WALNUT CREEK
DISTRICT

K-State Research and Extension
December 2023

Wishing you and your family health, happiness, peace and prosperity this Christmas and in the coming New Year!
-Walnut Creek District Staff

Upcoming Dates
December 4th: Meet & Greet for Kristen at Cuppa Joe in Ness City at 7:30am
December 4th: 4-H on the 4th
December 4th: Walnut Creek Offices Closed for Staff Meeting
December 4th: Lane Co. Teens @ 6pm & Lane Co. 4-H Council @7pm
December 5th: Crop Pest Management School, Colby
December 5th: 4-H Project Leader Zoom @ 7pm
December 6th: Crop Pest Management School, Russell
December 6th: Lane County Cloverbuds at 5:30pm
December 6th: 4-H Project Leader Zoom @ 7pm
December 8th: Dighton After-School Program
December 8th: Registration due for Holiday Live Centerpiece Workshop
December 11th: Holiday Live Centerpiece Workshop, Dighton at 6:30pm
December 18th: Rush County 4-H Council
December 25th - January 1st: All Walnut Creek Office Closed for the Holidays
Soil Health U 2024 on Jan. 17 to 18 at the Tony’s Pizza Event Center in Salina, Kansas. The two-day event includes a diverse line-up of speakers, panelists, Certified Crop Advisor CEUs, hands-on demonstrations, and a tradeshow full of soil health-adjacent exhibitors. Whether you are well versed in regenerative agriculture or brand new to the concept, there’s something for everyone.

Jeremy Brown, of Broadview Agriculture Inc. from west Texas, will open the event with keynote entitled, “Your Why.” Brown is a diversified farmer and grows 5,000 acres of conventional and organic cotton, wheat, rye, grain sorghum and multispecies cover crops. Another general session speaker featured at Soil Health U will be Macauley Kincaid, a farmer and soil health enthusiast from Jasper, Missouri. Kincaid is set to present a session entitled, “Regenerating your profits.” Kincaid’s farm features 13 different row crops. All of his acres are 100% no-till, 100% cover cropped and he integrates livestock on 80% of his land.

Cristine Morgan, chief scientific officer at the Soil Health Institute, will close the event with a presentation entitled, “Measuring soil health and interpreting those measurements.” Morgan establishes research priorities to advance soil health and develops the scientific direction, strategy and implementation for soil health research programs.

Early bird registration is $99 and only available through Nov. 30. Rates will increase to $125 on Dec. 1 up until the event. Onsite registration is $135. Questions about registration can be directed to Andi Moravec at andi@wjinc.com.

PLANT HARDINESS ZONE MAP

For the first time in 11 years, the US Department of Agriculture has updated its Plant Hardiness Zone Map, which is historically the standard that gardeners and growers use to determine the perennial plants most likely to thrive at a location. This map is based on the average annual extreme minimum winter temperature, displayed as 10-degree F zones and 5-degree F half zones. The new map is available to view online at https://planthardiness.ars.usda.gov.

KANSAS FOREST SERVICE TREE SALES

The Kansas Forest Service offers low-cost tree and shrub seedlings for use in conservation plantings. Plants are one to two years old and sizes vary from 8 to 18 inches. Two types of seedlings are offered; bare root and containerized. Orders are accepted from now through May 1st. Orders are shipped beginning in mid-March.

All items are sold in units. Each single species unit consists of 25 plants. Tree planting accessories are also available including marking flags, root protective slurry, rabbit protective tubes, weed barrier fabric and tree tubes.

For more information and an order form, check out http://ksfs.mybigcommerce.com/ or stop by your local Extension office.
STAYING SAFE THIS HOLIDAY SEASON

For many, this month will be a time for decorating, traveling, cooking and shopping. While we spend time with family and friends, it’s also important to take steps to stay safe.

Check the Weather Before You Travel
It’s a good idea to know the weather forecast before you travel. If you see there is an approaching winter storm, stay off the roads.

Having an emergency kit in your car can also help you be prepared for anything that might happen on the road. Your kit should include food and water, as well as emergency winter road tools such as an ice scraper, shovel, gloves, blanket, emergency flares or reflectors, rock salt, and a first aid kit.

Consider Fire Safety When Decorating
Flammable seasonal decorations, dry Christmas trees and more time spent in the kitchen all contribute to a higher number of home fires during the holiday season.

Follow these tips to prevent home fires:
- Turn off holiday lights at night or when you leave the house.
- Don’t overload extension cords.
- Keep candles away from flammable materials.
- Make sure to have working smoke alarms close to where anyone may be sleeping.
- Keep your Christmas tree watered: don’t let your holiday tree dry out.

Stay Alert When Online Shopping
When you’re shopping online for gifts, remember to be careful with personal information. Follow these cybersecurity tips when you shop:
- Do your online shopping at home, and make sure your wireless network is protected.
- Set strong passwords and change them often. Don’t set passwords that will be easy for cyber criminals to guess.
- Shop online through trusted retailers to avoid getting scammed.
- During the holidays, scammers may send fake emails that are too good to be true. Don’t click on the links!

Medicare Part D Open Enrollment Ending Soon
Time is running out! Open enrollment for Medicare Part D ends December 7, 2023. Medicare drug plans change yearly. Now is the time to compare drug plans to find the best plan to meet your needs. K-State Research and Extension can navigate you through the comparison and enrollment process from start to finish. Appointments are still available in Lacrosse on December 5th, Dighton on December 6th and Ness City on December 7th. Please call Family and Community Wellness Agent Kristen Schmidt at 785-798-3921 to schedule.
Sooo, the tests came back with feed that is HOT, now what? In September I covered methodology to sampling, and it worked—we’ve helped send many bags to test, and the results have been all over the board. If yours was high—do not despair, usually we can manage through this. Yes, lots of feed samples have came back high. Yes, you need to be careful with those bales, and Yes there is always risk when dealing with nitrates. However, I encourage producers to remember that it takes Nitrogen to build protein. So, in many cases the nitrates are present, or fall into the low (safe) range and protein is 8, 9, or 10+ %. That means we need to be aware of what and how we are feeding, but the need for additional supplements on dry, non-lactating cows is greatly reduced or down to mineral alone.

On the flip side, I also tell producers that if they are managing high nitrate feeds, do NOT compound the problem with additional nitrates in water, protein supplements (i.e. Urea), or nurse trailers that get double duty but not flushed out after drilling wheat. Cows can acclimate themselves to additional Nitrate consumption, but the variables in how much and how long are very hard to pinpoint. Nearly every land grant institution has a publication on Nitrates, including K-State. It can be found online in the KSU bookstore under Grazing Toxic Plants. However, the Oklahoma State Publication has more detail solely focusing on Nitrates, so the following information is derived from it.

Many producers have and currently are building electric fence to go to stalks. If the milo yield was marginal but you fertilized for a ‘good’ crop, then I encourage you to test the stalks as well. In this case “test what they eat.” As with all rules there’s a disclaimer, Nitrates do not usually accumulate in the leaves, heads (or corn ears), or upper plant—which is what cows will eat first. They typically accumulate in the bottom 6-8-or even 12” of stalk, which we typically don’t force them to eat. When testing the stalks, use pruning shears to cut off the upper portion of the standing residue. 4-5” of stalk easily fits in the sample bag, so that’s what I cut off. Granted if the milo lodged, sucker heads came on late, or it was really short to begin with, then the combine likely removed most of what we are looking for and you will go back to, “test what they’ll eat.” If all that’s standing is a coarse nub, you’ll need to consider your grazing time and distribution.
Thin cattle in poor health or those suffering from respiratory disease are more susceptible to nitrate poisoning. Allow hungry cattle to fill prior to release. If cattle are hungry, take time (1 to 3 days) to make sure they are consuming a significant quantity of a bulky forage such as good quality grass hay. Then, release the cattle in the afternoon when they are not as hungry.

Adapt cattle to nitrate. The objective is to give the ruminal microorganisms the opportunity to adapt to high nitrate intake. With high nitrate hay, this can be accomplished by blending with low nitrate feeds such as grass hay or concentrates. Grain feeding has the additional benefit of providing ruminal energy to stimulate the conversion of nitrate to nontoxic nitrogen compounds. With grazed high nitrate forages, palatable, low nitrate hay or concentrates can be used. Another alternative with grazed forage is to limit grazing for the first 6 to 8 days by increasing the grazing time each day.

Dilute high nitrate feeds with low nitrate feeds. Dilution is one method that can be used to help ruminal microorganisms adapt to high nitrate feeds. But, it may also be the only practical method that can be used to feed high nitrate forage (>10,000 ppm). Dilution is most effective when the low nitrate feed can be blended or mixed directly with the high nitrate feed.

Utilize propionibacteria. Some strains of propionibacteria are capable of rapidly reducing nitrate to nontoxic nitrogen compounds. These products have been hard to find.

Stock lightly so animals can choose lower nitrate leaves over higher nitrate stems.

Provide large quantities of fresh drinking water. Water dilutes nitrate concentrations in the rumen and reduces the potential of toxicity.

Do not allow livestock to have direct access to fertilizer materials containing nitrate. Losses have occurred because cattle had access to storage areas, fertilizer spreaders, broken bags of fertilizer, or fertilizer spills in pastures.

Cattle in cold or inclement weather are more susceptible to nitrates and are more likely to consume stalks which contain more nitrate.

**LIVESTOCK FACTORS RELATED TO NITRATE POISONING**

Despite a producer’s best efforts to avoid growing forages that contain dangerous concentrations of nitrate, occasionally, drought-stricken pastures of hay crops produce feeds that test high in nitrates. There may be methods of handling the high nitrate hays or pastures that reduce the risk of death or production losses. However, if the forage has extremely high concentrations of nitrate, such as 20,000 ppm, then the risk to livestock health is very great even when all known management techniques are employed. Burning, composting, or burying that forage may be the only safe alternative. Knowledge of the following livestock factors will aid in a producers decision on how to either prevent or manage the effect of high nitrate feed sources.

1. Thin cattle in poor health or those suffering from respiratory disease are more susceptible to nitrate poisoning.
2. Allow hungry cattle to fill prior to release. If cattle are hungry, take time (1 to 3 days) to make sure they are consuming a significant quantity of a bulky forage such as good quality grass hay. Then, release the cattle in the afternoon when they are not as hungry.
3. Adapt cattle to nitrate. The objective is to give the ruminal microorganisms the opportunity to adapt to high nitrate intake. With high nitrate hay, this can be accomplished by blending with low nitrate feeds such as grass hay or concentrates. Grain feeding has the additional benefit of providing ruminal energy to stimulate the conversion of nitrate to nontoxic nitrogen compounds. With grazed high nitrate forages, palatable, low nitrate hay or concentrates can be used. Another alternative with grazed forage is to limit grazing for the first 6 to 8 days by increasing the grazing time each day.
4. Dilute high nitrate feeds with low nitrate feeds. Dilution is one method that can be used to help ruminal microorganisms adapt to high nitrate feeds. But, it may also be the only practical method that can be used to feed high nitrate forage (>10,000 ppm). Dilution is most effective when the low nitrate feed can be blended or mixed directly with the high nitrate feed.
5. Utilize propionibacteria. Some strains of propionibacteria are capable of rapidly reducing nitrate to nontoxic nitrogen compounds. These products have been hard to find.
6. Stock lightly so animals can choose lower nitrate leaves over higher nitrate stems.
7. Provide large quantities of fresh drinking water. Water dilutes nitrate concentrations in the rumen and reduces the potential of toxicity.
8. Do not allow livestock to have direct access to fertilizer materials containing nitrate. Losses have occurred because cattle had access to storage areas, fertilizer spreaders, broken bags of fertilizer, or fertilizer spills in pastures.
9. Cattle in cold or inclement weather are more susceptible to nitrates and are more likely to consume stalks which contain more nitrate.
LABORATORY ANALYSIS FOR NITRATE

Hay samples can be accurately tested for nitrate content. Your local Extension Office can provide information about the test and help you submit samples. For laboratory test results to be useful, forage samples must be collected properly. Proper sampling is important since nitrate concentrations are extremely variable and only isolated areas in a field or just a few bales may be high in nitrate. Sample standing forage by clipping at least 20 representative plants at grazing height from the suspected area. Cut the plants into small pieces, combine, and mix thoroughly in a bucket.

Hay should be sampled based on the type of bales. I covered sampling earlier (September newsletter is available online). KEEP IN MIND, If the face of the bunker is as tall or taller than you, do not sample it! Remember; the more effort that is put into sampling, the better the overall results should be. Bales are not all the same based on the mixing of high and low areas with swathers, rakes, and balers, so core sampling a representative number of bales is key.

Generalized interpretations for nitrate forage tests are presented below. The interpretations are based on nitrate concentrations reported as parts per million nitrate (ppm NO₃) on a dry weight basis. Some laboratories may report results as nitrate-nitrogen (NO₃-N) or potassium nitrate (KNO₃). These values must be converted to nitrate, also below. Look at the lab results! A score of ‘1000’ can have vastly different meanings between systems. Most of the samples from the Walnut Creek go to Servi-Tech and they report results in NO₃-N.

Generalized interpretation for forage nitrate test.

0-3000 Generally safe for all cattle
3000-5000 Generally safe for non-pregnant beef cattle. Low risk of reduced breeding performance and late term abortions.
5000-10,000 Some risk for all cattle. May cause mid to late term abortions and weak newborn calves. May decrease growth and milk production.
>10,000 Potentially toxic for all cattle. Can cause abortions, acute and toxicity symptoms and death.

To convert NO₃-N to NO₃, multiply by 4.4
Example: 1,000 ppm NO₃-N X 4.4 = 4,400 ppm NO₃
To convert KNO₃ to NO₃, multiply by 0.61
Example: 1,000 ppm KNO₃ X 0.61 = 610 ppm NO₃

As can be seen, it is important to use the correct units when interpreting test results.

Hay which has potentially toxic levels of nitrate should be fed only as a part of the total diet. Prussic acid and Nitrates are not the same. Prussic acid will typically evaporate as the forage is dried, either by frost or by swathing. In very high concentrations it can persist in dried forages, but determining these values is hard to test for and not something that has been closely measured in the past. Time will not dissipate Nitrates. If the given bales are high now, they will always be. If the droughty forage was chopped and packed, then the ensiling process will generally remove ½ of the Nitrates. Feeding starch (grain) will help with the ruminants’ ability to digest the added Nitrate and is often the needed or lacking element in rations. Corn is cheaper than its been in a couple years, so if warranted- its worth considering feeding even a small amount.
Do you sit on the school board, hospital board, coop board or are you an officer for your 4-H club or a community organization? Then you should understand parliamentary procedure.

Used properly, parliamentary procedure is one of the most effective means by which individuals can take orderly action as a group. One can give full consideration to any matter of common interest, encourage common-sense minority discussion on each question, then act according to the will of the majority — all with a minimum waste of time. Its purpose is not to inject unnecessary formality into a meeting, nor is it to prevent a free expression of opinion. There are certainly some sound reasons then why one should acquire a good working knowledge of parliamentary procedure.

Here are some tips that will help both officers and members understand the basic parliamentary rules. It is intended as a brief and convenient guide, primarily for use in the meetings of your community groups. It does not presume to cover the entire field of parliamentary law.

**Point of order:** That is not correct! This motion is used to correct any errors in parliamentary rules. Let us suppose a motion to buy a new chair is on the floor. While it is being discussed, a member moves to “send two delegates to the state convention.” The chairperson received the second motion. Since there should be only one main motion on the floor at one time, a member may rise to a point of order as follows: Member: “Chairperson, I rise to a point of order.” Chairperson: “State your point of order.” Member: “The chairperson has received a second main motion while another main motion was on the floor; the second motion is out of order at this time.” Chairperson: “Your point is well taken; the second motion is out of order.”

**Making Motions**

A motion is a REQUEST that something be done or that something is the opinion or wish of the assembly. There are various types of motions.

A MAIN MOTION introduces an action to the assembly for its consideration. Only one main motion should be placed before the assembly at one time. It is always debatable and amendable, and it ranks below all other motions.

The motion to amends always applied to another motion, usually the main motion. The motion to amend may be applied in several ways: 1. to add 2. to insert 3. to strike out 4. to strike out and insert.

I move to (state your request to the club)
**Nominations and elections:** Nominations for an office may be made in three ways: 1. Nominations from the floor 2. Nominations by petition 3. Nominations by nominating committee. Officers should always be chosen by ballot even if the constitution does not so state. Such voting makes for independence of choice as well as secrecy of choice.

**Quorum:** The number of members required to be present to transact business legally. The number is usually a majority of the membership, unless otherwise specified in the constitution.

**Bylaws:** Generally the bylaws comprise all the rules by which a society is governed. The rules may be divided into three classes: constitution, bylaws and standing rules. The constitution and bylaws are usually considered one and the same in most organizations. They are of such importance they should not be changed, except after suitable notice is given to the members, and then by a vote larger than the majority of those voting.

**Debate and Discussion:** Debating or talking about a motion or question.

**Division of the House:** Count the vote again. It may be requested by any member after the chairperson has announced the outcome of a vote when the count is not definite, generally after a voice vote. The member need not be recognized nor need to rise when calling “division.”

**Has the Floor:** When a member has been recognized by the chairperson, he or she has the floor. A member should, in only rare instances, be interrupted; he or she may yield the floor to someone else if he or she so desires.

**Majority:** More than half the votes cast.

**Meeting:** A meeting of a society is an assembly of its members for a time during which they do not separate longer than for a recess of a few minutes or do not separate at all. A series of meetings such as a convention, is called a session.

**Previous Question:** A subsidiary motion that means “to close debate.” If passed, it stops discussion and puts the pending motion to a vote. It is not debatable or amendable and requires a two-thirds vote.

**On the Floor:** A motion is on the floor when it is being considered by the assembly.

**Orders of the Day:** The scheduled program of business, used most often in conventions and sometimes called the agenda of business.

**Recognition:** A member is recognized by the chairperson when the latter announces the member’s name, or, in small groups, simply nods. A member obtains recognition by raising a hand, rising, and in some cases calling, “Mr. Chairperson.” No member should speak or make a motion until recognized by the presiding officer.

**Withdraw A Motion:** An incidental motion permitting a previous motion to be withdrawn. If the maker of a motion refuses to withdraw the motion, that motion cannot be withdrawn. Any member may move to withdraw a motion. The maker of the motion must agree to the withdrawal of his or her motion. If the motion to withdraw is made before the chairperson states the motion for the assembly, only the maker and seconder need to agree upon the withdrawal. If the motion to withdraw is made after the chairperson states the motion for the assembly, the maker and the entire assembly must be consulted for its withdrawal.
**STEM Challenge Kits**

Need a Winter Boredom Buster or just some fun hands-on STEM (Science, Technology, Engineering and Math) Kits to help you teach your littles how things work. We have several kits that can be checked out through the Extension office. These can be used as a family, a classroom activity or a project meeting. Contact the Ness Extension Office if you would like to check out a kit for your family.

**Galactic Quest 4-H STEM Challenge**
The theme of space exploration takes youth on an out-of-this world adventure and makes connections to the 4-H pillars—STEM, civic engagement, healthy living, and agriculture. The challenge activities allow youth to develop inquiry, observational, and problem-solving skills while they make discoveries and develop their STEM identities. Galactic Quest is ideal for youth ages 8 to 14 years to spark an interest in STEM and inspire real-world actions. For families wanting to engage with the activities right away or youth working on their own, the Youth Guide can be used as a Quick Start Guide to the challenge.

**Game Changer 4-H STEM Challenge**
Game Changers is a collection of 3 activities that teaches kids computer science (CS) skills through game play and puzzles centered around topics they care passionately about. Developed by Google, 4-H, and West Virginia University Extension Service, it includes a computer-based activity on Google’s CS First platform and two unplugged activities:
- **Pitch Your Passion** is an online activity that teaches kids to use CS and animation to advocate for a cause or issue they care about using CS First and Scratch. Can be completed on tablets or computers.
- **Program Your Playground** is an unplugged activity where kids use CS skills like decomposition and conditional logic to design their own versions of tag and invent new sports and games.
- **Hack Your Harvest** is an unplugged activity where kids will use CS concepts like automation optimal efficiency to solve and create logic puzzles related to agriculture—or any topic kids can think of.

**Mars Base Camp Kit**
The race to land humans on Mars is on! The 4-H STEM Challenge will explore sending a mission to Mars with the activity, Mars Base Camp. Developed by Google and Virginia Cooperative Extension, Mars Base Camp is a collection of activities that teaches kids ages 8-14 STEM skills like mechanical engineering, physics, computer science, and agriculture. Check out this kit to get started to learn how to code an animated story with Scratch.
Upcoming dates:

**December**
- 4- H On the 4th - This month help keep 4-H in the public eye by donating a project related item to a worthy cause or organization. Examples - donate eggs to someone for your poultry project, donate outgrown clothing to the thrift shop for your clothing project, donate craft supplies to a school classroom or daycare for your visual arts project, donate hamburger or sausage to a food bank your church or another location for your beef and swine project.
- 4 - Lane County 4-H Teens 6pm, 4-H Council at 7pm
- 5 - Project leaders zoom meeting at 7pm
- 6 - Project leaders zoom meeting at 7pm (repeat of last night)
- 8 - Dighton After School Program
- 18 - Rush County 4-H Council 7 pm
- 25-Jan 1 Office Closed for the Holidays

**January**
- 4 - 4-H on the 4th - Update your 4-H Record Books
- 8 - Rush Community Leaders meeting
- 19 - NW Area Record Book Screening, Hays
Coffee & Connections

JOIN US AND WELCOME OUR NEW MEMBER, KRISTEN SCHMIDT TO THE WALNUT CREEK EXTENSION DISTRICT & ENJOY A CUP OF COFFEE!

7:30 AM - 8:30AM
MONDAY, DECEMBER 4TH

Cuppa Joe
108 Sycamore St., Ness City, KS