

K-STATE

Research and Extension

Sunflower Extension District #6



April 2022
Newsletter



www.sunflower.ksu.edu

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for Life*

K-State Research and
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opportunity provider
and employer.

www.ksre.ksu.edu

April 2022

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

Inside Your Newsletter...

Understanding the Chemical Reactions of Urea in the Soil..... ..Crop Production page

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Tree Care and Pruning Workshop

Dr. Charles Barden Professor of Forestry and Research Center
Director, K-State University is coming to the
Sunflower Extension District!

Tuesday, May 3, 2022

5:30 PM (MDT)

Sherman County 4-H Building, Fairgrounds, Goodland, KS

Indoor workshop followed with hands on experience at a tree site.

Any residents in Cheyenne, Sherman or Wallace Counties may
leave samples of trees in question at the local Extension Offices on
Monday, May 2 or Tuesday May 3.

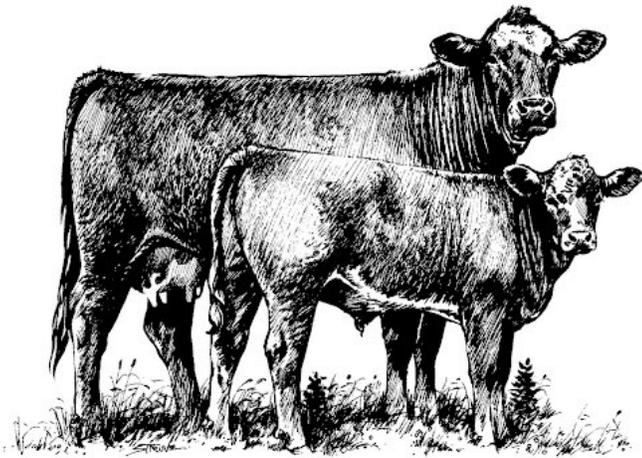
Sample needs to include-

Pictures of the tree and area where planted, branch sample, still
alive to help ID it, and a sample with the symptoms. A note to de-
scribe the problem would be helpful also. These will be
diagnosed and information returned.



Breeding Success Through Cow Management

As discussed in last month's newsletter article, it is important to test bulls for fertility prior to every breeding season. However, bulls are half the equation and the females being bred need to be set up for success as well. While bull fertility is dependent on several factors, a cow's ability to conceive becomes way more complicated. Females not only have to battle any inherent issues with their fertility, post partum periods, dystocias, and nutrition can all negatively impact the ability for a female to rebreed. In short, a successful breeding season starts far before calving even starts. Proper nutrition and management decisions year round will set the cowherd up for success.



Dystocia

Dystocia or difficulty while calving can cause damage to the reproductive tract and stress that may delay a female from coming into heat again. Research shows that every hour that a female is in stage 2 of labor (from the appearance of the membranes to delivery of the calf), her resuming estrous is delayed by four days (Anderson, 2017). Conception rates increased by 16% when females experiencing difficulty were assisted in the first 90 minutes compared to those that were not assisted (Anderson, 2017). To optimize re-breeding success, assist early when appropriate and make selection decisions to avoid dystocias.

Post-partum period

The post-partum interval (PPI) is the amount of time that passes between calving and rebreeding. After calving, a cow needs time for her reproductive tract to repair and to resume cycling. The length of the anestrus period where she is not cycling significantly impacts the chance of her becoming pregnant. Dependent on many factors, this period of non-cycling can last 17 days to 150 days (Anderson, 2017). Considering an ideal body condition score (BCS), mature cows generally experience 45 - 90 days of anestrus, while first calf heifers experience 75 - 120. Considering a 285 day gestation, a female would need to conceive within 80 days of her calving date to theoretically calve at the same time or earlier the next calving season. This stresses the

importance of defined breeding seasons as it becomes difficult for a late calving female to calve earlier in the subsequent years.

Body Condition Score

Assessing body condition of cows is a management practice that should be done year round. Body condition scoring (BCS) is the assignment of a score based on an estimation of body fat. In beef cattle the scores range from 1 to 9, in which a score of 1 is extremely emaciated and a score of 9 represents an extremely obese animal. A change in one score is usually represented by a 75 pound change in body weight (Anderson, 2017). Ideally, cows should calve at a BCS of 5 or greater. This helps ensure that they can maintain their own condition as much as possible as they take on lactation. Emphasizing this increase in requirements, protein and energy needs increase by 25 to 30% in most beef cows after calving (Anderson, 2017). Research has suggested that as pre-calving BCS decreases, the calving interval increases. For example, on average a cow in BCS 3 at calving would not calve again until approximately 400 days later, while a cow at a BCS 6 would calve approximately 360 days later (Anderson, 2017). Evaluating the BCS of cows in the herd is important year round, however it is most important prior to calving and subsequently before breeding season. Therefore, if cows are thin at calving, their energy intake should increase to salvage reproductive performance as much as possible.

Vaccinations

There are several diseases that are known for causing significant reproductive losses in the form of infertility, abortions, birth defects, and weak calves. Some of the diseases that can cause losses include leptospirosis, bovine viral diarrhea, trichomoniasis, and vibriosis. According to the NAHMS survey, in 2017 only 46% of cows were vaccinated for leptospirosis, 24.8% for vibriosis, 4.6% for trichomoniasis, and 57.4% of cattle were vaccinated for bovine viral diarrhea. Unvaccinated cows could be experiencing reproductive losses that are being attributed to other factors. Producers should work with their veterinarian to develop of herd health plan that includes vaccination against these reproductive diseases to minimize losses.

Every breeding season takes year round planning in terms of management, timing, and precautions. To set up cows for reproductive success, producers should focus on optimizing body condition scores, implementing a herd health program, providing early calving assistance when appropriate, making selection decisions to avoid dystocias, and creating a plan to resume estrous in after calving.

For more information on preparing for breeding season, please visit or call the Cheyenne County Extension Office at (785)332-3171.



For more resources and event announcements, please follow us on Facebook at *K-State Research and Extension Sunflower District*.



KEYS TO EMBRACING AGING



***We are all aging,
but whether we do so gracefully
is up to you!***

Join K-State Research and Extension, Sunflower District to learn 12 keys that can help you grow old successfully and with increased longevity. No matter your age, you can take steps now to age well into the future.

Starting on Thursday, April 7th at 3:00 p.m. (M.T.) 1 hour zoom sessions, will end on June 23. No cost!!

All are welcome!

There are 12 keys (lessons) in the program. You will need to sign up for the program by calling the Sunflower Extension District in your own county or you can call my office at 785-852-4285 or email: mdaily@ksu.edu.

We will do one lesson per week for 12 weeks. I know that seems like a long time, but it will be worth your time. There will be a handout every week on our web-site at: www.sunflower.k-state.edu/fcs. Once you have signed up I will be able to email you the handouts as well.

We will have sessions every week on Thursdays at 3:00 p.m. (M.T.) via zoom meetings. These sessions will be recorded for those that are not able to attend at that time. At the end of every lesson there will be an evaluation that I would appreciate you filling out and returning it to me. I will be posting on Facebook reminders for the program.

Physical Wellness Checklist

Positive physical health habits can help decrease your stress, lower your risk of disease, and increase your energy. Here are tips for improving your physical health:

GET ACTIVE

How well your body functions affects your ability to accomplish your daily activities. Sedentary behavior—which usually means sitting or lying down while awake—has been linked to a shorter lifespan and a wide range of medical problems. Any time you get up and move, you’re improving your chances for good health.

MAINTAIN YOUR BODY

Your bones, muscles, and joints all work together to make your body an amazingly movable machine. Like any machine, your body can suffer some wear and tear. It needs regular care and maintenance to keep moving with ease.

EAT A HEALTHY DIET

We make dozens of decisions every day. When it comes to deciding what to eat and feed our families, it can be a lot easier than you might think to make smart choices. A healthy eating plan not only limits unhealthy foods, but also includes a variety of healthy foods. Find out which foods to add to your diet and which to avoid.

MIND YOUR METABOLISM

Your metabolism changes as you get older. You burn fewer calories and break down foods differently. You also lose lean muscle. Unless you exercise more and adjust your diet, the pounds can add up. Middle-age spread can quickly become middle-age sprawl. Carrying those extra pounds may be harming your health.

BUILD HEALTH HABITS

We know that making healthy choices can help us feel better and live longer. Maybe you’ve already tried to eat better, get more exercise or sleep, quit smoking, or reduce stress. It’s not easy. But research shows how you can boost your ability to create and sustain a healthy lifestyle.



You CAN Incorporate STEM in your 4-H Project!



**America needs people with expertise in technology, engineering and math!
Science happens all around us ...
Find ways to incorporate STEM and inquiry-based learning with 4-H members. (Hint—refrain from giving them the answers and work with them to find the answers.)**

Think of science as discovery:

Scientists ask questions, predict, compare data, test ideas, and communicate findings. Suggest problems for members to solve and resist feeling like you have to give them an answer. Encourage them to discover answers themselves.

Think of engineering as imaginative design:

Engineers think creatively and create designs that are useful. Challenge members to engineer something that improves a tool they use in their project.

Question every day occurrences:

How is STEM related to what they are learning? Ask members to talk about how things work.

Members are inquisitive and like puzzles.

What is in the food you feed your animals and why is it in the feed? What do the eggs do in a recipe?

What is sandpaper made of and why does it work? Where does electricity or water come from?

Find experiments related to each project area.

What is in a seed and how does it grow? Why are eggs an egg shape? How is ice cream made? How do robots work? How do things fly? How is science involved in riding a bike? What do animals need to stay healthy?

What kind of bait do fish like best and why?



Samples of ways to incorporate science content into a 4-H project.

Chemical engineering.

Youth involved in cooking groups can explore food by designing a new snack product. They can even use technology and design a commercial to market their new creation.

Physics.

Youth involved in a shooting sports group can experiment with distance and trajectories in arrow flight and report on the results.

Entomologist.

Youth involved in garden clubs can research the use of beneficial pests in gardens and on farms, and learn about entomology or the study of insects.

Veterinary science.

Youth enrolled in a horse and pony project may enjoy learning about various horse feeds and compare the differences in ingredients and how they affect the equine digestive system.

Materials engineering.

Youth involved in clothing and textiles can conducting an experiment that tests how different fabrics absorb dye.

Environmental engineering.

Youth interested in environmental projects can set up a water quality monitoring program for a local stream.



Sources: https://www.canr.msu.edu/news/stem_programming_for_4_h_club_or_the_home_part_2

<https://extension.purdue.edu/4h/Documents/Volunteer%20Resources/Science%20Made%20Easy/STEM%20into%204-H%20Projects.pdf>

Contact:

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karennelson@ksu.edu**

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4-H'ers statewide may choose to utilize the online record option with ZBooks. This online record keeping software is identical to the new Project Report Form pdfs- meaning 4-H'ers and families now have the option to choose which format they feel more comfortable using. They can continue to fill out the form fillable pdf version of Project Report Forms or they may opt to keep their records online with ZBooks. ZBooks is user friendly and a great way to keep project records.



This amazing opportunity offers over 20 topics to choose from. Have you received your registration/information forms? If not, contact the Extension Office to receive one.

You won't want to miss this!



April 2022:

- 24: Market Beef DNA Envelope order due
- 27: Small Livestock Weigh-In 6-7:00 pm

May 2022:

- 1: Project Deadline – Final Add/Drop for Projects
- 1: CN Breeding Heifer & Horse ID's Due
- 1: KSF/KJLS Market Beef Nomination Due
- 15: CN Market Livestock ID's Due



Three in person options available

- Sherman County April 19 5-6 pm mt
- Wallace County April 20 6:30-7:30 pm mt
- Cheyenne County April 21 5:30-6:30 pm ct



Cheyenne County

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17 	18	19  YQCA YOUTH FOR THE QUALITY CARE OF ANIMALS TRAININGS SH Co.	20 WA Co.	21 CN Co.	22 	23
24 Deadline to order Mkt. Beef DNA Envelopes	25	26	27 Small Animal Weigh In 6-7:00 pm	28	29	30



Important Dates

- April 1JR Leader Scholarships Due
- April 4Promotion Committee Meeting
- April 44-H Council
- April 6Foods
- April 10Ruleton Eager Beavers
- April 10Prairie Dale
- April 15Good Friday
- April 16Cloverbud
- April 17Easter
- April 18Country Clovers
- April 18Small Animal Weigh-In
- April 19YQCA
- April 24Sunflower 4-H



Sherman County

Rock Springs 4-H County Camp 2022 is much different this year!



Why the changes?

For more information, visit

<https://www.kansas4-h.org/4-h-programs/camp/docs/Direct%20Mailing%20to%204H%20Families.pdf>

For session pricing and to register, visit

<https://www.rockspringsranch4hcamp.org/>

Session Dates:

4-H Camp	Dates	Duration
Session 1	June 8-11	3 nights
Session 2	June 12-15	3 nights
Session 3	June 15-18	3 nights
Session 4	June 19-22	3 nights
Session 5	June 22-25	3 nights
Session 6	June 26-29	3 nights
Session 7	June 29-July 2	3 nights
Session 8	July 5-9	4 nights
Session 9	July 10-16	6 nights
Session 10	July 17-23	6 nights

4-H Family Camp Dates:

Session 1	June 3-5
Session 2	August 5-7

Rock Springs County Camp will be making arrangements for a pickup spot in Colby, KS .

Call your local Extension Office for more information.



Small Animal Weigh - In
Monday, April 18, 2022,
from **4:00 - 6:00 PM** at the
4-H Livestock Barn.

You must enroll in your Livestock Project before the weigh-in or you will show in open class.

All Other Projects

Add or Drop are due on May 1, 2022, or you will show in open class.



Save the Date!

Discovery Days

June 1 - 3, 2022

What is Discovery Days?

For more information, visit:

<https://www.kansas4-h.org/events-activities/conferences-events/discovery-days/index.html>



<https://www.facebook.com/sunflowerextensiondistrictshermancounty4h/>



Sherman

2022 

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1. JR Leader Scholarships Due to the Extension Office	2.
3.	4. Promotion Meeting 6:00 PM 4-H Council 7:00 PM 4-H Building	5.	6. Foods 3:30 - 5:00 PM 4-H Building	7.	8.	9.
10. Ruleton Eager Beavers 3:00 PM Prairie Dale 5:00 PM 4-H Building	11.	12.	13.	14.	15. Good Friday	16. Cloverbuds 10:00 AM 4-H Building
17. 	18. Small Animal Weigh-in 4:00 - 6:00 PM <u>Fairgrounds</u> Country Clovers 7:00 PM 4-H Building	19. YQCA 5:00 - 6:00 PM Assembly Room Court House	20.	21.	22.	23.
24. Sunflower 4-H 3:00 PM 4-H Building	25.	26.	27.	28.	29.	30.



When: April 20, 2022

Where: Wallace County Extension Office

Who: Any youth 8 years of age and older who will be exhibiting a market or breeding animal in the KS State Fair Grand Drive or KJLS is required to obtain certification.

Fair Board has said this year that all members in Wallace County weren't required to do this, only members that will be going on in a livestock project. So this year if you take it you will be in charge of paying yourself. New members are encouraged to take it as well.

Visit www.yqca.org

Discovery Days 2022

When: June 1-3rd, 2022.

Who: 4-H members ages 13 to 18 years of age eligible to participate.

What: Help youth learn new ideas, techniques, and skills they can use personally and in their 4-H clubs or groups and communities. Give youth in-depth training through hands-on educational sessions from content and youth development experts. Enhance personal growth by giving opportunities to develop responsibility, confidence, independence, accountability, problem-solving, decision-making, and time management skills.

For more information on how to get in on this opportunity, visit the website at www.ksre.ksu.edu.

Dates to Remember

April

- 15- Extension Office Closed 1/2 Day
- 20- YQCA Training—Sharon Springs
- 24- Small Animal Weigh-in

May

- 1- Horse ID Certification Papers Due
- 7- NW Tech Project Learning Day—Goodland
- 8- WCHS Graduation
- 14- Weskan Graduation
- 18- Livestock Committee Mtg
- 30- Closed for Memorial Day

June

- 1-3 —Discovery Days—Manhattan

July

- 22- Fair Clean Up
- 23- Fair Horse Show
- 25-30- Wallace County Fair

Wallace County

Small animal weigh in will be held April 24 from 2-4 pm

*****Notice time change*****



2022 Wallace Co Fair Dates are July 25-30th

Please let the office know of any ideas you may have for a fair theme



April 2022 Wallace Co.



Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
						
3	4	5	6	7	8	9
10	11 4-H Council Mtg	12	13	14	15 Office Closed 1/2 day	16
17 	18	19	20	21	22	23
24 Small Animal Weigh-In 2-4	25	26	27	28	29	30



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