

K-STATE

Research and Extension

Sunflower Extension District #6



January 2025

Online! Newsletter

www.sunflower.ksu.edu

Sunflower Extension District

Goodland Office

813 Broadway
Room 301
Goodland, KS 67735
(785) 890-4880
Fax (785) 890-4879

Sharon Springs Office

118 N Gardner St.
P.O. Box 189
Sharon Springs, KS 67758
(785) 852-4285
Fax (785) 852-4284

St. Francis Office

212 E. Washington St.
P.O. Box 667
St. Francis, KS 67756
(785) 332-3171
Fax (785) 332-3199

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Go to www.sunflower.ksu.edu for more details on these programs.

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Cooking for One or Two



Individuals living in one or two-person households may find it challenging to plan meals, use leftovers, or justify the time required to prepare and clean up from a meal for one or two servings.

This educational program will teach you:

- easy and practical ways to prepare meals for one or two people
- gain confidence in recipe modification
- identify ways to repurpose or reuse leftovers
- reduce the amount of time spent cooking
- learn food safety standards
- learn how to shop to reduce food waste and to save money

Program will be held in: St. Francis, January 7 @ noon CT
Goodland, January 14 @ noon MT
Sharon Springs, January 15 @ noon MT

All sessions will be held at the local Extension Office!

January is RADON month. Stop by your local Extension Office for a RADON test if you would like to test your home. \$8.50/kit



Crop Production and Soil Properties Impacts of Integrating Annual Forages and Ruminant Livestock into Wheat-based Cropping Systems

This is an overview of research conducted at the K-State Agriculture Research Station in Hays. The complete research report, with the details on how the study was conducted, a description of the soil measurements and data tables with yields, is posted here: <https://newprairiepress.org/kaesrr/vol10/iss5/5/>

Introduction Intensifying dryland cropping systems with annual forages and integrating ruminant livestock can increase profitability, enhance fallow water use efficiency, and improve soil health by increasing residue cover and reducing wind and water erodibility. Currently, the most common crop rotation in this region is winter wheat (WW)-summer crop-fallow (F). The most common crops utilized within that rotation are grain sorghum (GS) and corn (C).

Typically, after the summer crop is harvested, a 12- to 14-month fallow period is used to build soil water content for the next WW crop. Due to high evaporation in this climate, only 17 to 30% of precipitation is retained as stored soil moisture during the fallow period (Peterson & Westfall et al., 2004). Even with no-till (NT), less than half of precipitation is retained, and soil cover is lost. Intensifying the rotation with annual forages may reduce soil water and have a negative impact on subsequent grain yield, but the forage that is produced for grazing and haying may offset negative impacts to profitability.

Adding annual forages in wheat-based systems may even boost profitability (Holman et al., 2018, 2021, 2023a, 2023b; Carr et al., 2020). Concerns also may arise with the negative impacts haying and grazing could potentially have on soil organic carbon (SOC) reserves, water stable aggregates, and wind erodible fraction due to grazing or haying the crop residue. Grazing is often seen negatively as it may increase soil compaction as indicated by greater bulk density (BD) and penetration resistance (PR).

The objective of this study was to analyze crop yield and soil health impacts of intensifying a traditional NT WW-GS-F system with annual forages, and integrating ruminant livestock to graze forages and crop residues.

Procedures. This study was initiated at the K-State Agricultural Research Center– Hays in Hays, KS, with all phases of the experiment in place by 2021. The study design was a randomized complete block with four replications in a WW-GS-F rotation system. The study compared a WW-GS-F rotation with grazing of GS stalks and with grazing or haying of annual forages grown in place of GS. Each crop phase and the hayed or grazed treatments were present each year.

Each treatment was grown under NT conditions. Treatments were:

1. Year 1: winter wheat; Year 2: grain sorghum; Year 3: fallow: (WW-GS-F)
2. Year 1: winter wheat; Year 2: grain sorghum (grazed stalks); Year 3: fallow: (WW-GSG-F)
3. Year 1: winter wheat/double-crop forage sorghum (grazed); Year 2: forage sorghum (grazed); Year 3: fallow: (WW/FSG-FSG-F)
4. Year 1: winter wheat/double-crop forage sorghum (hayed); Year 2: forage sorghum (hayed); Year 3: fallow: (WW/FSH-FSH-F)

Results Summary. Results showed that full-season forage sorghum harvested for hay produced 5,994 lb/a on average, while post-wheat forage sorghum harvested for hay produced 1,682 lb/a. Before grazing, full-season forage sorghum produced 9,735 lb/a with about 51% of biomass remaining as residue after livestock were removed. On average, post-wheat forage sorghum produced 2,988 lb/a before grazing. Because of smaller yields, post-wheat forage sorghum plots were grazed only in one year when 82% of biomass remained as residue on the plots after livestock were removed.

In 2023, WW yields were low due to dry weather, but there was no difference among treatments and average was 15 bu/a.

The WW/FS-FS-F (grazed) treatment had greater crop residue cover (77%) at winter wheat planting than all other treatments (53%) in fall 2023.

No differences in bulk density or penetration resistance in the 0 to 2-inch and 2 to 6-inch soil depths were observed across treatments. Despite no differences in bulk soil organic carbon (SOC) in the 0 to 2-inch and 2 to 6-inch soil depths, dry aggregate associated SOC was greater with WW-GS-F (grazed) and WW/FS-FS-F (grazed) treatments than WW-GS-F and WW/FS-FS-F (hayed).

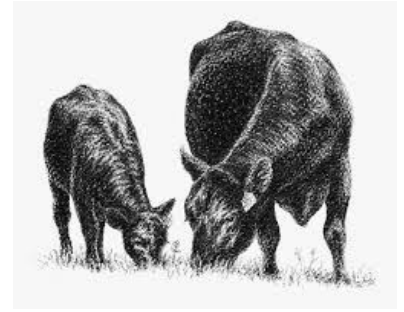
No differences in mean weight diameter (MWD) of water stable aggregates or the wind-erodible fraction were observed across treatments.

These preliminary results suggest that intensifying the WW-GS-F rotation with annual forages and integrating livestock increased available forage, soil residue cover, and dry aggregate associated organic carbon with no effect on winter wheat yields.



Save the Date!

Cow/Calf Clinic



Dr. Gregg Hanzlicek, Kansas State University Veterinary Professor and Kansas State Veterinary Diagnostic Laboratory Associate Director



Mrs. Tressie Mitzner, Kansas State University Associate Extension Agricultural Economist and Kansas Farm Management Association - Northwest Executive Economist



Mr. Caleb Morris, Farm Credit of Western Kansas

When: Monday, February 17th, 2025

@ 5:30 PM C.T.

Where: American Legion Hall in Bird City, KS

Meal will be provided!

Registration is \$10, can be paid in advance or at the door.

RSVP by Friday, February 7th

Call the extension office or register online at https://kstate.qualtrics.com/jfe/form/SV_885xP9URt3mabZk





Healthy Body, Healthy Brain

What you eat, how much you move, how well you sleep, and how you manage stress affects nearly every aspect of your well-being, including physical (body) and mental (brain) health. Research also shows a connection between heart and brain health. By keeping your heart healthy, you also lower your risk for stroke, dementia, and other brain problems.

Age-related cognitive decline is common. It's been said, "you are what you eat" and now scientific evidence suggests diet plays a bigger role in brain health than previously suspected. There is strong evidence that indicates the human gut serves as type of a "second brain" that affects not only digestion but also mood, health, and thoughts.

The connection between these two systems may help explain the mental-physical relationship. Simply stated, foods that promote gut health not only may be good for you physically; they also may help your mental state, easing such conditions as depression and anxiety.

Typically, American diets lack diversity and are high in fat and sugar, all of which reduce healthy bacteria in the gut.

Eat a lot of vegetables, fruit, beans, and legumes that provide many nutrients that support a healthy gut. They are also high in fiber, which supports the growth of healthy bacteria.

Eat whole grains. They contain fiber and non-digestible carbohydrate substances. Since they are not digested, those substances move into the large intestine and are broken down.

Cooking for One or Two

A healthy eating pattern is essential for current and long-term health. Individuals living in one- or two-person households may find it challenging to plan meals, use leftovers, or justify the time required to prepare and clean up from a meal for one or two servings.

Considering food prices and health outcomes, it is more important now than ever to learn how to use practical ways to prepare healthy meals at home, feel confident in food preparation, and repurpose leftovers to reduce meal preparation time in the kitchen.

Cooking for One or Two Programs

I will be giving programs in the Sunflower Extension District in all three counties.

- * **January 7 in St. Francis at noon CT**
- * **January 14 in Goodland at noon MT**
- * **January 15 in Sharon Springs at noon MT**

They will all be given in the Extension Offices!!

This lesson will provide tips for individuals as they prepare healthy meals in a one- or two- person households. Although it could be helpful for larger families as well. Participants will gain knowledge of how to prepare meals at home, while utilizing knowledge gained to reduce food waste, maintain their food budget, and follow food safety guidelines.

Participants will be able to:

- * Learn easy and practical ways to prepare meals.
- * Gain confidence in recipe modification.
- * Identify ways to repurpose or reuse leftovers.
- * Reduce the amount of time spent cooking.
- * Learn food safety standards.
- * Learn how to shop to reduce food waste and to save money.



Summer Camp Registration is Open for 2025 Season

[Submitted by Jared Gleason](#)

Families and youth eager to experience the excitement of 4-H camp at Rock Springs Ranch can secure their spots for the upcoming summer sessions. This includes mini camp, half week and full week sessions, teen leadership programs and several new specialty camps. The transportation schedule is available at: <https://www.rockspringsranch4hcamp.org/transportation/>.

As in years past, registration for the Leaders in Training (LIT) and Counselors in Training (CIT) programs will be covered by generous philanthropic support from the Patterson Family Foundation. To apply, youth must complete a letter of interest.

Last year, we did reach capacity in a few sessions early in the registration process. Early bird registration rate (10% discount) ends on December 31, 2024.

If you have any questions, please reach out to me directly at jgleason@rockspringsranch.org or by calling 785-257-3221.

The session dates are below. We look forward to seeing you in 2025!

Half-Week Sessions: (Rising 3rd-12th graders)

Session 1: June 1-4
Session 2: June 4-7
Session 4: June 15-18
Session 6: June 29 - July 2

Week-long Sessions: (Rising 3rd-12th graders)

Session 3: June 8-13
Session 7: July 6-11
Session 8: July 13-18

Mini Camp Session: (Rising 1st-3rd Graders)

Session 1: June 22-24
Session 2: June 25-27

Leaders in Training (LIT): (Rising 10th-11th graders)

Session 1: June 8-13
Session 2: June 22-27
Session 3: July 6-11
Session 4: July 13-18

Counselors in Training (CIT): (Rising 12th graders)

Session 1: June 8-13
Session 2: June 22-27
Session 3: July 6-11
Session 4: July 13-18

Specialty Camps: (Rising 6th to 9th graders)

Ranch Camp: June 22-27
Shooting Sports: June 22-27
Cooking Camp: June 22-27
Outdoor Wilderness Leadership Skills (OWLS) Camp: June 22-27

Family Camp: (All ages are welcome!)

Please note: Many of the activities offered are designed for ages 6 and up
Session 1: May 16-18
Session 2: August 8-10





Citizenship In Action

What: Would you like to have more influence in laws and rules that affect your life? Then you'll want to go to Kansas 4-H Citizenship in Action! This two day event is sponsored by the State 4-H Youth Leadership Council. The purpose of the event is for Kansas youth to learn how the state legislative process works and how their voice and participation in decision-making can make a difference in their local communities. The legislative visit will not only familiarize youth with the capitol building, but will also show them how they can affect the legislative process.

When: February 16-17, 2025

Where: Topeka KS - Hotel Topeka at City Center (formerly Capitol Plaza)

Who: Youth 13-18 years old by January 1 of the current year

Registration: Coming Soon!

Registration Deadline: January 24, 2025

BANQUET will be Sunday evening, if you are asking your legislators to join, please email dsratlif@ksu.edu by Feb 3 with any additional attendees. The cost is \$35 for additional attendees.

Congratulations!

KS Project Record Books Qualifying for Regionals

Sherman County

Kaelyn Schilling - Beef
Rylea Martin - Foods
Hayden Short - Leadership
Matthew Berls - Rabbit

Wallace County

Addison Aldridge - Leadership
Ayden Aldridge - Woodworking
Hayden Stubbs - Beef
Kasen Stramel - Swine

Cheyenne County

Harmony Wilson - Foods

Spring Events

It's not too early to start thinking about **Spring Events** which include:
4-H Club Days & Talent Night,
Project Talks, Demonstrations,
Creative Tables, Promotional Posters,
and Model Meetings.
Get ahold of your local Extension office for dates and times

Horse Panorama



The State [Horse Panorama](#) for adults & youth will be on February 22-23, 2025 @ Rock Springs



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<http://www.facebook.com/sunflowerwallace>
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New 4-H policy Guide: <https://www.kansas4-h.org/resources/policy-guide/Kansas%204-H%20Policy%20Handbook%202023.pdf>



January 2025

Happy New Year



Sunflower Extension District

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1. Happy New Year! Extension Offices Closed	2.	3.	4.
5.	6.	7. CN-Cooking for One or Two noon CT	8. SH-Foods 3:30 - 5:00 PM MT	9.	10. Qualifying KS Project Record Books- due to the Extension Office	11.
12.	13.	14. SH-Cooking for One or Two noon MT	15. WA-Cooking for One or Two Noon MT	16. KS Project Record Books Regional Judging Scott City	17.	18.
19.	20. Extension Offices Closed 	21. SH-Leaving A Lasting Legacy for Farmers 5-8 pm CT	22.	23.	24.	25.
26. CIA - Topeka Registration Due	27.	28. SH-Leaving A Lasting Legacy for Farmers 5-8 pm CT	29.	30.	31.	



Sunflower Extension District #6
Goodland Office
813 Broadway, Room 301
Goodland, KS 67735

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Manhattan, KS 66502



Sunflower Extension District #6 Offices

www.sunflower.ksu.edu

Goodland Office

Karen Nelson

4-H Youth Development Agent/Director
karennelson@ksu.edu

Sherri Keith

Office Professional/4-H Program Assistant
sherrick@ksu.edu

Sharon Springs Office

Melinda Daily

Family & Consumer Science Agent
mdaily@ksu.edu

Wendy Benisch

Office Professional
wbenisch@ksu.edu

St. Francis Office

Rheanna Melcher

Ag & Natural Resources Agent
rmelcher@ksu.edu

Linda Elfers

Agent Assistant
lelfers@ksu.edu

K-State Northwest Research and Extension Center - Colby

Jeanne Falk Jones

Multi-County Agronomist for Cheyenne, Sherman, and Wallace Counties
jfalkjones@ksu.edu

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