many of the teachers use the 4-H Embryology booklets that are provided to help them teach lessons and conduct activities with the students. This is a very popular program with teachers and students alike.

Students received firsthand instruction and knowledge on the life cycle, where food comes from, and how to care for animals.

4-H CLOVER KIDS:

A pre 4-H experience offering hands-on learning and lots of FUN for youth ages five to seven. Through Clover Kids clubs, children learn how to get along, share, work in groups, explore their interests, and build self-confidence. Clover Kid leaders introduce five to seven-year olds to the 4-H concept of learning by doing. Learning opportunities are science based themes such as pumpkins, weather and botany, and include activities in science, arts & crafts, healthy life choices (good nutrition) and getting along in groups. Lots of FUN is always included!

MU Legislative Day 2016

Eight Polk County teens participated in the MU Legislative Day. They traveled by van to the State Capital. In addition to touring the Capital they visited the offices of Representative Sue Entlicher and Senator Mike Parson. Ice cream from the Central Dairy was enjoyed by all!

Shown in the photo to the left are the teens from Polk and Hickory County with Senator Mike Parson and Velynda Cameron, 4-H Youth Development Specialist.
FAIR ACTIVITIES:
Through county fair activities youth learn valuable life skills such as responsibility, commitment, problem solving, goal setting, communication skills, follow through, and initiative.
**Polk County Fair** — 44 youth entered 160 handmade 4-H exhibits which were showcased and judged at the annual Polk County Fair. **Ozark Empire Fair** — 66 handmade 4-H exhibits by 32 youth were showcased and judged at the annual Ozark Empire Fair. **Missouri State Fair** — 46 handmade 4-H exhibits by 29 youth were selected and showcased at the annual Missouri State Fair in Sedalia.

Community Service is a huge part of 4-H. In 2016 4-H members helped SW Electric at their annual meeting by passing out coolers to the meeting participants.

On Saturday, May 7th, eighteen 4-H members from across the west central region gathered together for the first annual Junior 4-H Robotic Rumble. Curtis Dickerson and Harlee Maxwell with their winning robot, “Flappy the Chicken.”

Eight Polk, Cedar, Hickory, and St. Clair County teens participated in the **2016 Agriculture Career Tour.** Sites included a shrimp farm, an elk farm, a taxidermy shop, Crowder College and a behind the scenes tour at the Dickerson Park Zoo.
Agriculture

The purpose of agriculture and environmental programming is to provide information and recommendations that will help individuals, groups and agribusiness firms apply research based knowledge. Along with educational programming, University of Missouri Extension personnel provide one-on-one farm visits. Area specialists work closely with small producers that are moving into the county or existing residents that have decided to start new enterprises. Services the Polk County office provides include: soil-testing, fertilizer and pesticide recommendations, weed, insect and disease identification and control, forage testing information, pesticide use training, nitrate tests for forages, and crop variety selection.

Impact in 2016

SW MO Beef Conference:
Since beef production is a vital part of our community, Polk County Extension sponsors this regional educational event to update producers on key management practices and help improve their profitability. Producers from all over Southwest Missouri come to Bolivar to attend this great educational event. Topics this year included estate & succession planning for farmers, how to save money on utility bills, and the beef price outlook for 2017.

Livestock & Forage Conference:
Local producers look to Polk County Extension to provide the education they need to stay current in the livestock industry. This annual conference is just another example of the valuable educational resources being provided to our community. This year’s topics included the weather outlook & impacts for 2017, pasture weed & brush control options, and preparing the beef herd for breeding season.

Ag Lenders Seminar:
All segments of agriculture are experiencing tremendous financial stress as livestock and grain prices fall. Extension used it’s 11th annual ag lenders seminar at Smith’s restaurant in Bolivar to provide training and educational resources to local lenders to prevent a recurrence of the 1980’s.
Agriculture

Estate Planning Class:
A growing request within our rural community is for education and counseling on estate and succession planning. Polk County Extension is in a unique position with the resources to meet this important need. This year we offered an introductory estate planning class and provided one-on-one counseling to many area farmers and residents.

Polk County Grazing School:
Extension, NRCS, and the Soil & Water Conservation District partner to teach a five-night course on how to get the most out of your forages. On surveys of landowners that attended the grazing school more than 5 years ago, participants reported that attending the school allowed them to increase their profitability by an average of 22%.

Private Pesticide Applicator Training: Polk County Extension offers this service to the community to ensure that our natural resources are being protected for future generations. Throughout the years we have trained hundreds of producers how to properly handle and apply pesticides to protect our environment.

Junior Livestock Show & Auction:
Extension strives to develop the Polk County Fair and support our youth by building the market sale. This year's sale raised $17,353 that went directly to the youth to help offset the costs of their livestock projects. We are helping develop our future farmers and agriculture leaders.
Individuals and families can find information through the educational programming of MU Extension Human Environmental Sciences program. Areas addressed include family resource management, good health through nutrition, leadership development and effective decision making to enhance the quality of life. A variety of educational programs and information is provided through several regional specialists.

**Impact in 2016**

**Cooking Matters:**
These classes meet for two hours a week for six weeks and were taught multiple times throughout the county. Their goal is to empower families with the skills, knowledge and confidence to stretch their food budgets in order to prepare healthy and affordable meals. The course covers meal preparation, healthy grocery shopping, food budgeting, and nutrition. Classes even include field trips to the grocery store where participants are challenged to use the skills they’ve learned to buy a meal for a family of four with only $10.

**Matter of Balance:** This 8-week course was taught to seniors to provide practical strategies for reducing the incidence of falls and increase their physical activity. Participants learn to face their fears, change their environment to reduce risk factors, and exercise to increase strength and balance.

**Diabetes Self-Management:** This innovative educational program incorporates the needs, goals, and life experiences of the person with diabetes. The program supports informed decision-making, self-care behaviors, problem-solving, and active collaboration with their health care team.

**Food Preservation:** Interest in home food preservation has increased with the farm to table movement. These wonderful classes teach participants how to safely preserve produce and other foods. Workshops include pressure and boiling water canning of vegetables and other low-acid products, pickling, salsas, fruit and sweet spreads, dehydration, freezing, and other storage options.

**Youth Mental Health First Aid:** This 8-hour program introduces participants to the unique risk factors and warning signs of mental health problems in adolescents and increases the understanding of the importance of early intervention. Using role-playing and simulations participants learn how to help an adolescent in crisis or experiencing a mental challenge.
University of Missouri Extension Family Nutrition Education Programs (FNEP) provide low-income residents in Polk County with nutrition education. FNEP provides information on nutrition, food safety, and physical activity for lifelong health and fitness. Nutrition education for youths provides 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.

### Impact in 2016

#### Student changes reported by teachers

<table>
<thead>
<tr>
<th>Student changes</th>
<th>% of teachers who observed each type of student change</th>
<th>% of teachers whose students talked about this change</th>
</tr>
</thead>
<tbody>
<tr>
<td>More aware of nutrition</td>
<td>90%</td>
<td>89%</td>
</tr>
<tr>
<td>Make healthier meal and/or snack choices</td>
<td>67%</td>
<td>80%</td>
</tr>
<tr>
<td>Eat breakfast more often</td>
<td>50%</td>
<td>55%</td>
</tr>
<tr>
<td>More willing to try new foods</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>Improved hand washing</td>
<td>83%</td>
<td>79%</td>
</tr>
<tr>
<td>Improved food safety other than hand washing</td>
<td>39%</td>
<td>43%</td>
</tr>
<tr>
<td>Increased physical activity</td>
<td>65%</td>
<td>69%</td>
</tr>
</tbody>
</table>

98% of teachers reported one or more changes in students after the FNEP Program!!!

For adults who participated in the program, survey results revealed the following:

**Food Resource Management**
- 68% of participants reported improvement in planning meals in advance
- 53% of participants reported improvement in comparing prices before buying food
- 59% of participants reported improvement in shopping with a grocery list

**Dietary Quality & Physical Activity**
- 56% of participants reported improvement in thinking about healthy food choices when deciding what to feed their families
- 71% of participants reported improvement in using the “Nutrition Facts” label to make food choices
- 57% of participants reported improvement in eating more than one kind of vegetable each day
- 47% of participants reported improvement in consuming three cups of dairy each day
- 43% of participants reported improvement in exercising a minimum of 30 minutes each day

**Food Safety**
- 75% of participants reported improvement in following the recommended practice of not thawing foods at room temperature
- 61% of participants reported improvement in following the recommended practice of not allowing meat and dairy foods to sit out for more than two hours
Polk County is home to a diverse, growing population with varied interests. The goal of the Polk County Extension program is to extend the unbiased research-based knowledge and problem-solving resources of the University of Missouri to the community. Whether it is a question about a tree in their yard, growing tomato plants, getting rid of termites, treating for weeds, writing a partnership agreement, balancing a feed ration, or just about anything else you can imagine, the Polk County Extension Center is here to help. With the resources of the entire University of Missouri System behind them, there are experts in practically every field to answer questions. The Polk County Extension Center is a resource to the community and ready and willing to help.

The Extension Center is known as “The Place To Go When You Need To Know.”

Call-Ins:
- Agriculture 674
- 4-H 301
- Other Areas 648
- **Total Call-Ins** 1,623

Walk-Ins (total): 786
Email Inquiries (total): 464

**Total Contacts = 2,873**

**194 Soil Tests** were conducted through Polk County Extension Center, 14 people visited the office for individual pesticide applicator training, 9 people brought in canner pressure gauges to be tested, and 4 people requested notaries.

A field full of broom sedge in desperate need of a soil test

Common Requests Include:

- Cattle Share Arrangements
- Land Leasing Agreements
- Pasture & Pond Weed Identification
- Herbicide Recommendations
- Vegetable Gardening Concerns
- Soil Testing Recommendations
- Fruit Planting Guides
- Bug Identification & Control
- Plant Disease Identification & Control
- Land Rental Rates
- Custom Rates for Farming Practices
- Farm Income Taxes
- Cattle Marketing Information
- Beef Ration Balancing

- Supplements for Cattle On Pasture
- Forage Management
- Nitrate Poisoning in Cattle
- Sheep & Goat Information
- Mole Control (sometimes other varmints)
- Fruit Spray Schedules
- Mold Issues in the Home
- Forage Quality Needs
- Mushroom Edibility
- Canning Food & Pressure Cooker Testing
- Fencing Laws
- Estate Planning
State, Federal and County Funding for Extension

University of Missouri Extension programs in Polk County are funded by county, state and federal appropriations. Local funding for support of the Polk County Extension Center is provided by the Polk County Commission. They provide office space, funds for office expenses, clerical salaries and travel expenses of extension specialists who conduct educational programs in Polk County.

A special acknowledgement and appreciation is given to the Polk County Commission, Bolivar Farmers Exchange, and the City of Bolivar for financial assistance.

Unique partnership

Polk County’s University of Missouri Extension County Council is a full partner with Missouri's land-grant universities to deliver high-quality education and research-based information that helps people solve real-world problems and take advantage of opportunities. Council members:

- Work with extension specialists to provide the county with quality educational programs;
- Manage finances of local extension operations;
- Provide personnel to carry out extension activities; and
- Elect and organize the local extension council.

The Randy & Rhonda Hall Family represented Polk County as the 2016 MU Extension/Farm Bureau State Fair Farm Family
Polk County Council

Chairman
Shirley Cook, term ends 2017

Vice Chairman
Katie Williams term ends 2018

Secretary
Lanelda Presley, term ends 2018

Treasurer
Patty Jones, term ends 2017

Other Elected Members:
Peggy Barham, term ends 2017
Katie Crain, term ends 2018
Bob Ham, term ends 2018
Cathy McNatt, term ends 2017
Donna Mitchell, term ends 2017
Bill Otradovec, term ends 2017
Ted Rovenstine, term ends 2018
Diana Sievers, term ends 2018
Whitney Watson, term ends 2017
James Wheeler, term ends 2018
Katie Williams, term ends 2018
Lynn Williams, term ends 2017

Other Appointed Members:
Marcy McDaniel, MFA, term ends 2018
Bill Dryer, Farm Bureau, term end 2018
Rex Austin, Polk County Commission, term ends 2017
Darin Chappell, City of Bolivar, term ends 2017
Jacob Noblitt, Youth Representative, term ends 2018

POLK COUNTY COMMISSIONERS
(2016)

Shannon Hancock
Presiding Commissioner

Kyle Legan
Northern Commissioner

Rex Austin
Southern Commissioner