

# UNIVERSITY OF MISSOURI Extension

Randolph County

## Annual Report 2017

The Mission of MU Extension is to improve lives, communities and economies by producing relevant, reliable and responsive educational strategies that enhance access to the resources and research of the University of Missouri.



December 4, 2017

Dear County Commissioners and Friends of MU Extension:

For much of the past year, MU Extension was focused on a long-overdue assessment of statewide needs and a deep look at how we respond to these needs with programs and resources.

We crisscrossed the state to gather input from 42 community conversations with 1,200 people and reviewed analysis and recommendations from a range of external experts. As a result, MU Extension is working on a variety of changes in the interest of providing better university engagement with your communities.

We are steadfast in our resolve to help local communities and the state meet grand challenges associated with economic opportunity, educational excellence and healthy futures. These challenges reflect what Missourians from every corner of the state told us they were most concerned about.

As you read your county's annual MU Extension report, I believe you will be pleased to see the results that have been accomplished through county-based University of Missouri faculty. These faculty members work in response to input received from local extension councils.

At the state level, local MU Extension efforts really add up. Though we have long known extension funds were leveraged, an independent review revealed that MU Extension created more than \$945 million dollars of public value from the \$80 million it received from federal, state, county, grant and contract partners. A public value ratio exceeding 11:1 even surprised us.

As we go about implementing changes based on the recently completed needs assessment and review of our organization, I am confident that our ability to create value at the local level will be even greater.

I encourage you to read the attached annual report from your MU Extension county center to gain an understanding of how MU Extension has worked this past year to serve your community.

Your support of MU Extension and your efforts in your community is greatly appreciated. As always, I welcome input on how the University of Missouri can better serve your community and its people.

Sincerely,



Marshall Stewart, Ed.D.

Vice Chancellor for Extension and Engagement

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### *Our Extension Council:*

The Randolph County Extension Council, comprised of elected and appointed citizens, 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.

Our council consists of 9 elected positions and 6 appointed members. The appointed members are from the Randolph County Farm Bureau, Randolph County Commissioners, City of Moberly, EXCEL, Master Gardeners, FCE, and 4-H.

### *Council members;*

- ◆ Work with Extension specialists to provide the county educational programs
- ◆ Manage finances of local Extension operations
- ◆ Provide personnel to carry out Extension activities
- ◆ Elect and organize the local Extension Council

The Randolph County Extension Council, backed with the educational resources of the University of Missouri, provides services, programs and classes on a wide range of topics from traditional agriculture and gardening to business development, child care and volunteer engagement, among others.

The Council also engages in many civic and community activities. The Randolph County Extension Council is always ready to improve our community and help the residents of our county.

We would like to thank everyone who has been supportive of MU Extension in 2017. We look forward to an exciting 2018!

## **2017 Council Members**

### **Elected**

Marla Stegall (Chair), Mary Kertz (Vice-Chair), Theresa Hunt Hyatt (Treasurer), Roy Morales, Kim Buckman, Linda Taylor, William Cleeton, Bart Backus, Merl Lee Riley

### **Appointed**

Carrie Mulch (Secretary), City of Moberly

John Hobbs, Randolph County Commissioner

Amber Baughman, 4-H

Betty Mayo, FCE

Kristin Chesher, Master Gardener's

Marie McSparen, Randolph County Farm Bureau

Sam Richardson, EXCEL



## Randolph County Faculty and Staff



**Jeremiah Terrell**  
HUMAN DEVELOPMENT  
& FAMILY SCIENCE  
SPECIALIST & CPD



**Vickie Troyer**  
4-H YOUTH PROGRAM ASST



**Marjorie Lee**  
NUTRITION PROGRAM ASSOCIATE

**Stacey Roth**  
COUNTY OFFICE SUPPORT  
STAFF

## Regional Specialists Serving Randolph County



**Heather M. Conrow**  
LIVESTOCK



**Megan Samson**  
NUTRITION & HEALTH EDUCATION



**Dhruba Dhakal**  
AGRONOMY



**Jennifer Schutter**  
HORTICULTURE



**Charles A. Holland**  
BUSINESS DEVELOPMENT



**Kent Shannon**  
NATURAL RESOURCE ENGINEERING



**Letitia (Tish) K. Johnson**  
COMMUNITY DEVELOPMENT



**Mary Smyser**  
REGIONAL COORD. FNP



**Lisa Morrison**  
4-H YOUTH DEVELOPMENT



**Mary Sobba**  
AGRICULTURE BUSINESS



## Human Development & Family Science

Jeremiah Terrell, Human Development & Family Science Specialist



The **Randolph County Skill Up program** is geared toward the following criteria: Are you on food-stamps, aged 16-59 year old, want to add to your educational background, gain financial knowledge, and learn to be a good employee. 1 participant walked in for this class and learned anger management and conflict skills, decision making strategies, and basic parenting skills. He applied these strategies to apply for a truck driving school and was able to gain employment as a truck driver.

**Taking Care of You** is a multi-session program offering practical strategies and experiences to help you deal with the stress in your life. Managing life's challenges in a healthy way allows you to take better care of yourself and your overall health. 17 Randolph County residents participated in the program. A few testimonials: "You really pushed some of my buttons in this class and I appreciate that. My blood pressure is now in the normal range— no meds, yay!" and "When I begin feeling anxious or down, I am having success with conditioning myself to re-evaluate the true importance of the stressor and put it into perspective quickly and move on."

**Building Strong Families** is a program that helps families find their strengths, build on those strengths, and learn skills to create stronger families, improve relationships, and increase positive communication. The program covers 6 topics and uses hands-on activities to involve participants. 41 county residents gained a better understanding of what it means to be a family and ideas of what they can do to have stronger relationships and better communication with family members. Adults participants reported that they have increased satisfaction with relationships, their families were better at helping out, communicating and getting along together, and found strategies for bringing balance to household and work responsibilities. When stronger families more effectively engage with others at home, work and school, communities benefit from a higher level of household and workplace productivity.

**Focus on Fatherhood** is a program designed to increase the involvement of fathers in child nurturing and to enhance the parenting skills of fathers so that they could assist in nurturing their children to grow into healthy, responsible adults. The program targets high-risk fathers that are either custodial, or non-custodial, facing poverty, recent or long-term lack of employment, have a familial history with legal issues or substance abuse, and have limited experience in interacting with their children. 27 county residents participated in this program. Fathers involved with this program exhibit lowered levels of lying, disruptive behavior, and depression, fewer externalizing and internalizing behaviors and less delinquency, higher self-esteem and less sexual risk.

**Focus on Kids** is a 2.5 hour class ordered by state statute for all divorcing parents with kids still at home. The program reviews the five predictors of positive outcomes for children when their parents divorce. Through class discussion and viewing video vignettes, parents are reminded of the importance of keeping their children out of conflict. 63 divorcing parents with children under the age of 17 successfully completed the class.



## NUTRITION & HEALTH EDUCATION SPECIALIST

Megan Samson



### Food Preservation: Salsa!

Through hands-on learning, 10 participants water-bath canned homemade salsa in a class at the James Youth Center. After completing the program, all 10 participants reported that they have better knowledge of how to safely preserve food and 90% would recommend this program to others.

### County Fair Food Preservation Session:

A class was held to answer questions from those interested in learning how to can safely at home.

### Self-Managing Chronic Condition Workshop: Located at the Towers

This one-time educational session consisted of tools to manage chronic illnesses and was in partnership with Randolph County Caring Communities. Through mini lectures, group discussion and activities, 10 participants learned about nutrition, physical activity, stress management, and more in relation to their chronic condition. Many participants signed up for the multi-session Diabetes Self-Management Program

### Health Information for Men Class:

The Randolph County Caring Communities Fatherhood Network was interested in promoting men's health to their participants. This multi-session program covered 11 different topics including: diabetes, heart disease, hypertension, sleep health, protein supplements, low testosterone, and more. While 11 men attended at least one of the four sessions, the average class attendance was six men. As a result of this program, men reported they would recommend the program to others and would take actions to better their health.



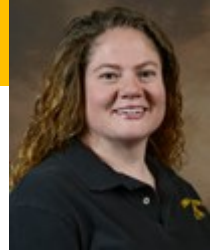
	N	Total % Agree or Strongly Agree
<b>Participation in this course has...</b>		
Made me more confident in my ability to take care of my diabetes	10	80%
Improved my ability to deal with problems caused by my diabetes	10	80%
Increased my independence and ability to carry-out routine daily activities	10	100%
Improved the physical symptoms caused by my diabetes	10	70%
Improved the emotional distress (i.e. depression) caused by my diabetes	10	80%
Led me to change something based on what I learned or experienced.	10	100%

### Diabetes Self-Management Program:

10 participants of this multi-session program met weekly for group discussion, mini lectures, activities and goal-setting related to managing diabetes or caring for someone with diabetes. The chart to the left shows participant behavior changes after completing the program.

## LIVESTOCK SPECIALIST

Heather M. Conrow



### Show-Me-Quality Assurance Workshop:

18 Randolph County residents participated in 54 hours of a workshop to learn what quality assurance is and why it is important to the consumer. They learned what HACCP & Food Safety is all about, ways to use animal health products carefully, the different types of animal health products and their usage, the proper administration techniques for giving intramuscular and subcutaneous injections, what carcass quality grades are and the importance of ethics and how youth livestock projects develop those traits.



### Livestock Education: Mid-Missouri Grazing Conference and Howard County Calving Clinic

22 people participated in 45 hours of learning at the Mid-Missouri Grazing Conference. They learned the benefits of raising sheep and cattle together, and how to manage them together in an extensive grazing system. They learned how other producers are managing systems and ways to improve their own operations. Other topics included land and livestock leasing options, vaccinations of ruminants, comparison of legumes for grazing systems, succession planning, grazing standing cover crops to replace stored feed, and many other things. 3 from Randolph County attended the Howard County Calving Clinic for a total of 48 learning hours.

## Mid-Missouri Grazing Conference



### Beef Cattle Artificial Insemination School:

In Randolph County, 2 learners participated in the Beef Cattle Artificial Insemination School for a total of 22 workshop hours. Participants were provided the opportunity to learn through hands-on exploration the following: palpation, identification of reproductive tract parts and functions, heat detection and insemination techniques.





## Randolph County 4-H

Lisa Morrison, 4-H Youth Development Specialist

Vickie Troyer, Youth Development Program Assistant



Randolph County 4-H is a community of 159 youths and 60 trained volunteers building life skills and contributing to their community with 1,940 learning hours and 1,365 adult volunteer hours.

Randolph County 4-H serves youth through six organized clubs, school enrichment groups, camps and more.

4-H Clubs offer long-term educational experiences in which members learn life skills such as decision making public speaking and teamwork. The youth of Randolph County have demonstrated advanced learning the following activities: Camp Counselors, Teen Conference, Major Events, 4-H Summer camp, Clover Kids' Day Camp, State Meats Evaluation, State Livestock Judging, State Poultry Day, State 4-H Congress, State Shooting Sports, State Fashion Revue, State Fair Demonstrations, State Public Speaking , and showing at the Missouri State Fair.

Embryology Class—Twelve classrooms and 149 Randolph County students participated, giving them the opportunity to learn the scientific process of embryology.

### Randolph County 4-H Clubs

Randolph County 4-H Clubs participate in community service projects such as collecting canned goods and money for the Christo's Center, picking up trash along Route M, re-painting the mini-train depot house at Rothwell Park, planting a Liberty Tree at Boney Park in Cairo, and many other projects.



**Margie Lee****Nutrition Program Assistant**

Family Nutrition Programs (FNEP) is the term used to refer to MU Extensions' two key nutrition programs for low-income Missourians: The Family Nutrition Program (FNP) and the Expanded Food and Nutrition Education Program (EFNEP). FNP grant funds come to MU Extension from USDA, Food and Nutrition Services through Missouri's food stamp program. The main focus of FNP is on youths and the adults who support them. Nutrition Program Associate's (NPA's) works with grant eligible audiences in helping participants achieve lifelong health and fitness. Education focuses on teaching healthier eating habits, understanding food safety and better management of food dollars. FNEP is available to individuals, groups and schools at no cost. FNP brought \$9,681,129.00 in federal funds to the state of MO.

#### **Kids and adults reached in Randolph County:**

Higbee Schools: 272

Moberly Head Start: 131

Westran: 483

South Park: 478

Moberly Early Childhood: 108

North Park Health Fair: 105

Christos Center: 149

Tiny Treasures Learning Center: 14

Health Department: 16

Safe Passage: 4

Total reached: 1,760 directly/ 1,808 indirectly = 3,061

#### **Supplemental Nutrition Assistance Program (SNAP),**

formerly known as the food stamp program, provides monthly benefits that help low income households buy the food they need for good health. SNAP is a federal program administered on the local level by the Mississippi Department of Human Services. Nationally, SNAP is the largest program in the domestic hunger safety net. SNAP is meant to be a supplement to one's income to help ensure nutritional needs are met. Mississippi residents who face food insecurity are urged to apply for the program. Help is available for those struggling to put food on the table.

#### **Success Stories:**

As a teacher you always wonder whether the students you're instructing are really understanding what you're saying, do they get the point you're trying to make? This month I got my answer. I was working with 3rd grade students in Higbee, and I asked a question and every hand in the room flew up.. I happened to call on a young man that gave me the wrong answer and I immediately felt let down, I had missed getting the point across somewhere. But as soon as I let him know that he was close but not quite there, all the hands went up again and the whole class answered the question correctly. I found out that of 20 students, I had called on the one child that had not been in class the week before. The best part was when the class was over this little guy came over to me and said "at least I know the difference between food groups and nutrients now". Now even he had the point.

After class one day at South Park, a parent who had been in the classroom volunteering came up to thank me. She said her daughter was a very picky eater and refused to try new foods, especially vegetables. But after hearing me teach and encourage the kids to try new foods, she is eating veggies. Now she wants to try all kinds of veggies and she is willing to at least give them a try. She has even found some she will eat without arguing about it. I really believe that when children see other kids trying new foods and enjoying them, they become more interested in trying them themselves.



## Horticulture Education

Jennifer Schutter, Horticulture Specialist



### Master Gardener's-

10 Master Gardener's served 838.5 total hours. 83.25 were education hours and 755.25 were service hours, which has a value of \$18,231.74 using the 2016 value of \$24.14 per hour from the Independent Sector. Some of their activities included: preparing a garden display each month for the Little Dixie Regional Library, guest presenting on the live greenhouse radio show in Moberly, beautification at the railroad and maze gardens in Rothwell Park, spring plant sale, and consulting with many people throughout the year answering garden questions.

### Home Horticulture and the Environment-

20 Randolph County residents sought horticulture assistance on various garden topics. Citizens took the information they learned to apply proper control methods for pests and diseases. They used information on other garden topics to better public gardens as well as their homes.

### Garden Talk Newsletter-

39 Randolph County residents receive the Garden Talk Newsletter. Readers are informed of timely gardening practices and production methods, new varieties, planting methods, plant diseases and insects, monthly gardening tips and upcoming horticulture events.

### Spring Gardening Class-

23 residents attended a spring gardening program in March at the Little Dixie Regional Library. They learned how to establish monarch waystations, the life cycle of a monarch butterfly, food source and how to raise caterpillars. In the second hour, they learned how to prepare garden beds and containers for spring planting, cool-season plant selection and how to care for cool-season plants.

### Missouri Grown: Selling local foods workshop-

2 residents from Randolph County attended this 12 hour workshop in Kirksville. They learned the business of local foods, food safety and regulations, optimizing food storage and handling, displaying your product, and proper food sampling. The participants represented the Moberly Farmer's Market and learned information they planned to use to help increase the number of producers and consumers to their market.

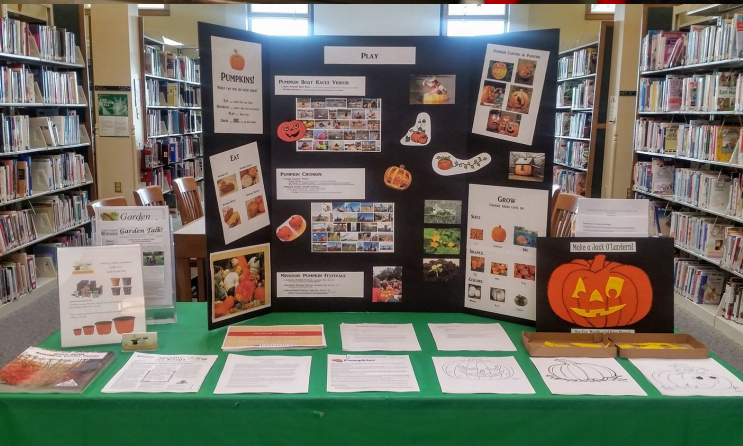
### Missouri Livestock Symposium: flower arranging class-

2 residents participated in the holiday flower arranging class on December 2. They learned the basics of floral design and created a table centerpiece to take home.





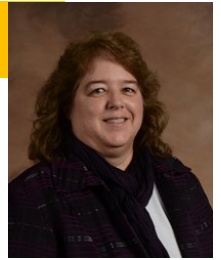
# Magic City Master Gardeners





## Agricultural Business

Mary Sobba, Agriculture Business Specialist



### MU Tax Schools:

During 2017, University of Missouri Extension ag economics department and regional ag business specialists worked together to coordinate one summer and seven fall tax schools. The schools were designed for those who prepare taxes including: enrolled agents, tax preparers, CPA's, individuals and attorneys.

The training included new tax legislation, rulings and cases, individual taxpayer issues, affordable care act, IRS rules and regulations, business issues, retirement issues, cybersecurity, ethics and agricultural topics. The schools were approved for 8 hours of continuing education credit by the IRS, Missouri Bar and for CFP continuing education. Total continuing education hours reported to IRS for the schools was 2,674 hours.

The 2017 school attendance was a total of three hundred eighty-two people. The schools were held in Cape Girardeau, Columbia, O'Fallon, St. Joseph and Springfield. The participants were from all over the state. There were 4 participants from Randolph County.

The teaching teams included a CPA and former IRS employee, an IRS certified retired ag economics professor, an attorney and a regional extension ag business specialist.

The trainings received positive evaluations and planning is underway to offer additional trainings in 2018. Local county residents benefit when local tax preparers have the opportunity to gain knowledge they can use to benefit their clients.



### 2017 Grazing School:

22 people participated in the Randolph County Grazing School in June. Agricultural Business topics included economic aspects of grazing management, livestock nutrition evaluation of farm resources, and layout and design of grazing systems. The participants plan to adopt and build new infrastructure on their farms to more efficiently use grass and increase production, which will in turn increase sales. This benefits their overall farm income and gives them more money, which in turn will help the local economy.

## Agronomy

Dhruba Dhakal, Agronomy Specialist



Agronomy by the numbers: **over 176** Randolph County Residents benefited from Extension in 2017

Over **50** Farms and Ponds were visited to diagnose problems in crops, soils, ponds and to identify and control plant disease and insects. Timely diagnosis of insect, disease and nutrient deficiency helped farmers save their crops and increased their knowledge and awareness to the sustainable crop, soil nutrient and pest management practices. The results increase net farm income/local economy by increasing crop productivity and reducing production cost. The increased net farm income encourages young farmers to be involved in the farm.

**2** Randolph County residents participated in the **Missouri Strip Trial Program**. They learned to determine the proper rate of phosphorous fertilizer applied to their corn field. When applied at the proper rate, it increases crop productivity, and minimizes the cost of production and increases net farm return. Higher farm income improves local and state economy.

**15** attended the **Randolph Soil and Crop Conference**. Participants learned about: weed management in row crops, weed management in pasturelands, tall fescue toxicosis management in pastureland, and nutrient management in row crops and pasturelands. By utilizing the knowledge learned, crop/cattle/pasture/hay producers in Randolph County increase net farm income which encourages young farmers to be involved in the farm and provide more employment opportunities to local young people. This helps to retain local young people in the area.

**22** attended the **Management Intensive Grazing School** in Renick. Participants gained knowledge on different aspects of management intensive grazing during this two day workshop. Participants visited a field and evaluated pasture conditions, identified pasture plants and weeds, and estimated forage yields during the trip. By utilizing the knowledge learned, producers increase net farm income by increasing pasture productivity, animal daily gain and reducing production cost.

**27** attended the 2nd annual **Randolph County Farm Tour**. Bagby Berry Bucket, Shepherd's Pecan farm, Rice Shrimp farm and the Mutter farm were toured. They gained knowledge on successful blackberry production, pecan production and processing, shrimp farming, row crop farming, grain drying systems, seed treatment processes and outcome of variety test result of corn and soybean.

### Private Pesticide Applicator Training

**11** participated in trainings that provide research-based information in the areas of Integrated pest management, environmental stewardship, and pesticide safety training to private applicators. This education program helps applicators and handlers of pesticides make informed decisions that are both economically and environmentally sound.



### Soil Testing Consultation

**51** soil samples and **2** water quality samples were tested. Consultation is provided to producers specific to their soil test results for the particular crop either face-to-face, written correspondence, phone or email.

## EXCEL



More than 40 EXCEL and Youth EXCEL programs across Missouri provide leadership development tailored to individual community needs and resources.

EXCEL is a process, not a pre-packaged program. What distinguishes EXCEL programs from other approaches to leadership development is the program's flexibility and its focus on local control, inclusiveness and the future of community governance.

Communities investing in an EXCEL program see new and younger people running for public office, more involvement in community activities and organizations, improved community appearance, and better functioning boards and commissions.

Randolph County's EXCEL program is the longest running in the state at 33 years.

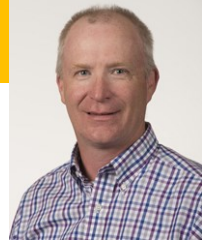
### 2017 Youth Class



### 2017 Adult Class







## Business Development

Charles Holland, Business Development Specialist

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Areas of Work: Entrepreneurship; Business start-up; Business growth; Executive Coaching; International Trade; Finance; Marketing; Human Resources and Healthcare.

Business Development Program Specialist and business counselors with MU extension, Missouri Small Business & Technology Development Centers (MO SBTDC), counsel people and their companies with start-up and management counseling, training and other assistance. In Randolph County: 19 Clients/Companies received business counseling.

As Entrepreneur's and innovators, Missouri's small businesses are becoming a more diverse group that continues to make the state's economy productive. There are approximately 500,000 small businesses in Missouri. Nearly 98 per cent of all businesses with employees are categorized as small businesses. In assisting owners and managers of those businesses, MU Extension contributes to a county's economic development through growth in jobs, sales, innovation, technology development and commercialization. Training and business counseling result in businesses making better financial and management decision leading to stronger businesses and a stable business community

Procurement Technical Assistance Center assists businesses-including small, disadvantaged and women owned firms in obtaining federal, state and local government contracts. MO PTAC specialists have years of experience helping identifying opportunities and understanding the contracting process so small businesses can take advantage of government sales dollars. PTAC awards in Randolph County amounted to \$829,534.

### The Statewide SBTDC Impact amounts to:

Loans and Equity \$91,002,145

Sales Increase \$478,772,408

Jobs Created 3106

Jobs Retained 3675

New Businesses Created 198

Number of Trainings

633 with 10,685 total participants and 1876 hours of classroom hours.

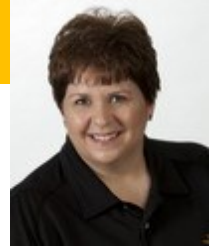
3458 Client counseled with 25,110 hours of counseling.

PTAC Awards \$403,359,341

## Human Environmental Sciences

Cynthia Crawford

Areas of work: Donor Education, Charitable Giving Decision Making, Adult Education, Leadership, Family Financial Education, Community Economic Development



### How to get an “A” in retirement online course -

A total of 299 participants learned **How to get an “A” in retirement in 2017** through a popular online University of Missouri extension course with that title. Of those learners, **22** were residents of Randolph County. The course combines research and best practices from both personal financial planning and positive psychology to help people take positive steps to increase their wellbeing in retirement (and in the years leading to retirement.) One hundred percent of this county’s participants recommend the course to you and say it was worth their time, energy and fees. 100% of participants would consider taking another Extension online course, similar to this one, on a different topic. Over 98% have taken positive steps for retirement planning. Participants identified retirement goals they are excited about and feel less stressed about retirement.

When you support retirement planning education for Missouri residents, people replace worry with action solutions like having more adequate emergency funds and investments for retirement, which serves to reduce financial stress and increase productivity. There is a substantial cost to employers of financially distracted workers.

#### Individual comments:

- "This is a **polished and professional course** based on years of research and experience."
- "I have really been pushing folks to sign up for this course as it really is a '**one stop shop**' for all **things retirement**."
- "I liked the **positive psychology** the best... I think of courses about retirement as financial courses. This one was so much more."
- "Taking this course and going over what I've been learning with him (my spouse) has **brought us both a greater sense of calm**."
- "I find the positive psychology aspect of this class to be very valuable... In addition to being financially sound, I want to be **happy and healthy in retirement**, too, and this is helping."



The Randolph County Extension FCE Chapter reached approximately 3000 adults and youths in the county during their programs held during 2017.

**Randolph County FCE Programs and events were:**

Membership Event

4th Grade Essay/Artwork Contest on Character Counts. This is a National Competition

International Night

Craft and Gift Show

Randolph County Old Settler's Reunion & Fall Fair—sponsored two of the little royalty contests

Scholarships—2 to MACC New Traditions and 2 to High School Seniors

Kids Make it For Christmas Event

Child Advocacy Day at the Capitol

Make and taste test recipe submission's to go into MFA "Today's Farmer" magazine recipe taste testing contest.

Book donations to graduating Kindergartners from Westran.

"Moving up" party for 5th grader's going into Middle School.

Served lunch during Government Day

Awards Received during the 81st Annual State FCE Conference were: 1st Place in Education, 2nd place in leadership, 3rd place in action. Won the county gold award for Achievement.





# Pride Points

Number of free programs in 2017

7



Randolph County Farm Family—  
Rick and Kathy Buxton at the State Fair

Continuing Education through MU Extension in Randolph County

Fire and Rescue Training: 107  
MU Conference Office: 45  
Missouri Training Institute: 22  
Nursing Outreach: 18  
Law Enforcement Training Institute: 7

Over 500 phone calls and walk-ins

## Top 10

### Walk-In and Call-In Customer Topics

- #1 Horticulture
- #2 Soil Testing
- #3 Agronomy and Livestock
- #4 Insect and Plant Identification
- #5 Pond Management Questions
- #6 Food Preservation Questions
- #7 Business Development
- #8 Tree Disease
- #9 Joining 4-H
- #10 Self improvement classes

Funds raised from Council  
Sponsored Events in 2017

\$883.50





## Council in Action

- ◆ Council members presented check to Ritter's Hanging Basket for the sales of flower baskets
- ◆ Council members distributed packets of information at the Career/College/Health Fair at MACC
- ◆ Council members gave lecture and served water and snacks and informational brochures at the Annual Wine Stroll to over 300 people



- ◆ Council members presented cookies to the Randolph County Ambulance District for the United Way day of giving
- ◆ Council members held a babysitting clinic at the James Youth Cabin which had 19 teens attend and ask for more!
- ◆ Council members attended and made lunch for the annual county farm tour

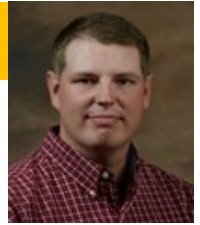
- ◆ Council members participated in the Trick or Treat Trail, handing out 1200 toys to children
- ◆ Council members represented Extension by serving lunch at the Cultural Heritage Workshop at the 4th Street theatre
- ◆ Council members met each month for council meetings to schedule programs, fundraising, and other civic activities to promote extension





## Livestock Specialist

Zac Erwin



### Missouri Livestock Symposium - 15 Randolph County residents attended

The Missouri Livestock Symposium is an annual educational program and trade show that attracts participants from throughout Missouri and beyond. It is recognized nationally as an outstanding program that targets agricultural producers and landowners. Curricula includes workshops led by nationally-known speakers in the areas of horses, beef, sheep, stock dogs, meat goats, forages, around the home, small poultry production and farm continuation planning.

#### Comments:

- “Interesting speakers and able to reach a group that without the Symposium we would not be able to meet.”
- “Great event highlighting livestock production and ag.”

Public funding helps support the Missouri Livestock Symposium with objectives to provide educational opportunities for livestock producers and landowners representing all species of livestock, forages, and renewable resources and to promote the adoption of best management practices that are economically and environmentally beneficial. The producer benefits from this program by being better able to manage their livestock and their financial resources. Financially successful producers provide a basis for successful communities. Missourians benefit by keeping farm and ranch families in rural communities and improved natural resource stewardship.





## Great Wines and Whiskey Begin in Missouri White Oak Forests

Missouri rolls out the barrels for spirits industry

Many of the world's finest wines and whiskeys begin in Missouri's hardwood forests.

University of Missouri Extension forester Hank Stelzer shared Missouri's role in wine and spirit production during the recent White Oak, Whiskey & Wine tour. Due to popular demand and positive reviews, Stelzer plans to make it an annual event.

Tourgoers visited the Rudolf Bennitt Conservation Area at the junction of Boone, Howard and Randolph counties to see a white oak forest. "True white oaks are the preferred species to make barrels, but chinkapin and swamp white oaks also may be used," Stelzer says. "Other oak trees do not possess the unique cellular features that make white oak barrels leakproof."

Missouri grows more white oaks than any other state. However, the Show-Me State's forests and woodlands also contain many undesirable species, Stelzer says. Proper "weeding of the woodland garden" allows white oak seedlings to become mature trees.

The path from forest to barrel is a long one. It takes at least 80 years to grow an American white oak tree to a marketable size. Stelzer says white oak stave logs represent only about 10 percent of timber harvested in any timber sale. The rest goes to grade lumber, flooring, railroad ties, pallets and blocking.

Craftsmen cut logs lengthwise into four bolts at the stave mill. They saw the stave bolts into flat, "quarter-sawn" stave blanks. Heading bolts used to make the top and bottom of the barrel are cut from larger-diameter logs or stave blanks that had to be shortened due to defects.

Stave and header blanks for wine barrels air dry for 24 to 36 months. This allows the sun, wind and rain to break down the tannins in the wood. It also mellows oak in a way that kiln drying cannot. Staves used in whiskey barrels usually dry for 30 to 40 days and finish in a dry kiln.

Tour stops also included The Oak Cooperage and Barrel 53 in Higbee, Missouri. Oak Cooperage artisans have produced 59-gallon oak wine barrels since 1972. More than half of its barrels go to Napa Valley for Silver Oak Winery's prized Cabernet Sauvignon. They also produce American and French oak barrels for the whiskey and bourbon industries.

Barrel 53 is a family-owned enterprise that makes whiskey and wine barrels. It operates a stave mill that processes white oak logs from nearby woodlands. Barrel 53 also recently opened its own distillery. Tourgoers watched artisans create barrels from aged white oak staves and headers. The most crucial step in barrel making is the raising. An artisan assembles narrow staves into a temporary steel ring to hold the staves in place.

To make the staves pliable, artisans place the raised barrel over an open fire or pass it through a hot steam tunnel. They cinch the wide end with a cable and add a second temporary steel ring to give the barrel its final shape.

At The Oak, the barrel's inside is heated to a specific temperature to impart a light, medium or dark "toast" to the wood according to the winery's exact specifications. This produces the "roasted" aroma in wine. Toasting also enhances the presence of vanillin and creates smoky and spicy notes similar to the oil of cloves.

At Barrel 53, visitors watched as barrels for freshly distilled "white dog" whiskey were charred or burned on the wood's surface. The charcoal acts like a filter and reacts with the sharp substances of the white dog. Intense heat during charring forms a caramelized layer from natural sugars in the wood. This layer creates the bourbon's amber color and caramel and butterscotch flavors. During aging, the whiskey expands into the wood during hot months and returns into the barrel during cold months to add color and flavor to the spirits.

But before that complex chemical dance begins, the final steps of the coopering process must occur. A groove is milled into the inside ends of cooled barrels. Headers are placed in these grooves. Galvanized metal hoops replace the temporary hoops. Wine barrels are sanded smooth for appearance.

The last steps are to add the bunghole — the entrance and exit for wine or whiskey — and check for leaks. The bunghole goes on the side of the barrel in the middle of a wide stave. After drilling, workers put water into the barrel and rotate it so the water touches all staves. Artisans pressurize the barrel to check for bubbles, which indicate leaks. Defective barrels go back to the most experienced coopers for repair.

Following lunch in Higbee, the tour traveled to Les Bourgeois Vineyards at Rocheport to learn how the winery uses Missouri white oak barrels. It is Missouri's third-largest winery, producing more than 120,000 gallons of wine each year, including native cultivars such as Missouri's state grape, Norton, along with French hybrid grapes and the newest, Chardonel.

Gary Hinegardner of Wood Hat Spirits at New Florence explained how he uses Missouri white oak barrels and locally grown heritage corn to create unique whiskeys and cordials. Hinegardner says Wood Hat is the first craft distillery in Montgomery County and the only wood-fired still in the country. He prefers toasted barrels to bring out subtle flavors. "Six hundred dollars' worth of whiskey comes from a \$3 bushel of corn," he said. "That's what I call value-added."

