

K-STATE

Research and Extension

Sunflower Extension District #6



January 2023



Newsletter

www.sunflower.ksu.edu

Sunflower Extension District

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www.ksre.ksu.edu

January 2023

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

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Cover Your Acres Winter Conference

January 17 and 18
The Gateway in Oberlin

Sessions:

Current Financial Status of NWKS Farms
Oils, and Surfactants, and Drift Agents, Oh My!
The world of adjuvants
Nutrient Management Strategies
Cover crops and grazing for soil health in
western Kansas
Weather Outlook and Mesonet Tools
Are you able to help your neighbor?

Make your plan: Weed Management 2023
Market Outlook - Local to Global Influences
Row-Crop Decisions: Dryland and Limited
Irrigation Management
Wheat: The crop with 9 lives
Panel Discussion: When to hold them,
when to trade them. Machinery
management strategies

The full schedule and registration: www.northwest.ksu.edu/CoverYourAcres
The same schedule is offered both days, so you can pick which day works best for your schedule!

Tri-State Cow Calf Symposium

"Adapting in Times of Uncertainty"

January 27th, 2023 ~ Bird City, KS

Program includes:

- Cattle Market Outlook
- Short Term Forage Considerations
- Ground Beef Alternative Taste Panel
- Weather Outlook
- Producer Panel "Planning & Pivoting for Drought"



Please see the Livestock page for more details.

Registration required by January 20th

Individual: \$15

Student/Youth: \$10

Fees cover lunch and refreshments

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COLORADO STATE UNIVERSITY
EXTENSION

*For more information see the Livestock page

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Yield and Profit Maximizing Annual Forage Rotations in the Central Great Plains

With the dry conditions and concerns with forages to feed cattle, this article from our K-State Agronomists John Holman at Garden City and Augustine Obour at Hays outlines forage production system research.

Introduction

Forage-based rotations with greater forage nutritive values and efficient resource utilization are needed to increase forage availability in the central Great Plains. The objectives of the current study were to quantify forage yield, nutritive value and net return from individual crops and overall crop rotation sequence of winter triticale, forage sorghum, and spring oat.

Materials and Methods:

Forage yield, nutrient analysis and economic data presented herein were from a study conducted at the Southwest Research-Extension Center near Garden City, KS from 2013 through 2020. The treatments were (1) continuous forage sorghum rotation with no-tillage (S-S NT); (2) winter triticale/double crop forage sorghum-forage sorghum-spring oat rotation with no-tillage (T/S-S-O NT); (3) winter triticale/double crop forage sorghum-forage sorghum-spring oat rotation with single tillage after spring oat (T/S-S-O RT); (4) winter triticale/double-crop forage sorghum- forage sorghum-forage sorghum-spring oat rotation with no-tillage (T/S-S-S-O NT); (5) winter triticale/ double-crop forage sorghum- forage sorghum- forage sorghum-spring oat with single tillage after spring oat (T/S-S-S-O RT); and (6) a winter triticale-forage sorghum-spring oat with no-tillage (T-S-O). There were four replications for each treatment and plot size was 30 ft by 30 ft.

Results

Averaged over the years, there was no significant treatment effect on oat forage yield due to tillage and crop rotation treatments. Forage sorghum yield was 26% greater in the S-S compared with T/S-S-O (NT) treatment. Triticale forage yield was 41% more in the T/S-S-S-O (RT) compared with T/S-S-S-O (NT) or

T/S-S-O (RT) treatments.

Overall, annualized forage yield was greatest for S-S and T/S-S-S-O (NT and RT) and was the least for T/S-S-O (NT) and T-S-O treatments (Table 1).

Nutritive value of the three forage crops in the study varied as expected. Triticale had the greatest CP, forage sorghum had the

greatest ADF and NDF, and oat had the greatest Ca, K, P, and IVTDMD compared with the other forage species. The higher nutritive value of oat and triticale combined with the higher yield of forage sorghum integrated into one crop rotation is a benefit of the forage rotation, i.e., to supply all necessary nutrients and biomass yield to meet livestock demand. Crude protein is an essential nutrient for livestock and is positively correlated with both dry matter digestibility and organic matter digestibility where as ADF and NDF are negatively correlated with forage digestibility. Crude protein content decreases with maturity and plants were harvested at heading in this study to optimize both yield and nutritive value. Legumes (not included in our study) have much higher CP than grasses, however, in semi-arid regions, legumes tend to produce less dry matter and often not enough to cover the cost of production (Holman et al. 2018, 2022). Among treatments, there was a 23-31% greater CP for T-S-O and T/S-S-O compared with S-S. The differences in CP among rotation treatments is consistent with individual crop CP. The presence of forage sorghum in rotation tended to decrease CP concentration because forage sorghum had less CP than triticale or oat. The nutritive value differences were minimal among rotation treatments with the exception that S-S tended to have greater ADF and NDF, and lower CP, IVTDMD, Ca, and P concentrations compared with other treatments. Of the treatments, S-S was among the top in net return due to greater forage sorghum yields. However, the T/S-S-S-O (RT) treatment was among the greatest in all four measures, i.e., productivity, stability (based on prior report), nutritive value, and net return (based on this report). Our findings also showed raising forage sorghum and triticale may be more economical compared to some purchased alternatives. We concluded forage producers should consider growing a rotation of forages throughout the year to reduce production variability and weather risk, while increasing forage yield, nutritive value, and value in designing profitable forage systems.

Table 1. Forage accumulation in oat, forage sorghum, and triticale for six rotation by tillage Treatments at Garden City, KS, average for years 2013 – 2020.

	Oat	Forage Sorghum	Triticale	Treatment	
				Total	Annualized
		-----lb/ac-----		lb/ac (1 cycle)	lb/ac
S-S (NT)		6187		6187	6187
T/S-S-O (NT)	1691	4891	2773	13333	4615
T/S-S-O (RT)	1665	5342	3803	15581	5325
T/S-S-S-O (NT)	1727	5932	2779	21753	6067
T/S-S-S-O (RT)	1596	5657	3935	21612	6032
T-S-O (NT)	1682	5518	3483	11754	3918
HDS ²		957	1040	3776	862
Pr > F	0.896	0.019	0.001	<0.0001	<0.0001



Tri-State Cow Calf Symposium set for January 27th, 2023



Tri-State Cow Calf Symposium

"Adapting in Times of Uncertainty"

January 27th, 2023

American Legion Hall

113 W Fourth Street

Bird City, KS

K-STATE

Research and Extension



COLORADO STATE UNIVERSITY
EXTENSION

Name: _____

Company: _____

Address: _____

City/State/Zip: _____

Phone: _____

E-mail: _____

Individual: \$15
Student/Youth: \$10
Fees cover lunch and refreshments

Make checks payable to:

Sunflower Extension District

**By January 20, Return Registration Form
and Payment to:**

Cheyenne County Extension Office
212 E. Washington
St. Francis, KS 67756

With questions call Cheyenne County
Extension at 785-332-3171

K-State Research and Extension is committed to making its services, activities and programs accessible to all participants. Reasonable accommodations for persons with disabilities may be requested by contacting Cheyenne County Extension (785)332-3171. Notify staff of accommodation needs as early as possible. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. K-State Research and Extension is an equal opportunity provider and employer.

Program Schedule

➤ **9:30 a.m. CT**

Registration and Refreshments

➤ **10:00 a.m. CT**

Market Outlook

Stephen Koontz, Ph.D (or alternative)

Colorado State University Professor, College
of Agricultural Resources & Economics

➤ **10:30 a.m. CT**

Short Term Forage Considerations

Jerry Volesky, Ph.D

Professor, Nebraska Extension Range &
Forage Specialist

➤ **11:00 a.m. CT**

Ground Beef Alternative Taste Panel

Lane Egger (or alternative)

K-State Research & Extension Associate

➤ **12:00 noon CT**

Lunch and visit with sponsors

➤ **12:40 p.m. CT**

Weather Outlook

Chip Redmond

Assistant Agronomist Incident Meteorologist
for Kansas Forest Service

➤ **1:00 p.m. CT**

Producer Panel - planning and pivoting for drought

Moderated by Keith Harmony, Ph.D

➤ **2:00 p.m. CT**

Wrap-up and Adjourn



HAPPY NEW YEAR

Start the New Year Out Right!!!

Crispy, crunchy, colorful, and curiously delicious — all are words that describe a wide variety of vegetable, fruit, and whole grain dishes. The body's nutritional requirements can be adequately met by consuming plant-based foods. Most plant-based foods are naturally low in calories and fat. Couple that fact with the high amount of antioxidants and fiber found in plants and a strong case is made for putting more plants on your plate.

WHAT ARE WE EATING?

On average, adults living in the United States consume almost 600 calories per person beyond what is needed each day for growth, maintenance, and physical activity.

The estimated number of calories needed by the average adult is 2,200 each day. The increase in calories eaten beyond those needed for growth, maintenance, and physical activity explains why the number of overweight children and obese adults in the U.S. is increasing.

Think about it. When our stomachs are empty and our schedules are full, we tend to grab and eat. Chances are, there is not much thought as to how nourishing or even how satisfying the foods really are. Then, when we gain a few extra pounds, we look to quick-fix solutions for help. Instead, why not turn to a diet with more plants that is full of nutrients, low in calorie, and very satisfying?

Many factors are identified as causes for weight gain. The balance of calories stored and burned depends on genetic makeup, the level of physical activity, and how many calories the body burns while you rest. Weight is maintained when calories consumed in a day are consistently burned. Weight gain occurs when more calories are consumed than expended.

Vegetables, fruits, legumes, and whole-grain foods typically provide a feeling of fullness with fewer calories, compared to other types of foods. Putting more of these kinds of plants on our plate can make it easier to manage your appetite and maintain body weight.

Transitioning to a healthier diet

Eat this	Instead of
Brown rice	White rice
Stone-ground 100% whole-wheat bread	Enriched white bread
Rolled oats	Refined grains and sugary cereals
Whole fruits	Fruit juice
Baked sweet potato	French fries
Whole grain flour tortillas	White flour tortillas
Legumes: lentils, peas and beans	Highly processed meal in a box
Air-popped popcorn	Cookies

WHERE TO GO FROM HERE

Many people simply live to eat. For improved health, now is the time to eat to live. Adopting a more plant-based diet requires a change in thinking. As research in nutrition has advanced, it has become apparent that there is room for improvement with the typical American plate. Consider including generous portions of vegetables, fruits, whole grains and lean protein choices at each meal. The options in the table above can give you an idea of where to start. This gradual transition to a plate with less high-fat and more nutrient-dense choices seems to be central in managing many of the health problems that concern us most.

It's your choice to choose what's right for your body and health.

Have a GREAT NEW YEAR!!!



GOALS



- What do you want to accomplish in 4-H this year?
 - What help do you need to reach your goals?
 - Who can help you reach your goals?
- How can you make sure you accomplish your goals on time?

**Because it is nearly impossible to accomplish something without a plan
—it is time to develop your ...**

Personal Goals

Improve my public speaking skills by doing a project demonstration.
Attend all club meetings.
Try out a new project.
Start on my projects and project record forms early in the year.

Learning Experience Goals

Attend a project meeting, self-study, or take a class to learn more about my projects.
Identify a skill you want to learn or improve.

Citizenship Goals

Identify a need in my community and do something about it.
Help someone or an organization in my community in my project area.
(i.e. donate something you make to a person or organization)

Leadership Goals

Teach one other person in a project area learn something I already know.
Take on a leadership role in my 4-H club to plan, teach, or organize something.

Kansas 4-H Project Goal Form

Project goals help you think about what you want to do, make, and learn in your projects this year.

They help you decide when you need to get started so you finish your projects on time!

There are 3 parts: the action (how you will do it), the result (what you will do), the timetable (when will do it?)

<https://bookstore.ksre.ksu.edu/pubs/4H1100.pdf> (Fillable sheet)

Contact:

Karen Nelson, 4-H Youth Development Agent
Sunflower District—785.890.4880
karennelson@ksu.edu

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Officer Training will be held in
Cheyenne County on January 3rd
at the Extension Office.



SUNDAY, FEBRUARY 12, 2023, 1:00 PM



K-STATE
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KANSAS 4-H DAY WITH K-STATE WOMEN'S BASKETBALL

\$25: Ticket, Voucher (\$10
concessions), & Shirt
\$15: Ticket & Voucher (\$10
concessions)

HOW TO GET TICKETS?

1. Register! Use the QR code or the link below!
2. Pick up ticket packages - location TBD (2/12/23, 11:30 AM-12:30 PM)
3. Doors open for the general public (2/12/23, 12:00 PM)
4. Tip-off! (2/12/23, 1:00 PM)

Online registration for this event will be due **January 15th, 2023**. No paper registrations will be accepted. To register, go to: <https://conta.cc/3UkNwIO>

Kansas State University Agricultural Experiment Station and Cooperative
Extension Service

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Resource: <https://www.apa.org/topics/resilience>



4-H Horse members please be aware of changes made to the new horse ID. Also Kansas State Fair qualifications. New information is posted on kansas4-h.org. Also an email was sent to 4-H horse members from the State Office. Contact the Extension Office with any questions.

785-332-3171.



Cheyenne County

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 Happy New Year	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16 Closed	17 Cover Your Acres	18 Land Lease Strategies	19	20 NW Area PRF Screening	21
22	23 Lunch & Learn CN 4-H Council 6:30 pm	24	25 Land Lease Strategies	26	27 Tri State Cow Calf Symposium	28 Horse Panorama
29 Kansas Day	30	31				



Happy New Year

Important Dates

January 1Happy New Year
January 2.....Prairie Dale
January 2 Extension Closed
January 4Foods
January 4.....JR Leader Meeting
January 8.....Ruleton Eager Beavers
January 10[Horse Panorama reg. due](#)
January 13.....KPRF going to the NW Area Screening due to Extension
January 15.....Sunflower 4-H Club
January 16.....Cloverbuds
January 16.....Country Clovers
January 16.....Martin Luther King/Extension Office Closed
January 20.....NWKS Record Book Judging
January 28.....[Horse Panorama](#)



Sherman County



Congratulations!

To Mason Berls for his
KS Project Report Form
That qualified to go to
Regionals in the
Wildlife Sports Fishing
Project.



Like us on
Facebook

Upcoming 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.**

4-H Days and Talent Night

Registration Due: February 10, 2023
Friday, March 10, 2023

Creative Tables

Registration Due: February 10, 2023
Friday, March 10, 2023

**F.Y.I. Your creative food table
could also be a talk!!!**

Promotional Posters

Registration Due: February 10, 2023

Please get in touch with the office for your
Club Model Meeting
to schedule your time with Karen.

**If you need information on Project Talks,
Demonstrations or Public Speaking stop
by or call the Extension Office at
785-890-4880.**

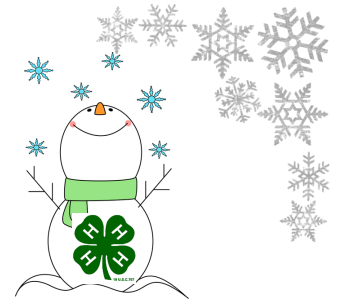
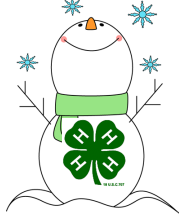


Horse Panorama

The State Horse
Panorama for
adults & youth will be at
the K-State
Salina Campus on
January 28, 2023
Registration closes:
January 10, 2023

Sherman January 2023

Happy New Year



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1. HAPPY NEWYEAR	2. Prairie Dale 5:30 PM Extension Closed	3.	4. JR Leader Meeting 10:00 -1:00 PM Foods 3:30-5:00 PM 4-H Building	5.	6.	7.
8. Ruleton Eager Beavers 3:00 PM 4-H Building	9.	10. Horse Panorama Registration Due	11.	12.	13. KPRF Books are due to the Extension Office	14.
15. Sunflower 4-H 3:00 PM 4-H Building	16. Cloverbuds 5:30 - 6:30 PM 4-H Building Country Clover 7:00 PM 4-H Building	17.  Extension Closed January 16, 2023	18.	19.	20. NWKS Regional KPRF Books Judging	21.
22.	23.	24.	25.	26.	27.	28. Horse Panorama K-State Salina Campus
29.	30.	31.				



Dates to Remember

January

9– 4-H Council Mtg—Sharon Springs

16– Office Close

17– Record Books due to office

20– KAP Judging—Hays

February

5– Large Animal Weigh-in

20– Office Closed

March

16– Babysitting Clinic – St Francis

20– County Club Days—TBD

24– Regional Club Days—Brewster—TBD

– NW 4-H Judging—Hays—TBD



4-H Council Meeting will be held at
the Extension Office January 9 @ 6:30
p.m.

Wallace County



Large animal weigh in will
be Feb. 5 from
2:00 –4:00 p.m.



Qualifying KAPs

Goat

Kenli Larson

Leadership

Brennan Aldridge

Record books that are going on to
regionals, are due in the
Extension Office by January 17.



January 2023

Wallace County

Sun	Mon	Tue	Wed	Thu	Fri	Sat
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1	2	3	4	5	6	7
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8	9	10	11	12	13	14
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4-H Council Mtg—
Sharon Springs

15	16	17	18	19	20	21
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- Office Closed

Land Leasing
Strategies

Cover Your Acres

22	23	24	25	26	27	28
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KAP Books due in
office
Conservation Mtg

Land Leasing
Strategies

Regional KAP
Judging— Hays
Cow Calf
Symposium

29	30	31
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K-State Northwest Research and Extension Center - Colby

Jeanne Falk Jones

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