



2022-2023 ANNUAL REPORT

MAKING A
DIFFERENCE
ACROSS KANSAS

K-STATE
Research and Extension

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

FROM THE ASSISTANT VICE PRESIDENT AND DIRECTOR FOR EXTENSION



K-State Research and Extension professionals and volunteers are passionate about serving Kansans – over eight million times from October 2022 - October 2023.

In fact, the exact number is 8,188,988. This accounts for the number of times Kansans engaged with our staff throughout the state, whether that be through webinars, field days or through educational materials. Every day, K-State Research and Extension professionals and volunteers are focused on one thing: helping those in our communities improve their lives and livelihoods.

Statewide, we work from three campuses, eight regional centers and offices in each of our 105 counties. Through these many locations our professionals and volunteers can respond rapidly, and with resources, to whatever challenge Kansans face.

I invite you to explore this *Making a Difference* report to see just a few of many examples of how K-State Research and Extension makes a difference in the lives of Kansans every year. I know you will be impressed.

K-State Research and Extension: our passion is helping Kansans succeed.

A handwritten signature in purple ink that reads "Gregg Hadley". The signature is written in a cursive, flowing style.

GREGG HADLEY

2022 – 2023 Extension Educational Contacts

Every year, K-State Research and Extension records the number of direct and indirect educational contacts made through extension programming throughout Kansas. A direct educational contact happens when an extension professional meets with a client. An indirect educational contact is recorded when a programming effort or resource is distributed through digital or traditional media.

*Direct contacts
reported*

610,670

*Indirect contacts
reported*

7,399,364

*Volunteer contacts
reported*

178,954

*Volunteer hours
reported*

309,346

*equal to \$8,800,000 worth
of service to Kansas
communities*

Direct educational contacts by Grand Challenge



111,302

**GLOBAL FOOD
SYSTEMS**



58,263

**WATER AND
NATURAL
RESOURCES**



107,208

HEALTH



95,942

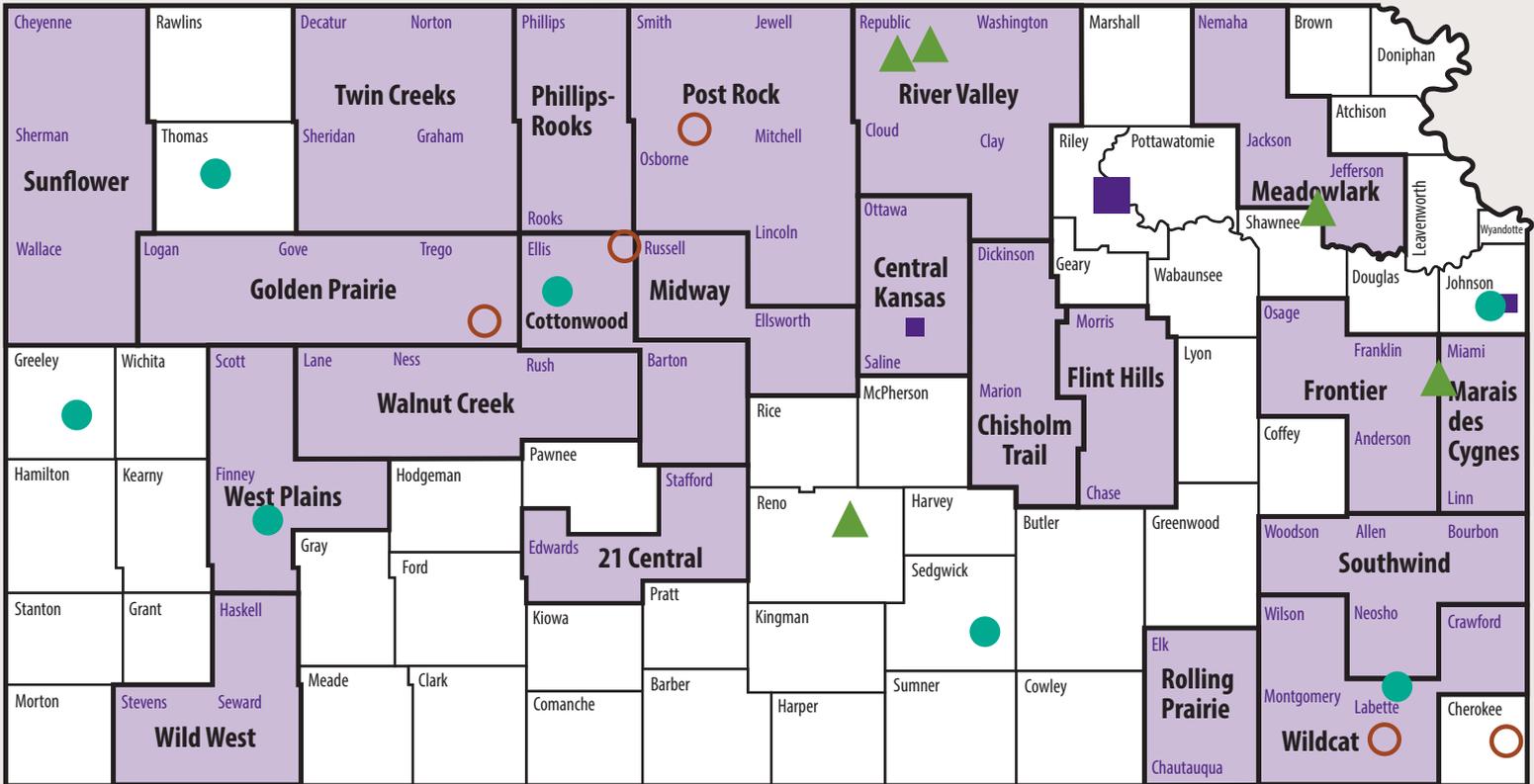
**COMMUNITY
VITALITY**



237,955

**DEVELOPING
TOMORROW'S
LEADERS**

A PRESENCE IN EVERY COUNTY



7/2023

Kansas State University
 Districts
 Satellite Stations
 Experiment Fields
 Research-Extension Centers

21

district units

46

county units

12

research centers
and satellite
stations

5

experiment fields



Learn more about our statewide locations



ADDRESSING OUR GRAND CHALLENGES

K-State Research and Extension's Grand Challenges are focused on improving the lives of Kansans.

Throughout this report, learn how our professionals work with state and community partners to develop and offer programs aligned with these Grand Challenges.



GLOBAL FOOD SYSTEMS

To feed a growing population, we are focused on developing innovative ways to help farmers, ranchers and agribusinesses improve profitability, efficiency and sustainability for Kansas, our nation and the world. We accomplish this through cutting-edge research in areas such as genetics, disease prevention, food security and Farm Bill education.

KANSAS AGRICULTURE



Source: Kansas Department of Agriculture

Land Leasing Strategies for Women in Agriculture

As populations decline in rural areas and landowners become more geographically removed, there are many questions and issues surrounding leasing land for agricultural-related purposes. Families who inherit land make up a majority of these absentee landowners. To help landowners navigate best practices for their property, K-State Research and Extension agricultural economists teamed up with the University of Nebraska – Lincoln and Purdue Extension to produce a four-part land leasing program.

Twenty-seven locations across Kansas hosted 469 program participants every Wednesday evening for four weeks starting in mid-January. Landowners learned about leasing topics and participated in hands-on problem solving. At the end of the series, 90% of landowners had a greater understanding of information to include on a written lease and its importance. In fact, 70% learned how to improve landlord-tenant relationships and 60% were made more aware of available conservation programs.

27

LOCATIONS
HELD WEEKLY
LEARNING
SESSIONS FOR
4 WEEKS

469

WEEKLY
PARTICIPANTS

90%

OF PARTICIPANTS
GAINED
INSIGHTFUL
KNOWLEDGE ON
THE IMPORTANCE
OF A WRITTEN
LEASE





Responding to Tar Spot Disease in Corn

Tar spot is a devastating disease affecting corn. It was first identified in the United States in 2015, and by 2022, the disease appeared in Kansas. To aid Kansas producers in responding quickly and efficiently to tar spot, K-State Research and Extension professionals educated producers on how to detect and mitigate the disease, prior to its arrival. This included leveraging data and information from other states on fungicide timing and efficacy, disease biology and hybrid selection.

Once the disease was reported in Kansas, extension programming intensified. Weekly field visits, communication strategies and producer meetings were facilitated. Initial efforts focused on the northeastern part of the state, as this area was most impacted. Through rapid outreach efforts, farmers were able to apply fungicide to control the disease, which helped prevent massive yield losses.



Supporting Local Food Systems

After an increase in inquiries to extension offices on how to sell meat, poultry and eggs locally, extension professionals hosted meat marketing workshops in Wichita, Olathe and Parsons, Kansas.

With the increase in small-scale farms, these workshops helped producers successfully bring their products to market. These resources also supported local food systems, which improve Kansans' access to healthy, fresh foods.

Approximately 160 attendees gained knowledge on regulations related to selling food directly to the public and marketing strategies to grow their businesses. During a follow-up survey, some participants indicated the knowledge they gained helped them sell meat products shortly after the seminar.

160

**PARTICIPANTS
GAINED HELPFUL
KNOWLEDGE
ON FOOD
REGULATIONS
AND BUSINESS
STRATEGIES**



WATER AND NATURAL RESOURCES

To ensure future generations have a reliable source of clean water, we are focused on developing and implementing programs that help Kansans maintain and improve water quality and quantity. These include pioneering new practices and techniques, researching high-priority water issues, facilitating meetings among local, state, and federal officials and effectively communicating research results.

Helping Ranchers Navigate Drought Pressures

In October of 2022, the U.S. Drought Monitor reported the state of Kansas was in drought, with 58% of the land in the extreme to exceptional range. These conditions required difficult decisions be made by cattle producers.

To help producers navigate the situation and protect the state's cow supply, K-State Research and Extension professionals organized in-person and online events on topics like risk management, grazing, alternative feedstuffs, water, and forage quality and other drought-related challenges. Through these sessions, more than 520 cattle operations were supported in making difficult drought-related decisions.

Forage quality is also a concern during drought. In addition to warning of potential forage toxicities caused by drought, extension professionals assisted producers in sampling and analyzing feedstuffs. More than 1,600 samples were collected and analyzed. Extension professionals shared findings through one-on-one consultations, which impacted decision making on appropriate management practices. In total, more than 2,000 conversations about forage quality and feed rations took place across the state.



520

CATTLE PRODUCERS
ATTENDED DROUGHT-
RELATED EVENTS

1,600

FORAGE SAMPLES
COLLECTED AND
ANALYZED



Improving Water Conservation in Home Landscapes

The statewide drought also impacted homeowners – causing them to evaluate and consider less water-reliant landscaping. Educating Kansans on proper practices became a priority for extension horticulture professionals, ranging from watering programs to suggesting hardy plants to consider for their yards.

Through a multitude of educational efforts including the K-State Garden Hour webinar, county and district-wide horticulture programs and special events, Extension Master Gardener outreach and more, approximately 16,000 Kansans received information on drought-tolerant home landscapes. A follow-up survey showed that program participants were choosing hardier plants and using water conservation techniques like mulching and watering deeply and less frequently.

Teaching Youth Conservation Practices

Educating youth about biodiversity and involving them in nature experiences is critical for sustaining the future of our biodiversity in Kansas, which impacts their own well-being. Research shows that youth who have regular experiences in nature are more likely to have a sense of community, greater quality of life and higher self-acceptance.

To nurture this growth, Central Kansas District offered nature experiences for youth in their communities. Participants studied composting, tree planting and community gardening. This program also led to the planting of 85 native trees and shrubs in Lakewood Park in Salina. During this Earth Day activity, 225 fourth graders learned about the importance of native trees to biodiversity.

Overall, 375 youth and college students expanded their knowledge of the natural world and were supplied information to help them advocate for nature and biodiversity within their peer groups.

85

**NATIVE TREES AND
SHRUBS PLANTED
IN SALINA**

225

**FOURTH GRADERS
LEARNED ABOUT
NATIVE TREES**

375

**YOUTH AND
COLLEGE STUDENTS
PARTICIPATED**



HEALTH

We are committed to supporting the health and wellness of Kansas communities. Health and wellness describes more than the absence of illness or injury. It includes physical, mental, financial and social wellness across life stages for all socioeconomic groups.



Suicide Prevention Training for Kansas

In Kansas, a life is lost to suicide every 16 hours. In 2023 the rate of suicide among Kansans was 27.5% higher than the national average. With these rising numbers, prevention measures are imperative to saving lives.

K-State Research and Extension's Stress and Resiliency team has stepped up its efforts to offer Question, Persuade and Refer (QPR) suicide prevention training across the state. This training teaches individuals how to be comfortable talking about suicide and how to recognize warning signs.

Throughout the year, 13 QPR training sessions were offered to 253 participants across the state. Extension professionals, 4-H volunteers, community members and mental health committees gained knowledge on how to recognize signs and encourage someone to seek help for suicidal ideations.

Identifying Social Determinants of Health

According to the Centers for Disease Control (CDC) and Prevention, where a person is born, works and lives affects his or her overall health. Nutritious foods, local job opportunities, safe housing, education, healthcare, recreational facilities and more, are all important to the quality and length of life.

Noticing a disparity in the average life expectancy across Kansas counties, extension professionals engaged in Policy, System and Environmental (PSE) work to discover sustainable solutions to closing the gap and improving life expectancy. This work included finding and researching barriers such as economic well-being and food insecurity. Once identified, Family and Consumer Science extension professionals went to work in their communities to address them.

Examples of this work included a prison gardening program that supplied one Kansas community with 3,000 pounds of produce. Another was a community partnership and grant that led to the creation of three mental health crisis facilities. Other programs addressed access to healthy foods and supplied basic necessities to those in need.

By the end of 2023, extension professionals and local partners raised \$115,000 in grants and other funds to support health-related PSE projects in their communities. These efforts directly helped 4,373 Kansas citizens.

\$115,000

**RAISED IN GRANTS AND
OTHER FUNDS BY LOCAL
PARTNERS**

4,373

**KANSAS CITIZENS HELPED
BY HEALTH-RELATED
PROJECTS**



COMMUNITY VITALITY

Rural, suburban and urban communities throughout Kansas face many similar and unique challenges. Through efforts like grant writing workshops, leadership development and linking small businesses with university resources and support, we are helping to build, grow and sustain communities across Kansas.

Expanding and Improving Grant Writing

For several years, K-State Research and Extension's grant writing workshops have helped Kansans acquire funds to improve their communities. Since 2016, 2,616 Kansans have participated in workshops and have written more than \$41,800,000 worth of successful grants.

This year, a new model of grant writing workshops was created to target the Bipartisan Infrastructure Law (BIL) and Build Kansas Fund. The model introduced table discussions and collaboration training activities, and more engagement with grant writing experts from across the state.

The new model was established in a region of Kansas experiencing economic growth. The computer chip plant being built in Coffey County is expected to bring 1,200 jobs to the area, which increases the need for local infrastructure like housing, hotels, roads, and water and sewer systems. The workshop, which took place in the neighboring Osage County, taught 61 participants how to apply for grants necessary to fund infrastructure projects.





Improving Communities' Access to Childcare and Child Development

Rural Kansans have limited access to childcare and early childhood education. The scarcity of services limits the economic well-being and quality of life for families in Kansas. Research shows that a lack of affordable, quality childcare has multiple negative impacts by placing emotional stress on families and causing children to miss out on early childhood development activities.

Local extension professionals partnered with organizations in their communities to lead coalitions that addressed this childcare access challenge. For several years, these coalitions have been establishing partnerships, completing feasibility studies, creating strategic plans and raising funds.

Payoffs for this work began taking shape in 2023. Extension professionals raised approximately \$2,751,000 to expand and improve childcare access in Kansas communities. They also provided grant writing assistance and continuing education opportunities to current childcare providers to improve the support and quality of childcare. These efforts directly helped 861 families. This momentum will continue into 2024 as extension professionals plan to further expand access to childcare across the state.



Addressing Food Insecurity with Gardening Programs

Households experiencing food insecurity rely on food pantries for sustenance. Those food pantries count on donations, which means the stocking of fresh fruits and vegetables isn't always guaranteed. To make healthy options available to these organizations, Extension Master Gardener volunteers maintained community garden projects to grow and donate fresh produce.

During the year, 76,122 servings of fresh produce were grown and donated by 436 trained Extension Master Gardener volunteers. Volunteers maintained 28 community garden sites, harvested more than 25,374 pounds of produce and donated food to 54 local food assistance organizations. However, the benefit of this work extends beyond donating food, it includes educational programming led by Extension Master Gardeners to teach adults and children how to successfully grow their own food.



25,374

POUNDS OF PRODUCE
WERE HARVESTED AND
DONATED

54

KANSAS FOOD
ASSISTANCE
ORGANIZATIONS
DISTRIBUTED GOODS

28

COMMUNITY
GARDEN SITES



DEVELOPING TOMORROW'S LEADERS

The complex global society of the future will require leaders with effective teamwork and communication skills. We are dedicated to preparing leaders of all ages, so they may contribute to a vibrant Kansas economy for years to come.

Creating Educational Opportunities for Youth

Through a three-year, \$4,000,000 grant, Kansas 4-H created a summer engagement program to address the impact of learning loss experienced by children during the COVID-19 pandemic. Through the program, youth across Kansas explored and engaged in subjects focused on science, technology, engineering and mathematics (STEM), agriculture and natural resources, creative arts, family and consumer sciences and personal development.

To implement the program, 82 college and high-school aged students were employed as Kansas 4-H summer interns. They worked with extension professionals to plan, organize and facilitate learning opportunities during a 12-week period. Partner organizations like Kansas SNAP-Ed, the Kansas Cosmosphere and Kansas Corn also contributed resources for learning activities.

By the end of the summer, 27,611 Kansas youth participated in the program, which included 715 activities, 1,576 learning sessions and 2,587 hours of direct educational instruction.

Another STEM educational program targeted home-schooled youth in northwest Kansas. The Northwest Research Extension Center STEM Field Day hosted 80 students from the Colby area and provided lessons in entomology, physical education, computer coding, nutrition and more. Upon completion, 55% of participants indicated increased interest in at least one of the subjects covered.



715

LEARNING
ACTIVITIES



1,576

LEARNING
SESSIONS



27,611

KANSAS YOUTH
PARTICIPANTS





Helping Youth Develop Communication and Leadership Skills

According to American College Testing (ACT) only three out of 10 high school graduates are considered career ready. This means they lack skills in professionalism, oral and written communications, teamwork and critical thinking.

To prepare Kansas 4-H members for post-secondary education and future careers, K-State Research and Extension's Youth Development team created a leadership and communication educational series with the support of National 4-H and Nebraska 4-H curriculum. The series consisted of 14 lessons which addressed subjects like public speaking, healthy communication, relationship building and how to facilitate group discussions. Youth who completed the series indicated they had gained confidence and improved skills necessary to being successful after high school.



Encouraging Healthy Behaviors in Youth

According to the Kansas Health Institute, issues ranging from suicide to substance abuse are impacting the state's youth population. In response to these issues and other health concerns, Kansas 4-H was gifted \$100,000 by Blue Cross and Blue Shield of Kansas, Blue Cross and Blue Shield of Kansas City and Anthem Partnership Holding Company to implement health initiatives specifically for youth.

During the 2023 4-H Discovery Days, Kansas 4-H launched the "Healthy Blue, Healthy YOUth" initiative by engaging 202 4-H members in a discussion about their mental health and physical well-being. Through this conversational activity, youth identified key areas important to teens' health. Top concerns were mental health, drugs, vaping, alcohol, social media and stress.



Learn more about Kansas 4-H
at kansas4-h.org.

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