

# K-STATE

Research and Extension

## Sunflower Extension District #6



December 2022

Online! Newsletter

[www.sunflower.ksu.edu](http://www.sunflower.ksu.edu)

Sunflower Extension  
District

### Goodland Office

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Fax (785) 890-4879

### Sharon Springs Office

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[www.ksre.ksu.edu](http://www.ksre.ksu.edu)

## December 2022

Go to [www.sunflower.ksu.edu](http://www.sunflower.ksu.edu) for more details on these programs.

### Inside Your Newsletter...

Crop Water Allocator Can Help with Cropping Decisions for Limited Water.....Crop Production page  
Drought's Impact on Future Grass Production.....Livestock page  
Stress Less and Have Fun During the Christmas Holidays!!!.....Family & Consumer page  
Tips for a Successful 4-H Club.....4-H Youth Development page

## The Power of Negotiation & Communication



*A 4-part series on Land Leasing Strategies for  
both landlords and tenants*



Lease Agree-  
ment Basics  
*January 18*



Landlord/Tenant  
Relations  
*January 25*



Negotiations &  
Communications  
*February 1*



Conservation  
Practices  
*February 8*

Wolak Building

1006 Center St, Goodland, KS

Supper at 4:30

Program from 5:00 to 7:30 pm MT

Detailed Schedule and Registration: [www.sunflower.ksu.edu/agronomy](http://www.sunflower.ksu.edu/agronomy)

Register by January 13

No registration cost to attend Goodland location because of support from local sponsors



## Crop Water Allocator Can Help with Cropping Decisions for Limited Water

As we have drought conditions continue across our area, we are making plans to use irrigation inputs to maximize returns and keep up with crop needs. One tool that is available to help with understanding how to maximize returns is the **Crop Water Allocator**. The **Crop Water Allocator** is part of the K-State Mobile Irrigation Lab and can be found online at [www.milab.ksu.edu](http://www.milab.ksu.edu).

With this tool, you can decide the best crop combinations for your fields and then estimate net returns. In the **Crop Water Allocator** you can choose multiple crops, different field splits and even make plans for multiple years.

“This **Crop Water Allocator** pushes the model toward the net return, so most of the inputs here could be modified toward their own local operation,” Aguilar said. It is also a good idea to work through multiple scenarios to better understand the function of the program and create a better fit for your farm.

In the program, you can customize the scenario to reflect your operation and current conditions and future scenarios. On the opening screen, you put in your acres under irrigation, soil type, rainfall, gallons per minute, and other input information for the field and irrigation capacity.

Field and Irrigation | Crops, Prices, Yields |  Corn |  Wheat

**Field and Location Information**

Acres: 120 | Soil type: Silt Loam | Annual Rainfall: 14 inches | Applied Irrigation: 18

Land Split: 50-50 | Multiple Year Run:

**Irrigation Information**

Discharge Rate: 350 GPM | Season Pumping: 2500 hrs | Pumping Lift: 200 ft | Well-head Pressure: 35

Efficiency: 90% | Fuel Type: Diesel | Fuel: \$4.25/gal | Repairs & Maint: 0.33 per ac-in | Labor: \$10

Based on 600 gpm, 130 acres, and 2500 hours of pumping, you would apply 23 inches of water in a season.

**Irrigation Costs Subtotal**  
\$11.24/ac-in  
\*not including labor costs

On the next tab, you put in the crops that you are willing to grow, anticipated prices and projected yields.

Field and Irrigation | Crops, Prices, Yields |  Corn |  Wheat |  (fallow)

	Price per unit:	Maximum Yield / Acre
<input type="checkbox"/> Alfalfa	120 /ton	12 /ton
<input checked="" type="checkbox"/> Corn	6.58 /bu.	220 bushels
<input type="checkbox"/> Sorghum	5.75 /bu.	140 bushels
<input type="checkbox"/> Soybean	10.22 /bu.	55 bushels
<input type="checkbox"/> Sunflower	9.2 /bu.	1500 pounds
<input checked="" type="checkbox"/> Wheat	9.5 /bu.	90 bushels
<input checked="" type="checkbox"/> (fallow)		

You can further customize the scenario by including your seed, fertilizer amounts/prices, herbicide costs and other input/operation/harvesting costs.

mycwa.engg.ksu.edu

Field and Irrigation | Crops, Prices, Yields |  Corn |  Wheat

**Corn**

**General Input Costs**

Nitrogen: 275.79 lb/ac | Use: optimal | \$0.44 /lb

Phosphorus: 87.84 lb/ac | \$0.8 /lb

Seed: 32 seeds/ac | \$2.89 /1000 seeds

Herbicide: \$30 /acre

Insecticide: \$36.48 /acre

**Subtotal** \$66.48/acre  
\*Not including nitrogen, phosphorus, seed

**Operation Costs**

Tillage: \$31.26 /acre

Planting: \$13.48 /acre

Fertilizer Appl: \$5.12 /acre

Insecticide Appl: \$5.24 /acre

Herbicide Appl: \$5.26 /acre

**Harvesting Costs**

Itemized  Flat Rate

Base Charge: \$28.58 /acre

Extra charge for yields exceeding 74 bushels: \$0.214 /bu.

Hauling: \$0.197 /bu.

**Subtotal** \$60.36/acre  
\*Not including harvesting costs

**Additional Returns and Costs**

Misc Returns: \$0.00 /acre

Misc Costs: \$0.00 /acre

Finally, when you click the ‘Calculate’ button, the program will show multiple scenarios for how to split water across a circle and with multiple crops. It will also show the economic return for each scenario. Once you click on a particular scenario, you can see the net return per acre at multiple crop prices.

update

Rank	Acres	Crop	Yield /acre	Applied Irrigation inches	Operating Costs \$/acre	Returns \$/acre	Total Return net \$/ac
1	60.0	Corn	204.3 bu.	18.0	\$714	\$1344	\$630/ac
2	60.0	Wheat	68.5 bu.	18.0	\$428	\$651	\$427/ac
3	60.0	Corn	204.3 bu.	18.0	\$714	\$1344	\$427/ac
4	60.0	Wheat	68.5 bu.	18.0	\$428	\$651	\$405/ac
5	60.0	Corn	102.2 bu.	9.0	\$476	\$672	\$384/ac
6	60.0	Wheat	47.1 bu.	9.0	\$291	\$447	\$223/ac
7	60.0	Wheat	2.1 bu.	0.0	\$115	\$20	\$208/ac
	60.0	Corn	220.0 bu.	27.0	\$836	\$1448	

Close

50% Corn | 50% Corn | Crop Price Comparison

**Net Return \$/acre**

Corn Market Price

4.83	5.18	5.53	5.88	6.23	6.58	6.93	7.28	7.63	7.98	8.33
273	344	416	487	559	630	702	773	845	916	988

The **Crop Water Allocator** can be downloaded to your computer or can be ran online. Other programs for water management include Crop Yield Predictor, KanSched for irrigation scheduling, a FuelCost calculator and a tool for comparing energy costs. These are all available on the K-State Mobile Irrigation Lab website: [www.milab.ksu.edu](http://www.milab.ksu.edu)



### **Drought's Impact on Future Grass Production**

Conditions have been less than favorable especially this past grass season. While producers do what they need to get their cows through the year, what implications do those decisions have on future grass production? Keith Harmony, a range scientist out of Hays recently released an article in the November issue of *Beef Tips* regarding historic data and what that can tell us about drought and future pasture productivity. Specifically looking at data from grazing studies conducted at the Hays Agricultural Research Center, Harmony was able to make some predictions based on what data patterns suggests.

Precipitation was the lowest on record for 1956 during this specific study, so low that grazing animals were removed from the pasture in August due to the low forage production. The year that followed was described as having above average precipitation. So what did that mean for forage production after an extremely dry year? All of the treatment pastures at different grazing intensity responded with above treatment average forage production due to the above average precipitation. Harmony suggests that the differences in forage production was the result of vegetation still present contributing to water collection, retention, and plant vigor. In the heavily grazed pastures where the forage left was minimal, forage production in the following year was decreased compared to more moderately grazed pastures. Fortunately, if cows were removed early due to lack of grass growth, the grass most likely stored enough carbohydrates to survive the winter and begin vigorous growth next spring. Harmony's final takeaway was that rainfall in 2023 will be the main driver of pasture production in the spring and summer returning

to normal, but will also depend on previous pasture management. Furthermore, he suggests having a drought plan in place and follow it accordingly as drought continues or comes back around in Kansas.

To discuss weather predictions, Chip Redmond is a meteorologist of the Kansas Mesonet who published a recent weather outlook in the October issue of *Agronomy eUpdate*. He summarized that La Nina was going to continue to dominate the weather pattern, but the weather forecast in general would most likely be warmer and drier than what was normal in years past. However, he is optimistic that in early 2023 that temperature and precipitation in Kansas has equal chances of being above, at or below normal. While this does not predict an above normal precipitation year per say, it does not rule it out.

In summary, drought and management decisions made during will have a carry over effect on future seasons. Producers should be planning ahead to handle such hardships as much as possible. If interested in planning and adapting in times of uncertainty, please consider attending and saving the date for the Tri-State Cow Calf Symposium to be held January 27th, 2023 in Bird City. The program will be heavily based on planning when conditions are less than favorable and include a producer panel segment of those who made adaptations during our most recent drought. Registration information can be accessed through the Sunflower Extension District Website at [www.sunflower.k-state.edu](http://www.sunflower.k-state.edu).

**For more information or resources for livestock production, please visit or call the Cheyenne County Extension Office at (785)332-3171.**

## **Tri-State Cow Calf Symposium**

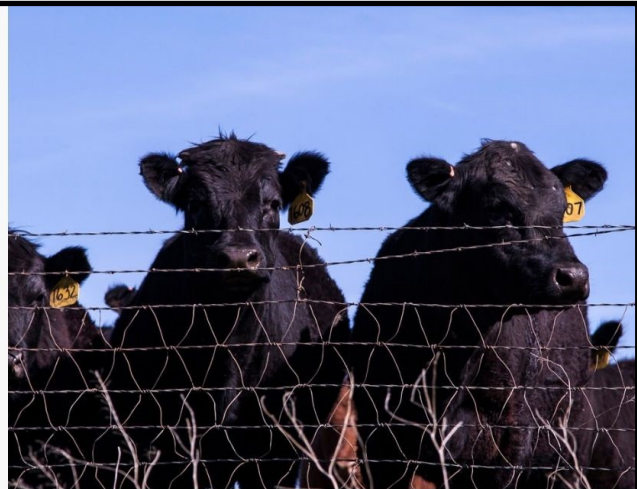
*Adapting in Times of Uncertainty*

January 27th, 2023  
American Legion Hall  
Bird City, KS

### **Topics Include:**

- Market outlook
- Short term forage considerations
- Ground beef taste panel
- Producer panel

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.



**Presented by**





## *Stress Less And Have Fun During the Christmas Holidays!!!*



Communication and planning are key to a happier Christmas Holiday get together.

Ahh, the holidays: a time for getting together with family, enjoying a fine meal and catching up on each other's lives. That is, of course, if the stress of the season doesn't ruin the party.

It's important for families to communicate their expectations as they go into a holiday season. It's really easy to be swayed by the hustle and bustle, and the buy-buy-buy, give-give-give party mentality.

This year could be different for some of our families that haven't been together for some time now. It will be important for all family members to keep in mind that there might be some children who have some shyness—maybe they don't want to give out hugs this year; maybe they don't fully recognize all their family members. It's going to be important to keep that in mind when we're interacting this year.

I am hopeful that we can get back to giving love and spreading joy to others.

I think it's important to identify ways that younger children can be involved in the planning process, and throughout the holiday season. Parents can give children their own calendar to keep track of time and events of places they will be going. A calendar gives kids ownership and allows them to plan and stick to a routine.

Teens and young adults can get distracted with devices, so families can think ahead about ways to keep them engaged with the family.

For older adults, situations with many people and background noise can be overwhelming and make it difficult for them to actively participate. Rooms with extra tables, or toys on the floor present tripping hazards.

Think about how families can increase their compassion and teach family members of all ages to recognize normal sensory decline in aging family members. By doing so, we hope to help older families to be more included and provide history and family tradition.

It's important for families as they enter the holidays to outline what is reasonable for them to host or accommodate their family members, and not be shy about communicating. This will help you keep in mind that you want to have time for everyone to congregate but it is okay to say enough is enough – it's time for us to go back to our environments where we're comfortable.

### **Bonding Thru Board Games**



Families live in a busy world in which time together is often lost in the buzz of activity. Family bonding time is important to maintain close relationships among family members.

One way to increase this time is through the use of Euro-style board games. A Eurogame, or Euro-style game, is a class of tabletop games that generally uses abstract pieces in a literal theme and is designed around the concepts of creating, developing, or nourishing. Euro-style games emphasize strategy while downplaying luck (players are allowed to control randomness) and indirect player conflict, which usually involves competition over resources. Eurogame activities create positive environments for relationships to grow.

*Happy Holidays!!!*



## Tips for a Successful 4-H Club

The success of the 4-H club is key to positive 4-H member experiences.  
How is your club doing?

What can your family do to make your club the best it can be?

- At least 80% of the members re-enroll each year.
- Each member receives recognition for their 4-H involvement; pins, project completion certificates or public recognition through a news article.
- The club has well planned meetings with three parts: business (group decisions, 15-20 minutes), learning (program activities, 40-60 minutes) and fun (group team building activities, recreation or social time, 15-20 minutes).
- The majority of the members attend each meeting.
- Each member's parents/guardians participate in the club meetings or activities regularly.
- The club has a program plan with goals for the year.
- Members have the main responsibility for planning programs and activities.
- The club plans and completes at least one community service learning project.
- Members are involved in county, state and/or national 4-H opportunities.



An effective meeting will be organized and led by youth officers with advice from screened and trained adult volunteers.

A well-planned meeting gives members the opportunity to:

- Make new friends and get to know current friends better
- Share and expand ideas
- Develop self-confidence and leadership skills
- Actively participate in the meeting and decision making
- Acquire new knowledge through a wide variety of activities and experiences
- Enjoy fun recreational activities
- Understand what is involved in events and activities announced at meetings



Basic items to include in planning include where to hold the meeting, definite starting and ending times, frequency, communication strategies with families, participation expectations, family involvement, yearly club calendar of times and events, description of what happens at each event and activity, and encouraging participation by all members.

Contact:

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

**K-STATE**  
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The 2021-2022 4-H Achievement Banquet was held November 20th in St. Francis. Congratulations to everyone involved in the 4-H program on a successful 4-H year.



Happy Holidays from the Sunflower Extension District Cheyenne County. Wishing everyone the best for the upcoming new year!

Upcoming opportunities in the Swine and Meat Goat projects.




**K-STATE**  
Research and Extension

**2023**

**K-State Junior Swine Producer Day**

*Saturday*  
**MARCH 11**

*Register By*  
**February 15**

K-State County Extension Councils, Extension Districts, and U.S. Department of Agriculture Cooperating. All educational programs and materials available without discrimination on the basis of race, color, religion, national origin, sex, age, or disability.

Join us on March 11, 2023 for the biennial K-State Junior Swine Producer Day in Weber Arena on the Kansas State University campus in Manhattan. This educational event will be a fun-filled day in which youth, parents, agents, and swine project leaders can increase their knowledge of youth swine projects. Presentations will be provided by K-State faculty members, graduate students, former exhibitors, and guest speakers. All ages and skill levels are invited! Participants will receive a K-State Show Pig Guide, t-shirt, and complimentary lunch. Only those who register by February 15 will receive a t-shirt. There will also be door prizes! The registration fee is \$20/person for those who sign up by the February 15 deadline, or \$25/person after that date. This is a family event! Anyone attending must register, including all youth and adults.



**K-STATE**  
Research and Extension

**2023**

**K-STATE Junior MEAT GOAT PRODUCER DAY**



*Saturday*  
**MARCH 18**

*Scan Me*

Join us on March 18 for the biennial K-State Junior Meat Goat Producer Day in Weber Arena on the Kansas State University campus in Manhattan. This educational program will be a fun-filled day in which youth, parents, agents, and project leaders can increase their knowledge of youth meat goat projects. Presentations will be provided by K-State faculty members, graduate students, former exhibitors, and guest speakers. All ages and skill levels are invited! Participants will receive a K-State Meat Goat Show Guide, t-shirt, and complimentary lunch. Only those who register by the deadline on February 22 will receive a t-shirt. The registration fee is \$20/person before February 22 and \$25/person after the deadline. This is a family event! Anyone attending must register, including all youth and adults.

# DECEMBER

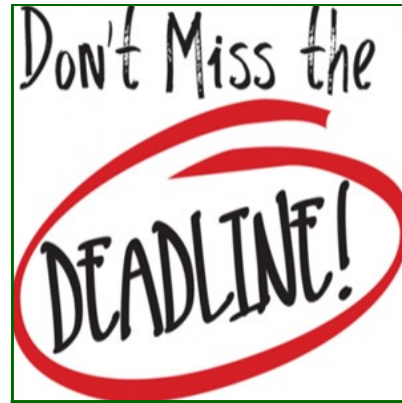
## Cheyenne County

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 4-H Enrollment Fee Paid Deadline	2	3
4	5 Lawn Ridge	6	7 Pleasant Hill Plum Creek	8	9	10
11	12	13	14	15	16	17
18 Go-Getters	19	20	21	22	23 Closed	24
25 	26 Closed	27 Extension Office Closed	28	29	30	31 



## Important Dates

- December 1.....[Re-enrollment deadline for returning 4-H Members to show in the 4-H Division at the County Fair.](#)
- December 3.....Genesis Food Drive
- December 5.....Prairie Dale
- December 7.....Foods
- December 11.....Ruleton Eager Beavers
- December 18.....Sunflower
- December 19.....Country Clovers
- December 24.....Christmas Eve
- December 25.....Christmas Day
- December 26-30.....Extension Office Closed
- December 31.....Fair Book Changes Due
- December 31.....New Years Eve
- January 1.....Happy New Year



Re-enrollment for returning 4-H Members are due on December 1, 2022.

Sherman County



JR Leaders participate in the annual "Trunk or Treat"! Bob Ross was the theme this year! The impressionist of BOB ROSS is Matthew Berls!

### 2022-2023 Club Leaders

#### Country Clovers

Penny Nemechek  
Amanda Martin

#### Prairie Dale

Amanda Schilling  
Kelsey Stephens

#### Ruleton Eager Beavers

Travis & Colleen Gattshall

#### Sunflower

Peggy Berls  
Julie Quain

For more information about the clubs & projects, call the Extension Office at 785-890-4880.

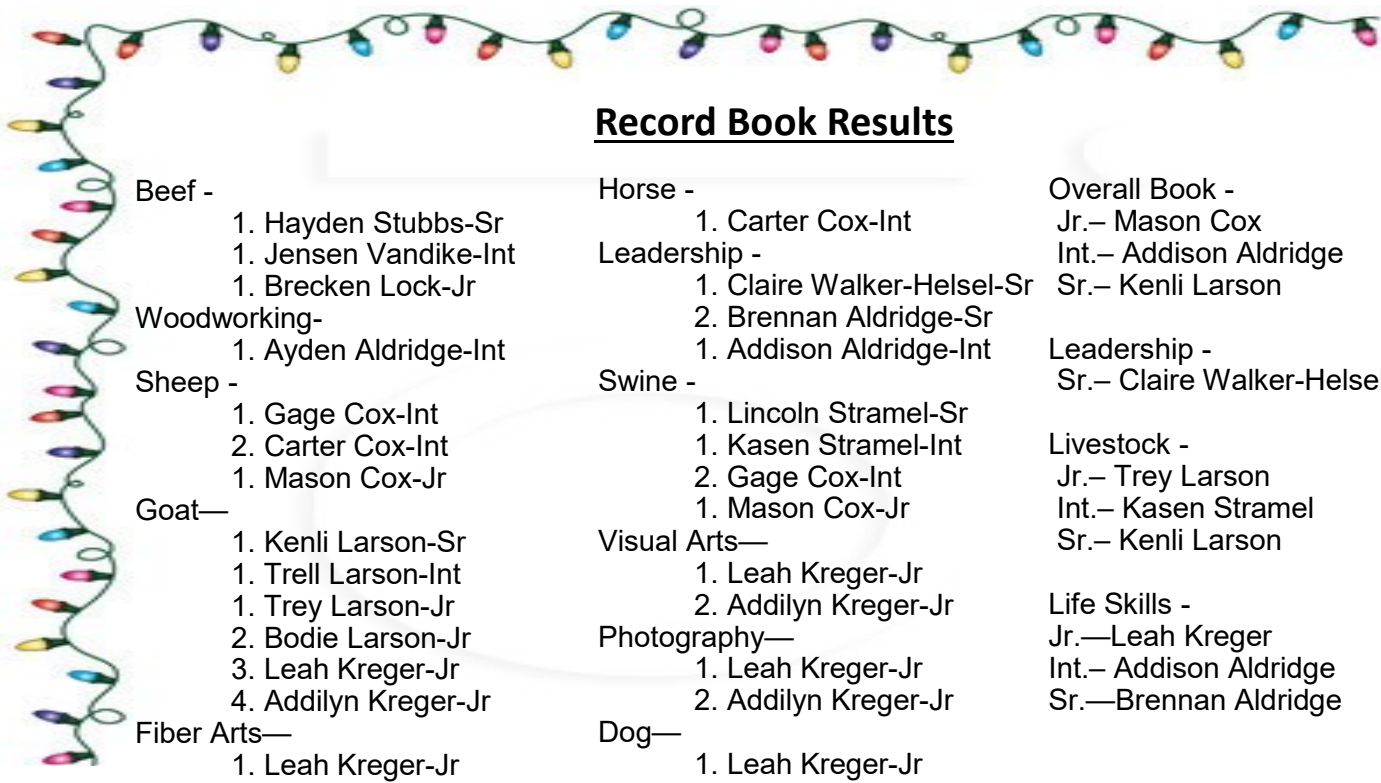






# Sherman December 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1. <b>4-H online Enrollment deadline</b>	2.	3. <b>Genesis Food Drive</b> 8:30 AM Rock House (6th & Caldwell) 9:00 AM the drive will begin
4.	5. <b>Prairie Dale</b> 5:30 PM Christmas Party 4-H Building	6.	7. <b>Foods</b> 3:30 - 5:00 PM <u>4-H Building</u> <b>Harvest of Holidays</b> 5:30 PM Library	8.	9.	10.
11. <b>Ruleton Eager Beavers</b> 3:30 PM Christmas Party 4-H Building	12.	13.	14.	15.	16.	17.
18. <b>Sunflower 4-H</b> 2:00 PM Christmas Party 4-H Building	19. <b>Country Clovers</b> 7:00 PM Christmas Party 4-H Building	20.	21.	22.	23.	24.  <b>Christmas Eve</b>
25. 	26.	27.	28.	29.	30.	31. <b>New Years Eve</b> 
<b>The Extension Office will be closed for Christmas Break December 26th - 30th</b>						



## Record Book Results

### Beef -

- 1. Hayden Stubbs-Sr
- 1. Jensen Vandike-Int
- 1. Brecken Lock-Jr

### Woodworking-

- 1. Ayden Aldridge-Int

### Sheep -

- 1. Gage Cox-Int
- 2. Carter Cox-Int
- 1. Mason Cox-Jr

### Goat—

- 1. Kenli Larson-Sr
- 1. Trel Larson-Int
- 1. Trey Larson-Jr
- 2. Bodie Larson-Jr
- 3. Leah Kreger-Jr
- 4. Addilyn Kreger-Jr

### Fiber Arts—

- 1. Leah Kreger-Jr

### Horse -

- 1. Carter Cox-Int

### Leadership -

- 1. Claire Walker-Helsel-Sr
- 2. Brennan Aldridge-Sr
- 1. Addison Aldridge-Int

### Swine -

- 1. Lincoln Stramel-Sr
- 1. Kasen Stramel-Int
- 2. Gage Cox-Int
- 1. Mason Cox-Jr

### Visual Arts—

- 1. Leah Kreger-Jr
- 2. Addilyn Kreger-Jr

### Photography—

- 1. Leah Kreger-Jr
- 2. Addilyn Kreger-Jr

### Dog—

- 1. Leah Kreger-Jr
- 2. Addilyn Kreger-Jr

### Overall Book -

- Jr.— Mason Cox
- Int.— Addison Aldridge
- Sr.— Kenli Larson

### Leadership -

- Sr.— Claire Walker-Helsel

### Livestock -

- Jr.— Trey Larson
- Int.— Kasen Stramel
- Sr.— Kenli Larson

### Life Skills -

- Jr.—Leah Kreger
- Int.— Addison Aldridge
- Sr.—Brennan Aldridge

### Record Books

Record books that are going on to regionals, are due in the Extension Office by January 17. Please have them to the Office by 5:00 p.m. Thanks!!

### 2022-2023 4-H Clubs

Harrison Endeavors    Smoky Valley  
Weskan Windmills    Ladder Creek

### 4-H Enrollment

Please enroll online at <http://v2.4honline.com> as we have started a new 4-H year. **Please get on to enroll by December 1st or you will have to pay the enrollment fee of \$15 and not be able to show in the 4-H division at the County Fair.** If you have any trouble or question please call the extension office. Thanks!!

### Dates to Remember

#### December

- 1- 4-H Enrollment deadline
- 23- Office Closed
- 26-30-Extension Office Closed

#### January

- 17- KAP Books due to office
- 20- Regional KAP Judging—Hays

# December 2022

## Wallace County



Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 4-H Enrollment Deadline	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23 Office Closed	24
25 Christmas Day	26 Christmas Break	27	28	29	30 Extension Office Closed	31
<b>MERRY CHRISTMAS</b>						



**Sunflower Extension District #6**  
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Goodland, KS 67735

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**Sunflower Extension District #6 Offices**

[www.sunflower.ksu.edu](http://www.sunflower.ksu.edu)



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**Wendy Benisch**

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**Heather McDonald**

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**Linda Elfers**

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**K-State Northwest Research and Extension Center - Colby**

**Jeanne Falk Jones**

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*Knowledge  
for Life*

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