Inside Your Newsletter...

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- Bovine Respiratory Disease—The Dreaded Shipping Fever ...................Livestock page
- Garden to Plate: Food Safety ..................................................Family & Consumer page
- Judging Practices .................................................................4-H Youth Development page

2020 Cheyenne County Fair
Boots, Jeans, and Cheyenne County Dreams
August 5-8
4-H Fair entries due July 13th

2020 NW Kansas District Free Fair
Ride the Tide to the County Fair
August 1-8
4-H Fair entries due July 15

2020 Wallace County Fair
The Greatest Show on Earth
July 30-August 1
4-H Fair entries due July 6
Harvesting short and thin wheat

Harvesting shorter wheat, with thinner stands, can be a challenge. Special attention needs to be given to cutting height, machine adjustments, and operator control. In short wheat, getting the heads into the combine with less straw will be a challenge. In some cases, the reel may not be able to effectively convey the wheat back from the cutter bar to the auger, nor hold it in place during cutting. Short cutting will also mean more contact potential with the ground and reduced levels of surface residue which can negatively impact cropping systems. Here are some considerations on combine headers from Lucas Haag, K-State NW Area Agronomist and Ajay Sharda, K-State Extension Ag Engineer.

Stripper headers
Stripper headers allow the grain to be harvested efficiently while leaving the maximum amount of standing residue in the field. To properly use a stripper header, note the following:
- Operators need to be aware of the rotor height and the relative position of the hood to the rotor. This position needs to be set correctly, so heads approach the rotor at the proper angle for stripping.
- Keep the nose of the hood orientated so that the top of the wheat heads are even with, or slightly below, the forward point of the nose. This may require operating the header with the nose in a slightly lower-than-normal position relative to the rotor. However, it’s important to note that running a stripper header lower than necessary will result in increased power consumption and finger wear.
- Combine ground speeds should be kept high (above 4 mph) to maintain collection efficiency and minimize header losses.
Continue to adjust stripping rotor speed throughout the day as conditions change. If rotor speeds are too high, that will result in detachment of the entire head and unnecessary increases power requirements. Rotor speeds that are too slow will result in unstripped grain remaining in the head. In general, rotor speeds will be less in thin short wheat than in better stands.

Air reels
Air reels will also aid in the material conveyance from the cutter bar to the auger in reel-type units when crops are light or thin. These units are made in several different types including finger air reels, non-reel, and units that fit over existing reels. Non-reeled units have the advantage of less eye strain from the continuously rotating header reel, but all units have collection efficiencies compared to conventional reels even in sparse or short crops. These units do not control the amount of wheat stubble left in the field and the operator still has to control the cutting height.

Draper headers and flex heads
Draper headers may also help with the conveyance of material since they have a very short distance between the cutterbar and the conveyance belt. The ability to tip the cutterbar completely back will aid in keeping harvested crop material moving across the cutter bar and onto the belt as well as ensuring some stubble remains standing in the field. Cleats on the belt need to be in good to new condition to maximize conveyance of crop material away from the cutter-bar. Set gauge wheels properly to maximize cutting height.

Combined headers
Adjust the reel to get the best movement of the heads from the cutter bar to the auger. Combining in slighter wetter conditions may help prevent shatter and decrease losses. If wheat heads have flipped out of the header from the top of the auger, an extra “auger stripper bar” may necessary. A small strip of angle iron can be bolted slightly behind and below the auger to help with material conveyance. In thin stands of wheat, it is even more important that sickles and guards are in good condition as there is not as much crop material to push and ensure cutting by worn sickles & guards.

Conventional headers
Maintain the cutting height high as possible to preserve standing stubble. Typically, cutting wheat at two-thirds of its full height will result in losses of less than 0.05 percent as any missed heads contain grain that will be lost as tailings during the harvesting process.

Combine adjustments
Lower yields and uneven crop flow may also require performing combine adjustments to the concave/rotor cage clearance, cylinder/rotor speed, and fan speed. Follow the manufacturer’s recommendations. Leading cause of grain damage under almost any harvesting condition is overly fast cylinder or rotor speed. This will especially be evident in harvesting short wheat where there will be less material in the concave or rotor cage to thresh against, increasing the likelihood of grain damage if cylinder/rotor speed is too high. On conventional machines it may be necessary to reduce concave clearance to attain good separation. On rotary combines, it may be advantageous to maintain a typical clearance to provide a more normal threshing condition while using less threshing area. The use of blanking plates on the rotor cage may improve separation. You may have to lower the fan speeds slightly to minimize grain losses. Once adjusted properly, keep material crop flow as constant as possible as most threshing and cleaning units work best under these constant flow conditions. As the amount of material passing through the combine decreases, response to various settings such as cylinder/rotor speed, concave/rotor cage clearance, & fan speed will be more sensitive than under normal operating conditions.
One of the costliest diseases affecting the cattle industry, bovine respiratory disease (BRD) is caused by a complex of viral and bacterial infection. Despite effort to reduce the disease’s rampage on the cattle industry resulting in significant economic losses, the disease remains one of the hardest to manage and control. BRD is caused by many stressors linked to management events and environmental conditions. Of those conditions, weaning, crowding, sorting, commingling, processing, and shipping have all been connected to causing BRD. Furthermore, environmental conditions such as a change in temperature, wet conditions, exhaust fumes, and dust can all contribute to the development of the illness (Peel, 2020). These conditions and events leading to BRD have resulted in the disease’s nickname “shipping fever.”

Unfortunately, the structural complexity of the cattle industry and its various sectors add difficulty to understanding and controlling BRD. The length of time needed and various operations it takes to produce a beef product makes cattle more susceptible to contracting BRD due to the prolonged opportunity for exposure to the stressors previously mentioned. Between cow-calf, back-grounding, stocker, and feedlot operations, cattle travel lengthy distances to be mixed with others adding handling, sorting, commingling, and shipping stressors thus increasing their risk for developing BRD. Furthermore, the disconnect between sectors and the process in which animals trade hands contributes to the lack of awareness or care of difficulties or economic losses other sectors may face concerning the disease (Peel, 2020).

According to the United State Department of Agriculture (USDA, 2017), non-predator death loss in all cattle in both the beef and dairy industries was 3.21%, including a rate of 5.55% in calves and 2.17% in cattle heavier than 550 pounds. Of that non-predator death loss, 23.9% were due to respiratory disease accounting for $370.8 million in lost value. Taking a closer look at the beef cattle industry, respiratory disease is responsible for 15.9% of cattle death and 23.0% of calf death loss. Considering morbidity, in the feedlot 16.2% of feedlot cattle are reported to have been affected by respiratory disease, with 87.5% of those animals being treated. Death due to respiratory disease is not the only economic impact of this class of disease, animal morbidity or illness can also have negative economic impacts on the cattle industry.

Bovine Respiratory Disease affects all cattle sectors in both the beef and dairy industries. There is a wide range of negative impacts that the disease has on production. These effects come in the form of animal death, but also from cattle who recover from the disease during sickness as well as after in terms of their productivity. Animals in the feedlot who contract BRD experience reduced weight gain, reduced feed efficiency, and carcass quality degradation, all which affect animal value (Peel, 2020). On the cow-calf side, calves can not only die, but also experience similar negative effects to feedlot cattle due to BRD. Females in the cowherd can suffer from reproductive losses, deformed calves, and difficulty with subsequent conceptions after contract-

ing respiratory diseases (Peel, 2020). Beyond losses accrued from decreased efficiency, producers should also expect to accumulate losses from treatment and prevention costs. The most common treatment for respiratory disease is an injectable antibiotic, and method of prevention is a respiratory vaccination (Peel, 2020). Its important to note that vaccinating against respiratory disease in any sector can have positive benefits for animals on that operation and as they move down the line.

Despite the improvements made in terms of detection, prevention, and treatment of BRD, the disease still persists. As mentioned, there are vaccines available to help prepare cattle for the challenge of BRD. However, according to the USDA (2007-08) 60.6% of beef cattle operations do not vaccinate calves for respiratory disease with small operations less than 50 head being less likely to vaccinate. It is believed that the reason for lack of vaccination of calves against BRD is due mostly to the lack of awareness between the cow-calf and feedlot sectors. The full impact that BRD has on the feedlot sector is unrecognized by a majority of the cow-calf producers who do not witness this impact firsthand in the following sectors. However, those cow-calf producers who experience an outbreak of respiratory disease may be made more aware of the diseases’ threats and may then implement a respiratory vaccine into their program for future protection (Peel, 2020). To help bridge the preparedness of calves moving through the sectors and to incentivize the adoption of preconditioning and vaccination against respiratory disease, various preconditioning programs have been developed. These programs give cow-calf producers an economic advantage and stocker, backgrounding, and feedlot managers confidence that animals have some protection against the costly disease (Peel, 2020).

The continued persistence of BRD in the cattle industry creates frustration for producers and animal health professionals alike. There remains a continued need to improve health testing, control, prevention, and treatment for BRD; however, the economic incentive for cow-calf producers to invest in better BRD control is still lacking. The downfall of this supports the need for a strong incentive program that encourages producers to begin BRD control early on in a calf’s life (Peel, 2020). An industry-wide cooperative effort must be taken to encourage and motivate the production of calves with better immunity and less risk to getting ill through better BRD control.

For more information or resources regarding bovine respiratory disease, 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.
Garden to Plate: Food Safety

Kids and families who grow their own produce are more likely to eat the fruits (and vegetables) of their labor.

Because gardening is an effective strategy for healthier food consumption, it’s a great idea to prepare your own family garden.

Fruits and vegetables can be contaminated any time from planting to eating. Most pathogens are killed by cooking, but they are difficult to wash off produce that will be eaten raw. Try to minimize contamination risks by practicing safe protocol.

Food Safety in Harvesting and Storing Your Produce

- Always use common sense when it comes to food safety. The goal is to prevent contamination of produce by microbes and chemical contaminants from seed to plate.
- Wash you hands often.
- Wash food-grade harvest and storage containers with soap and water. Sanitize and let it dry between uses. You can make your own sanitizer using 1 tablespoon of unscented bleach to 1 gallon of water.
- Clean and sanitize sinks, counters, cutting board, and utensils before preparing any food.
- Shake or rub off all excess garden soil or debris before bringing garden produce into the kitchen. A staging area for pre-cleaning and sorting is helpful to keep soil and food waste out of the kitchen.
- To slow mold and rotting, do not completely wash produce before storing.
- Do not rinse produce with water that is more than 10 degrees warmer or cooler than the temperature of the produce. Contaminants can be absorbed through porous tissues when large variations in temperature occur.
- Wash and sanitize cutting boards, dishes, utensils, and countertops within hot water and soap between preparation of raw meats and garden produce.
- Always use potable or drinkable water to wash produce.
- Keep raw produce separate from other foods such as meat, poultry and seafood.
- Thoroughly rinse all produce before eating, cutting, peeling, and cooking.
- Scrub rough peels and rinds with a vegetable brush.
- Discard any bruised or damaged pieces of fruits and vegetables.
- For refrigerated produce, store in refrigeration that is between 35 to 40 degrees Fahrenheit.
- Refrigerate all cut or peeled produce in airtight containers.

Sanitation and Tool Safety

- Wash your hands often when using garden tools and supplies. Clean garden tools and surfaces with soap and clean water before and after each use.
- Never lay long-handed tools on the ground. Lean against a wall or fence.
- Tools should not be held above waist level.
- Always keep an arm’s length between you and another person when using gardening tools.

Happy Gardening!!!
Recognition is an integral part of 4-H. Appropriate recognition can inspire young people to go further in their endeavors, and serve as an incentive to greater accomplishments. It helps them evaluate life skills they are learning through 4-H, helps them set realistic goals, and recognizes them for achievement toward those goals.

Sunflower District Fair Judging Policy

Only members will be seated with the judge during consultative judging. Parents may stand in proximity to hear comments but may not contribute to the conversation. (Necessary accommodations may be arranged in advance.)

“Consultative judging brings 4-H members and judges together to evaluate project exhibits. It provides a unique opportunity for young people to learn from the experiences and knowledge of a judge. Consultative judging involves one-to-one communication in which the judge and 4-H member talk directly with each other. As such, parents/guardians should not communicate for the young person unless special accommodations are necessary and arranged ahead of time.” (K-State 4-H Judging 4-H Project Exhibits: A Message to 4-H Members About Consultative Judging, January 2018)

The 4-H exhibit provides youth an opportunity to show the public a result of their project efforts. The interview can provide a positive experience, allowing them to practice communication skills as they process what they learned and what was personally gained from the experience, and to feel good about their accomplishments.

Mock judging interviews help members prepare!

We encourage each club and project leader to hold a mock judging session for members.

Parents—you can practice with 4-H members before the fair by asking these questions.

Practice questions:

- What skills did you use to complete your project?
- What was the easiest...(or most difficult)?
- What did you enjoy about working on this project?
- How many years have you been in the project?
- Where did you learn how to...?
- Why did you choose this project?
- Where did you get the idea for this project?
- Who gave you help with the project?
- What did you enjoy about working on this project?
- What could you do differently next time?
- How much did your project cost?
- How many years have you been in the project?
- Why did you choose this project?
- Have you helped anyone else learn these skills?
- Approximately how much did your project cost?
- What were your goals for this project?
- What skills did you practice?
- How did you do it (processes, steps, plans)?
- Tell me more about...
- What might have helped improve the project?
- What was the most enjoyable part of your project?
- What different techniques did you experiment with?
- What different techniques did you experiment with?
- What problems did you have?
- What could you do differently next time?
- What else would you like to do in this project area?
- One thing I’d would like to improve upon is...
- What helped you be successful with your exhibit?
- Did you meet your standards with this project?
- How will you apply what you learned in the future?
- How do you feel about your exhibit now?
- What helped you be successful with your exhibit?
- How will you apply what you learned in the future?
- How will you apply what you learned in the future?
- How did you improve skills you needed to use?
- What would you like to do next year in this project?
- What would you change if you did the project again?
- Did you meet your standards with this project?
- How will you apply what you learned in the future?
2020
CHEYENNE
COUNTY FAIR

Boots, Jeans and Cheyenne County Dreams
August 5-8

July 28th will be the clean up and set up for the Fair starting at 6 pm. Please come and help get ready for the Fair, there will be a job for everyone.

July 3—Extension Office Closed
July 13—Fair Entries Due
July 15—KSF Grand Drive Entry Due
July 20—Open Class Wheat Entry Due
July 24—Dog Show
July 28—Fairgrounds Clean Up
July 29—Visual Arts Judging

Online Resources—
http://www.cheyenneksfair.com
http://www.sunflower.k-state.edu
On Facebook—Sunflower Extension District Cheyenne County 4-H
## Cheyenne County

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<td>Fair Clean Up 6 pm</td>
<td>Visual Arts &amp; Crafts 9 am</td>
<td>Thresher Show in Bird City</td>
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Important Dates

July 3 ................... Extension Office Closed
July 4 ................... Happy Fourth
July 6 ................... Weather Day Camp
Registration Due - (May be canceled due to COVID 19 - Stay Tuned for more information)
July 6 ................... Weather Day Camp
Registration Due
July 6 ................... Weather Day Camp
Registration Due - (May be canceled due to COVID 19 - Stay Tuned for more information)
July 12 ................. Prairie Dale
July 13 ................. 4-H Council
July 14 ................. Weather Day Camp
July 15 ................. Fair Entries Due
July 15 ................. Style Revue Scripts Due
July 19 ................. Sunflower
July 25 ................. Dog Show
July 27 ................. Pet Judging
July 28 ................. Public Style Revue
July 30 ................. Fairground Clean-up
Aug 1 ................... Fair Parade
Aug 3-8 ................. Fair

Don’t Forget!

Fair Entries & Style Revue Scripts are due
July 15, 2020, by 5:00 PM MST.

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

KS State Fair 2020 Pre-Fair Entries

4-H Horse Entries
Postmarked by: August 1, 2020

https://fairentry.com/Fair/SignIn/14567
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<td>4-H Council 7:00 PM 4-H Building</td>
<td>Weather Day Camp 8:00-12:00 PM (May be canceled due to COVID 19 - stay tuned for more information)</td>
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Dates to Remember

July
3—Office Closed
6—Fair Entry Forms due
9—Indoor Committee mtg—Extension Office
14—Ice Cream Social
19-20—4-H Council Mtg—Extension Office
25—Fair clean up
26—Fair Horse Show
27-Aug 1- FAIR WEEK

Wallace County Fair entry forms are due no later then July 6th.
This helps us to make schedules.

GET YOUR FAIRBOOK!
Fair books are ready. They may be picked up at the Extension Office or local businesses around town.

4-H Club Fair Responsibilities
Harrison Endeavors-Snack Shack
Smoky Valley-Style Review, set up, decorate for Public Style Revue, Script, Clean-up
Ladder Creek- County Fair Horse Show

4-H Fairgrounds Clean Up will be held Friday, July 24.

Attention 4-Hers:
Stop by the Extension Office to pick up photo-boards, food & nutrition stickers, clothing tags for Fair exhibits.

Wallace County Fair Theme
WALLACE COUNTY FAIR
“THE GREATEST SHOW ON EARTH”

***Reminder***
Wednesday, July 29, 2020

Animals all need to be in place by noon.

Weigh-In order:
Noon-2:00 p.m.- Steers
2:00-3:00 pm— Goats & Sheep
3:00-4:00 p.m.— Swine
5:00 p.m. Livestock Judging Contest

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——— FAIR WEEK ————