

OUR IMPACT

K-State Research & Extension provides research-based information to help people, businesses and communities solve problems, develop skills and build a better future.

Our Research Sets Us Apart

It all started with agriculture. Kansas did not attain its food-production powerhouse status by accident. It fittingly followed the path of a well-tended seed, planted earnestly on March 3, 1887, when Kansas became the first state to accept the provisions of the Hatch Act, which established agricultural experiment stations at land-grant universities. A network of researchers that spans the state now define and refine best practices for livestock, grow test plots; and ensure crops, gardens, trees and turfgrass grow well in the varied climatological regions of Kansas. They also study how to manage water resources, soil, and threats from insects, disease, and severe weather.

The Feed the Future Innovation Lab uses unmanned aerial vehicles to collect data on thousands of plots in Kansas, Mexico and India. The project is able to deliver in-season yield predictions. Access to multiple countries allows research for thousands of breeding lines to continue year-round instead of during just one U.S. growing season. The same lab is working on research to reduce the incidence of toxins and food loss during post-harvest. For most consumers, mold on food may seem like a small inconvenience. But on the scale of global food production, it's a multi-billion dollar headache that means people may get sick or go hungry. Mycotoxins can appear in the food chain as a result of fungal infection in crops, caused by weather or other environmental conditions. These toxins, predicted to contaminate potentially a quarter of the global food supply, cause stunting in children, which often leads to difficulties in school and reduced earning as adults. Researchers are working with farmers to do on-farm surveys to develop practices that will reduce the risk of fungus on crops.

Kansas State University and PepsiCo are teaming up to focus on making nutritious food and beverage products more affordable and accessible. PepsiCo will provide funding for up to five years to develop nutritious packaged foods and to get those new products into the consumer market more quickly.

The list goes on. We build tomorrow's leaders through 4-H youth development programs and strengthen the role of volunteers to shape their communities. Local extension educators turn land-grant university research into trusted, practical advice. We are proud to share our 2017 educational impacts.



Container Mural Revitalizes Teaching Garden

Shawnee County Research and Extension took advantage of a wonderful opportunity to pair up with local organizations and revitalize a highly visible space for current and future extension work. Shawnee County Extension Master Gardeners (SCEMG) have a vegetable demonstration garden on the southern edge of the Kansas Expocentre parking lot. The garden is nestled between the locomotive and what was an eyesore of a storage container.

There are plans to expand the vegetable garden into a community garden for teaching and free produce for Shawnee

County community members. It's current achievements and future aspirations now have a bright, beautiful landmark. The storage container was painted in August by local artist John Sebelius, along with SCEMG volunteers. The project was coordinated by the Topeka Mural Project, ARTSConnect Topeka and the Shawnee County Extension office. This is Topeka Mural Project's 10th mural.

Education Helps Youth Link Agriculture to Local Food

Shawnee County Extension and its educational partners reached over 3,300 youth ages 7—11 this year teaching them where their food comes from and how to conserve water and the soils that grow food. Events including the Water Festival and the History and Environmental fair involve youth through activities, demonstrations and displays to teach how safe and nutritious food is grown by local farmers and ranchers. The annual “*From Farm to You*” program reached 750 second grade youth, helping them learn how all the parts of a pizza are grown by Kansas farmers. One teacher shared, “*I teach in USD 501 with city kids. This may be the only time these kids get to be that close to farm animals and make the link of how important farmers are. I love the tie-in with the pizza and linking that to several parts of farming. Kids can put pictures to the discussion we have about farming and natural resources.*”



Extension is grateful for the many partners and volunteers who make these events possible, including Shawnee County Farm Bureau, Shawnee County Extension Master Gardeners, Natural Resource Conservation Service, 4-H, FFA, and the Shawnee County Conservation District.

Walk Kansas Participants Encouraged to Walk Shawnee County

This year Shawnee County *Walk Kansas* participants were not only challenged to meet the Physical Activity Guidelines for Americans, and increase intake of fruits and vegetables, but were also encouraged to experience some of the wonderful places Shawnee County has to offer for outdoor exercise.



Twenty-seven *Walk Kansas* participants along with other friends and family completed a downtown Topeka walking scavenger hunt, created by Family and Consumer Sciences Agent, Susan Fangman. Participants learned about some of the history makers in our county and enjoyed the beautiful artwork available downtown. Another *Walk Kansas* activity was a walk at Ted Ensley Gardens at Lake

Shawnee during Tulip Time. Interactive Facebook posts encouraged participants to share their favorite places around the county to get exercise, and to try some of the new places suggested by others.

2017 Walk Kansas Statistics

- 44 teams consisting of 257 people participated
- 86% of teams reported getting at least the minimum amount of exercise recommended by the Physical Activity Guidelines for Americans
- 83% of individuals said they ate more fruits and vegetables as a result of the program
- 85% of individuals reported adopting healthier lifestyle habits
- 30 participants reported an increase in energy
- 19 reported a decrease in weight
- 34 reported increased endurance

Creating a Breastfeeding Friendly State of Kansas Capitol

Breastmilk is the perfect food for babies. Besides optimal nutrition, breastmilk is also a baby’s first vaccine by providing protection from illness. Health experts recommend exclusive breastfeeding for the first six months of a baby’s life. If 90 percent of Kansas families would follow this recommendation, the cost savings to the Kansas Economy adds up to \$112 million per year. However, breastfeeding mothers often find less than adequate facilities for feeding their babies or pumping their breastmilk when they are at work, or in other businesses, public buildings and organizations.

Recently, Kaw Area Breastfeeding Coalition and Shawnee County EFNEP worked together to provide a breastfeeding friendly lactation room at our State Capitol. A family room had been designated as the lactation room at the Capitol but it needed some additions. The Coalition and the Shawnee County Extension Education Foundation provided funds to purchase a comfortable office chair on wheels that can be moved closer to the outlet for pumping. A changing table was added, as well as signs. A map identifying the location of the room was created for the information desk.



Shawnee County Completes 3-year Grow 4-H Grant

In 2014 Shawnee County was awarded a three-year Grow 4-H grant by the Kansas 4-H Foundation. The grant's purpose was to increase membership, increase the number of project clubs and improve retention of existing members. The Kansas 4-H Foundation provided each county with \$5,000 to support those objectives.



Over the three years Shawnee County added Special Interest (SPIN) Clubs to our 4-H offerings ranging from Geocaching to Food Science. Our county also used the funds to help start the Quincy Proud after school club, Tecumseh Troopers 4-H Club, and an Archery project club. Over the three years Shawnee County 4-H increased membership by

13%. The number of 4-H project clubs doubled and member retention increased by 20%. Even though the grant period is over we will continue to work on these outcomes. Just like the 4-H motto, we will strive to "Make the Best Better!"



Healthy Food, Healthy Families

Healthful eating and physical activity have lifelong benefits but are a challenge for low-income families. The Shawnee County Expanded Food and Nutrition Education Program provides classes for families on healthy eating on a budget, feeding kids, food safety and physical activity. Families who have graduated from the program this year total 177, and as a result of participating in the program:

Nutrition and Physical Activity Practices:

- 93.2% improved their diets.
- 46% more often thought about healthy food choices.
- 44% more often prepared foods without adding salt.
- 47% were buying food low in salt more often.
- 61% more often used the "Nutrition Facts" on food labels to make food choices.
- 27% reported their children ate breakfast more often.
- 30% were eating meals as a family more often.
- 45% were drinking less sugar sweetened sodas.



Food Resource Management Practices:

- 53% more often planned meals in advance.
- 45% more often compared prices when shopping.
- 43% less often ran out of food before the end of the month.
- 45% more often used a list for grocery shopping.

Food Safety Practices:

- 24% more often followed the recommended practices of not allowing meat and dairy foods to sit out for more than two hours.
- 51% more often followed the recommended practices of not thawing foods at room temperature.

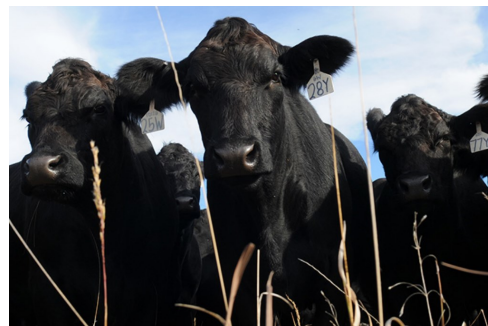
Education Helps Farmers and Ranchers Navigate a Struggling Economy

The agriculture community is currently experiencing one of the biggest economic downturns in history with net farm income dropping from a five-year average of about \$120,000 in 2014 to only \$4,568 in 2016. (source: Farm Management Association Farms) Shawnee County Extension partnered with many agencies to host the workshop "Top 10 Considerations to Navigate a Struggling Farm Economy." Seventy-four farmers and ranchers attended. The group (collectively) represented farm businesses with 24,743 acres of crops and hay, 21,998 acres of pasture and 4,080 head of cattle.

Extension professionals at the local and state level continue to assist local farmers and ranchers to survive the tough times being by helping them consider strategies to keep their business viable.

Some of the changes that the participants listed in management decisions were:

- *I plan to make savings in production and restructure debt.
- *Farming is in a difficult place right now. We can use all the information we can find to make educated decisions for our operation—to survive.
- *Consider timing and methods of selling commodities.
- *Think and plan more and do not do "impulse buying."



Welcome Tecumseh Troopers 4-H Club!

In January of 2017, Shawnee County 4-H charted our 12th club! The Tecumseh Troopers meet at the Tecumseh United Methodist Church on the second Sunday of the month. Tecumseh has been without a 4-H club since Decker 4-H closed in 2012. The idea of a new 4-H club was marketed at Tecumseh North Elementary school followed by an informational meeting for parents and youth. There was enough interest to set monthly club meetings.

At the first monthly meeting the youth elected their officers, and named their club! They are led by volunteers Rita Halderman and Heather Rake. Both women have extensive background in 4-H and according to Candis Meerpohl, 4-H Agent, the new club would not have started without them!

The Tecumseh Troopers are looking forward to their first full year, and doing all that the program has to offer. Their members participated in camp, the county fair and state fair!



More to know:

- ◆ Medicare counseling during the Medicare Part D open enrollment assisted 205 individuals in 2016. Ninety of those individuals changed drug plans saving an estimated \$73,482.
- ◆ The Shawnee StartUps e-Community was formed in early 2017, starting with a loan fund of \$125,000 targeting entrepreneurs wishing to start or grow a business in targeted areas of Shawnee County. The first loan was made this fall.
- ◆ Free Tax Assistance provided by VITA and AARP volunteers filed 7,000 tax returns during the 2017 tax season. Free tax sites helped taxpayers receive \$7,486,258 in federal refunds and place on record \$938,196 in tax liabilities. The IRS estimates taxpayers saved \$1,540,000 in tax preparation fees.
- ◆ Twenty-two Shawnee County Extension Master Gardeners have qualified for the 2017 President's Volunteer Service Award. Each has provided more than 100 hours of volunteer service to the Master Gardener organization and our community this year in the mission of "Improving Our Community Through Horticulture."
- ◆ Shawnee County Extension received over \$102,647 this year in in-kind donations to support Extension education.
- ◆ Volunteers for 4-H, Master Gardeners, VITA and Family & Community Education provided 22,673 volunteer hours valued at \$23.56/hour and totaling \$534,175.
- ◆ PRIDE volunteers in Dover completed a multi-year effort to build a community playground. Rossville PRIDE received a \$2,000 Partner in PRIDE grant to be used towards landscaping in Andrick Park.



Staff

Pictured left to right: Kendra Stover, Joanne Domme, Ariel Whitely-Noll, Susan Fangman, Michelle Wilson, Bessie Tolbert, Candis Meerpohl, Janice Jones, Marc Galbraith, Tracy Tugman, Lisa Martin, Brenda Jarboe, Margarita Munoz, Leroy Russell, Cindy Evans. In front: Callie Hobkirk, Kim Seeley