Welcome to Fall! The start of a brand new 4-H year! I want to congratulate everyone who participated in the Kansas State Fair. You can find all results online. [https://fairentry.com/Fair/Results/16853](https://fairentry.com/Fair/Results/16853)

Take a look and congratulate your fellow 4-H'ers!

Now it is time to start thinking about the new 4-H year, what goals you will set and what you will learn and accomplish in 2022-2023. Please remember that all enrollment is done online! Beginning Oct 1 you can re-enroll for the year and pick new projects as well as update your participation (health) form! Be sure to check out the information on the next page- you will have the opportunity to have your program fee paid for... if you hurry! Remember, you can log in at any time during the year to keep up on your project enrollment and check your information. We will also continue to provide curriculum to each early enrolled member!

~ Lindsey

### Calendar of Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 2-8</td>
<td>National 4-H Week</td>
</tr>
<tr>
<td>Oct 5-16</td>
<td>Paper Clover Fundraising</td>
</tr>
<tr>
<td></td>
<td>Tractor Supply Company</td>
</tr>
<tr>
<td>Oct 6</td>
<td>4-H Council, 7 pm</td>
</tr>
<tr>
<td>Oct 8</td>
<td>Officer Training &amp; Family Event</td>
</tr>
<tr>
<td>Oct 8</td>
<td>Tailgate Service Project Party</td>
</tr>
<tr>
<td>Oct 8-9</td>
<td>484H (Service Weekend)</td>
</tr>
<tr>
<td>Oct 22</td>
<td>CARE - Leadership Event- Salina</td>
</tr>
<tr>
<td>Nov 6</td>
<td>Achievement Celebration (TBA)</td>
</tr>
</tbody>
</table>

### Achievement Celebration

Congratulations on completing a 4-H year! Now... it is time to celebrate together! The Achievement Night Committee is working hard to finalize details for a celebration event on the afternoon of Sunday, November 6. This will be open to ALL 4-Hers and families! Watch your email for final details and ticket ordering.

### Fair Board Members Needed

The 4-H Fairboard consists of rotating members each year. That means the group is always in search of new members! If you enjoy the 4-H Fair and would be interested in making it happen, consider applying to be a member of the fairboard. Though the application deadline was Oct 1, we are still looking for youth and adult members to help us plan, organize and run the fair. The applications are available in the Extension Office or can be emailed to you! The McPherson County Extension Executive Board makes the final appointments for this group. If you have questions contact Lindsey.
WELCOME TO THE NEW 4-H YEAR!!!
Time to ENROLL! Please enroll starting October 1 at https://v2.4honline.com

It is so beneficial for the Extension Office and Leaders when you complete your enrollment Early! We hope you do this so much that we are going to pay you to complete this task! :-) If you enroll between Oct 1 and Nov 15 McPherson County 4-H Development Fund will cover your $15 state program fee! If you enroll between these dates, please select “Check” as your payment and it will be covered! Members are responsible for their individual fees after November 15.

ANOTHER INCENTIVE! Each member who is fully enrolled by November 15 has the opportunity to select two curriculum books that will be ordered for them with Development Fund monies. Please visit www.shop4-H.org. You will click on the “Curriculum tab towards the top left as shown and browse available options. You could also search by project name or relevant key words. You will need to email Lindsey or Terra with your two book options- please have the sku code from the website or at least the curriculum name and level. Options should be single book selections, not series packs. Submit your requests by November 15. Orders will be placed with hopes to be ready to pick up in early December.

It’s time for... National 4-H Week!!! Do you have an idea of how to promote 4-H to others? Now is the time to do it! National 4-H Week is October 2-8. Many clubs are planning activities or promotional things during this time. Participate in those, or invite a friend to your 4-H meeting! Spread the word and let people know what you do and learn in 4-H!

Don’t forget to be planning your ways to promote 4-H. Entering in the promo contests is a great way to promote 4-H and maybe receive prizes!! There will be three contests for National 4-H Week this year!

1. Clubs or groups can enter a Window Display promoting 4-H. Think of where these might be located... store fronts, school entry way or display case, libraries, etc. These do not HAVE to be in a store window! Displays can be located in any public space within the county. Remember to get permission! (The case at the McPherson County Courthouse is a great place to share information! Please contact Lindsey if you would be willing to fill this case!)

2. Individual Poster Contest. 4-H members can create a standard size poster promoting 4-H. Posters can have any theme the entrant would like. These need to be hung in a public place for the week!

3. Video Promo Contest. NEW this year will be a video promo contest! All members, projects or clubs are invited to complete a short video promo for 4-H! This can be a basic recording or edited in any way you would like! 30 seconds to 3 minutes is the recommended time. Please email your video promo entry to Lindsey and share on any social media you can to help spread the word about 4-H!

All contests will be judged for top awards! Entries will need to have a short video showing the entry (or picture for posters if you choose) that is posted to the McPherson County 4-H Facebook page or emailed/texted to Lindsey. For the window display and poster- the video can be a simple phone capture, but should show the display/poster well and can include any other info you would like the judge to know. These videos must be under 2 minutes.

Though it is recommended to have these items up for display by the start of 4-H week- entries must be in place with videos completed by October 4. Let us know what type of entry you have and where it is located when you email/post the video! Have fun and think outside the box... time to tell people how awesome 4-H is! Awards will be announced at Achievement Night!
Officer Training & Family Event

Our annual Officer Training and Family Event will be held in Salina at South Middle School on October 8. We will begin the event with registration at 9 am with the training kicking off at 9:15. There are session options for everyone that include officer training, 4-H fun, project interests, record book assistance and more! You will rank your session choices during registration.

Following the training there will be a free optional lunch that is sponsored by First Bank Kansas (indicate participation during registration)! The Tailgate Service Project Party will follow! Register by Oct 5 at https://tinyurl.com/2022OTFE484H

484H Tailgate Service Project Party

Following Officer Training and Family Event we will host a Tailgate Service Project Party with CKD! This event is so much fun and a great way to help so many organizations in a short time! Youth and groups will have booths set up with various service projects. All participants can walk around and do as many projects as they would like during the 2 hour period! If you have an idea for a booth YOU could set-up and haven’t signed-up... talk with Lindsey and we will make room for you!! These will be hands-on activities for everyone to do! Registration is at the same link as Officer Training (you may sign up for 1 or both events!) You are also welcome to come early for our sponsored lunch at 12 PM! Register by Oct 5 at https://tinyurl.com/2022OTFE484H

Paper Clover

It is time again for the Paper Clover Campaign hosted by Tractor Supply Co. Between Oct 5 and Oct 16 customers can add $1 (or more) to their bill to support 4-H! Share with your friends. The store would also LOVE for 4-H’ers or clubs to come out during the event to promote the campaign by showing projects, talking about 4-H, helping carry things out for customers, etc. The more visible 4-H is, the more money will come back our direction! All money from this years campaign will go towards camp scholarships! Please contact Tractor Supply for ideas or to set up a time to come out! Maybe they would even have a spot for your poster or window display for the contest!

Adult Chaperone

From time to time, adults are needed to chaperone events for 4-H members. This may include hour long or day events or potential overnight travel. Often help with transportation is needed with the County vehicles. If you are willing to be called upon when chaperoning opportunities arise, please let Lindsey know. Some examples include Discovery Days, KYLF, Leadership trainings, etc. If you have other ideas where you would have an interest in volunteering, I would love to talk about that as well.

Kansas Youth Leadership Forum...
November 19-20, 2022

Build your leadership skills and potential through workshops, consulting groups, inspirational speakers and more. Details and available class sessions will be available soon! KYLF is for all youth 14-18 years old before Jan 1, 2023. Registration will open soon and be due by Oct 17.

Don’t forget that each qualifying 4-H member is eligible for one activity scholarship a year (this does NOT include the OzSome 4-H Camp Scholarship). The application can be found online: http://www.mcperson.k-state.edu/4-h/awards-recognition/scholarships/index.html Don’t forget to check it out if you want to attend any area or state camps or events... KYLF (above) would qualify!

4-H Council

It’s a new council year! Let’s start it off with a bang and every club in attendance! Council Representatives are a VERY important officer position in your clubs! Plan to meet at 7 PM on Oct 6 at the Extension Office. Remember, each club should have two youth and two adult representatives! This will be our election of officers meeting. Please be thinking about the leadership role you would like to take. Previous year officers should attend to complete their year duties- please find a replacement and let Lindsey know if you will be unable to attend.
2023 Calendar Coming Soon

McPherson County Extension will be publishing a calendar for 2023 with a recipe each month. There will also be a monthly activity that you can do as a family. We will also be including “Did You Know” facts about places in and around McPherson County. We are excited to bring you this fun Community centric calendar.

Do you have an event for 2023 that is open to the entire county? If so, scan the QR code to submit your event to be considered for inclusion in the 2023 calendar.

Are you a non-profit organization or organization providing resources to the community? If so, scan the QR code to submit your organization to be considered for inclusion in the 2023 calendar.

Deadline to submit additions for the 2023 calendar is October 17, 2022.

Living Well Wednesday Webinar Spanish Series


Preserving Unripe Tomatoes

As fall approaches, those end of season unripe tomatoes are still usable. Be sure to pick them before a frost or freeze if canning them.

Unripe, or green, tomatoes can be preserved just like ripe tomatoes. So, when canning them they still require acidification.

Pickled Sweet Green Tomatoes
Yield: About 9 pints

INGREDIENTS:
- 10 to 11 lbs of green tomatoes (16 cups sliced)
- 2 cups sliced onions
- 1/4 cup canning or pickling salt
- 3 cups brown sugar
- 4 cups vinegar (5 percent)
- 1 tbsp mustard seed
- 1 tbsp allspice
- 1 tbsp celery seed
- 1 tbsp whole cloves
PROCEDURE:
- Wash and slice tomatoes and onions.
- Place in bowl, sprinkle with 1/4 cup salt, and let stand 4 to 6 hours.
- Drain.
- Heat and stir sugar in vinegar until dissolved.
- Tie mustard seed, allspice, celery seed, and cloves in a spice bag.
- Add to vinegar with tomatoes and onions. If needed, add minimum water to cover pieces.
- Bring to boil and simmer 30 minutes, stirring as needed to prevent burning.
- Tomatoes should be tender and transparent when properly cooked.
- Remove spice bag.
- Fill jar and cover with hot pickling solution, leaving 1/2-inch headspace.
- Adjust lids and process according to the recommendations in Table 1.

Table 1. Recommended process time or Pickled Sweet Green Tomatoes in a boiling-water canner

<table>
<thead>
<tr>
<th>Style of Pack</th>
<th>Jar Size</th>
<th>0-1,000 feet</th>
<th>1,001-6,000 feet</th>
<th>Above 6,000 feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Pints</td>
<td>10 min</td>
<td>15 min</td>
<td>20 min</td>
<td></td>
</tr>
<tr>
<td>Hot Quarts</td>
<td>15 min</td>
<td>20 min</td>
<td>25 min</td>
<td></td>
</tr>
</tbody>
</table>

For additional information see https://bookstore.ksre.ksu.edu/pubs/MF1185.PDF

Top 10 Scams in Kansas

The FTC has just unveiled a list of the top 10 fraud complaints by state. To date for 2022, there have been 12,942 total complaints logged with the FTC for the state of Kansas related to fraud, identity theft, or other reports.

<table>
<thead>
<tr>
<th>Top 10 Report Categories</th>
<th>Fraud Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care</td>
<td>2,207</td>
</tr>
<tr>
<td>Home Improvement</td>
<td>1,420</td>
</tr>
<tr>
<td>Home Repair and Improvement Repair</td>
<td>1,355</td>
</tr>
<tr>
<td>Bank Account</td>
<td>1,015</td>
</tr>
<tr>
<td>Financial and Services</td>
<td>948</td>
</tr>
<tr>
<td>Credit Card</td>
<td>693</td>
</tr>
<tr>
<td>Internet/Phone</td>
<td>431</td>
</tr>
<tr>
<td>Debit Card</td>
<td>340</td>
</tr>
<tr>
<td>Social Security</td>
<td>335</td>
</tr>
<tr>
<td>Phishing</td>
<td>330</td>
</tr>
<tr>
<td>Identity Theft</td>
<td>274</td>
</tr>
<tr>
<td>Total</td>
<td>6,421</td>
</tr>
</tbody>
</table>

What You Can Do to Avoid a Scam

1. Block unwanted calls and text messages. Take steps to block unwanted calls and to filter unwanted text messages.
2. Don't give your personal or financial information in response to a request that you didn't expect. Legitimate organizations won't call, email, or text to ask for your personal information, like your Social Security, bank account, or credit card numbers.
3. If you get an email or text message from a company you do business with and you think it's real, it's still best not to click on any links. Instead, contact them using a website you know is trustworthy. Or look up their number. Don't call a number they gave you or the number from your caller ID.
4. Resist the pressure to act immediately. Legitimate businesses will give you time to make a decision. Anyone who pressures you to pay or give them your personal information is a scammer.
5. Know how scammers tell you to pay. Never pay someone who insists you pay with a gift card or by using a money transfer service. And never deposit a check and send money back to someone.
6. Stop and talk to someone you trust. Before you do anything else, tell someone — a friend, a family member, a neighbor — what happened. Talking about it could help you realize it's a scam.

As we enter Economic Education Month, it is a great time to have family discussions with seniors, adults, and kids about the types of fraud and how to avoid being a victim.

Four Signs That It's a Scam

1. Scammers PRETEND to be from an organization you know.
   a. Scammers often pretend to be contacting you on behalf of the government. They might use a real name, like the Social Security Administration, the IRS, or Medicare, or make up a name that sounds official. Some pretend to be from a business you know, like a utility company, or even a charity asking for donations.
   b. They use technology to change the phone number that appears on your caller ID. So, the name and number you see might not be real.

2. Scammers say there's a PROBLEM or a PRIZE.
   a. They might say you're in trouble with the government. Or you owe money. Or someone in your family had an emergency. Or that there's a virus on your computer.
   b. Some scammers say there's a problem with one of your accounts and that you need to verify some information.
   c. Others will lie and say you won money in a lottery or sweepstakes but have to pay a fee to get it.

3. Scammers PRESSURE you to act immediately.
   a. Scammers want you to act before you have time to think. If you're on the phone, they might tell you not to hang up so you can't check out their story.
   b. They might threaten to arrest you, sue you, take away your driver's or business license, or deport you. They might say your computer is about to be corrupted.

4. Scammers tell you to PAY in a specific way.
   a. They often insist that you pay by sending money through a money transfer company or by putting money on a gift card and then giving them the number on the back.
   b. Some will send you a check (that will later turn out to be fake), tell you to deposit it, and then send them money.
Other ways to protect yourself from becoming a victim of fraud

1. Beware of offers for cheap travel that are 'too good to be true.' If you receive an email about a sale or event that sounds too good, rather than clicking the link in the email, go directly to the company's website and if it is a legitimate offer most times it will be prominent on their website.

2. Keep your debit/credit cards safe. Don't store or write down your time codes or passwords. Protect your cards are you would your cash.

3. Consider all emails requesting personal information as suspicious.

4. Protect your PC, laptop, tablet, and smartphone with strong passwords and with security programs such as antivirus/anti-spyware programs.

5. Protect your mobile devices when you are using WiFi in public places – unprotected use can reveal personal information you're sending.


7. Check your credit card statements upon receipt – saving your card receipts will help you verify your statement.

8. Use HTTPS and SSL protocols when browsing over the internet look for the padlock symbol on the URL bar (if the padlock shows "closed" it is a secured site).

9. Beware and never respond to 'phishing' emails that ask for personal details nor to unsolicited proposals offering you easy money.

10. Only download files or software from trusted sources.

3. Set Goals: Everybody has different goals. You may be using these materials because you have a family business that you want to keep going. You may have a brand-new baby. We are all in different stages with a different goal of how we want things to look and how this process is going to go.

4. Advanced Directives: No matter how we may all want to make our own decisions; we may not always be able to do so. Setting up advanced directives ensures that your wishes are followed, even if you cannot make the decision for yourself.

5. Get Professional Help: Once you have everything put together, it is time to get a professional. They are there to guide you through the legal documentation and make sure that what needs to get done gets done. This will be the legally binding part of all your planning.

6. Share the Plan: You have spent all this time planning, now it is time to let others know the plan. Make sure that they not only know the plan, but where the plan is located so that your wishes may be carried out.

7. Review and Modify: Life happens. There will be changes, so make sure your plan changes as events in your life happen. Planning isn't always easy. Having a plan is a gift that you leave to your loved ones. It is a way for your wishes to be carried out, and to leave a legacy.

Deciding what is best for you and fits your needs. The diagram below is not intended to be exhaustive list; but rather a starting point to review the types of forms you might need to include in an estate plan.

National Estate Planning Week
October 16th-22nd

No matter how large or small your net worth, everybody needs an estate plan. We all have something to pass on. It may not be titled property, but it could have sentimental value. Having an estate plan will help ensure your wishes for your possessions happen, even when you are not around. Not having a plan, means that state law will then take over, meaning your wishes won't be factored in.

1. Start the Conversation: There will be different times that you and your loved ones are ready to talk about the transition of assets. No matter when you reach that time, coming together and having a conversation will be vital.

2. Determine your Estate Value: Everybody's estate is worth something and changes all the time. Determine what you have and what it is worth. Don't think about just a monetary value. Many items will hold a sentimental value as well. If you have young children, making sure they are taken care of will be of importance.
Family & Community Wellness

“Alone we can do so little; Together we can do so much.”

Community Partnerships...

McPherson County Family and Community Wellness is actively working to connect with non-profits, businesses, community resources, senior centers, city resources, school districts, childcare centers, etc. throughout the county to develop partnerships that will thrive and prosper.

Family Resource Fair...

Family & Community Wellness is developing a Family Resource Fair that will bring together resources of the county for easy access by residents of all our communities. To participate in this Family Resource Fair with a booth, please contact Chuck Laughlin at claughlin@ksu.edu to get on the list to be notified with additional information as details are finalized.

Cake Pan Rental...

Through a partnership and collaborative program, we offer a wide variety of character, occasion, and functional cake pans for rent ($2 per pan for 3 days). Have a kid’s birthday party or special event coming up that you want a specific cake pan, check with us to see if we have what you are looking for to rent before you buy.

Youth Programs...

We offer a wide variety of youth enrichment programs designed for classrooms and community organizations. We also have home school and pre-school resources available for checkout. Currently includes, Wheat Bread, Handwashing, Book In A Bag, MyPlate, Big Books, Ag Innovators: Honey Bee Challenge, Embryology, watch for more being added all the time:

In person sessions are available for classes of 10 or more youth.

For additional information on these programs, contact:

Program Assistant:
Audrey Seeger • ASEeger@ksu.edu

About Us...

Family & Community Wellness in McPherson County works to strengthen the family unit which in turns builds a stronger community. By tapping into the engagement process, in the communities in which we serve, we strive to make connections with our community partners developing bonds between them and community members.

Follow Us...

We offer a variety of ways to keep in contact with us. Please use the following to keep in touch with us as we grow our online presence.

Can Make A BIG Difference.
Family and Home...

Through our Family and Community Wellness program, K-State Research and Extension provides life skills relating to home and family. Utilizing our programs, classes, publications, newsletters, columns, and much more, our agents provide you with Knowledge for Life.

Community Development...

A community's sustainability depends on its long-term ability to meet residents' needs. One of our goals at K-State Research and Extension is to provide technical assistance and evidence-based programs to citizens who want their communities survive and prosper.

K-State Research and Extension plays a key role in helping people create a vision across traditional geographical, sociological, and political boundaries. As Henry Ford said, "Coming together is a beginning; keeping together is progress; working together is success."

Wellness...

K-State Research and Extension offers a wide range of programs designed around wellness including Walk Kansas, Stay Strong Stay Healthy, Dining with Diabetes, and many more to come.

Youth Enrichment...

K-State Research and Extension offers programs for youth enrichment in McPherson County (see the section Youth Programs in this brochure).

Adulting (cause adulthood is hard)...

We are expanding our offerings to include programs designed around Navigating Childcare, Caring for Aging Parents, Aging in Place, Legacy Planning, Quick Easy Meals for Families on the Go, Small Steps to Change Your Life, Dining with Diabetes, etc.

Senior (50 and better) Vitality...

We will be offering programs for seniors to stay/become healthy and vital in their golden years. Program offerings include Stay Strong Stay Healthy, Cooking for 1 or 2, Surviving Technology, Legacy Planning, Couponing in the Digital Age, and many more fun programs to stay healthy and vital.

K-State Research and Extension...

Short for the Kansas State University Agricultural Experiment Station and Cooperative Extension Service, K-State Research and Extension employs approximately 300 research scientists, 180 faculty specialists and program leaders, 270 county and area specialists, and 400 support staff in 23 departments from 5 different colleges. Personnel are located at the main campus, in 105 county offices, 9 experiment fields, 4 area offices, 3 research centers, and 3 research–extension centers.

Our Mission...

"We are dedicated to a safe, sustainable, competitive food and fiber system and to strong, healthy communities, families and youth through integrated research, analysis and education."

Our Vision...

K-State Research and Extension is committed to expanding human capacity by delivering educational programs and technical information that result in improved leadership skills in the areas of communication, group dynamics, conflict resolution, issue analysis, and strategic planning that can enhance the economic viability and quality of life in communities.

Our History...

- 1862: The Morrill Act was passed paving the way for a land-grant university in every state.
- 1863: Bluemont College was renamed the Kansas State Agricultural College.
- 1887: The Kansas Agricultural Experiment Station was created at Kansas State Agricultural College under the provision of the Hatch Act.
- 1914: The Smith–Lever Act created the Cooperative Extension Service.
- 1959: The official university name was changed to Kansas State University of Agriculture and Applied Science.
- 1996: The Kansas Agricultural Experiment Station and Kansas Cooperative Extension Service merged to form the Kansas State University Agricultural Experiment Station and Cooperative Extension Service (K-State Research and Extension).

Walk Kansas is a team-based program that will help you and others lead a healthier life! Join this program and:
- be more active with friends and family
- make better nutritional choices
- walk away your stress

For more information about the Walk Kansas program, scan the QR code here to visit their official website:

Kansas SNAP-Ed supports low-income Kansans by making the healthy choice the easy choice through a dual focus on nutrition and physical activity education and partnering with local and statewide organizations to improve policies, systems, and environments that support healthy behaviors.

Kansas SNAP-Ed focuses on preventing nutrition and activity-related chronic disease by empowering low-resource Kansans to achieve healthy lives, improve food security, and reduce health disparities.

Through a series of nutrition classes, community-based nutrition educators lead interactive lessons for youth, adults, and older adults across the state to help individuals and families with:
- Easy, nutritious meal planning using MyPlate
- Stretching limited food dollars
- Increasing physical activity
- Improving skills for safe food handling and preparation

To learn more about what SNAP-Ed can do for you, scan the QR code here:

SNAP-Ed Nutrition Educator:
Tamme Lackey • Tammel@ksu.edu
Many areas of Kansas and surrounding states are experiencing drought and lack of water for our growing crops and forages. Farmers now, will have to do more with less, imagine that. Producers will have to be more efficient and find additional ways to increase yields plus save our soil, water and natural resources. It will be up to the farmers to continue to feed the world and it all happens right here in McPherson County. With the drought spilling into fall planting and fall harvest, farmers and cattlemen alike will be searching and experimenting with new practices and methods of producing grains and forages. Feed stuffs are in short supply and producers have to keep an eye out for high nitrates on many of the forages that have been drought-stressed. KSRE will be hosting a drought related program October 10 in Inman. Here producers will learn the best options for minimizing any forage gaps heading into the fall and winter.

**October 10th**

**Forage and management considerations for today, tomorrow, and next spring**

- Feedstuffs, forage Inventory and looking ahead
- Nitrate and prussic acid concerns in forages
- Feeding cows
- Feeding calves
- Health concerns

6:00 PM  
Community Building  
406 E. Center Street  
Inman, KS  
RSVP To McPherson County Extension Office  
at 620-241-1523 or smarston@ksu.edu

KSUBeeef.org for additional meeting site information.
Test to Prevent Nitrate and Prussic Acid Poisoning

Many Kansas cattle operations rely on some type of harvested feed to use in the winter months and common among these sources is forage sorghum, millets, sorghum-sudangrass, and sudan. Forages in the sorghum family are prone to two different problems for feeding cattle, nitrate poisoning and prussic acid (hydrocyanic acid, HCN) poisoning. Millet (proso and pearl) do not contain prussic acid but can have nitrates. Prussic acid and nitrate poisoning are easy to get confused because both result in a lack of oxygen availability to the animal and are more likely to occur when the plant is stressed (fertility, hail, drought).

Table 1. Key characteristics of nitrate and prussic acid poisoning.

<table>
<thead>
<tr>
<th>Item</th>
<th>Item</th>
<th>Prussic Acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant parts most affected</td>
<td>Base of plant</td>
<td>Young or new growth</td>
</tr>
<tr>
<td>Types of plants</td>
<td>Many, especially sorghum</td>
<td>Many (&gt;3,000 plant</td>
</tr>
<tr>
<td></td>
<td>family, pigweed (palmer</td>
<td>species), sorghums</td>
</tr>
<tr>
<td></td>
<td>amaranth, redroot,</td>
<td>including Johnson grass,</td>
</tr>
<tr>
<td></td>
<td>water hemp, kochia, oat hay</td>
<td>white clover, birdsfoot</td>
</tr>
<tr>
<td></td>
<td></td>
<td>trefoil, Indiangrass,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cydon spp. (Bermuda)</td>
</tr>
<tr>
<td>Grazing problems</td>
<td>Rarely a problem unless</td>
<td>Consumption of newest</td>
</tr>
<tr>
<td></td>
<td>forced to eat entire stem or</td>
<td>growth</td>
</tr>
<tr>
<td></td>
<td>extremely high levels.</td>
<td></td>
</tr>
<tr>
<td>Hay Silage</td>
<td>Not impacted by drying.</td>
<td>Not impacted by drying.</td>
</tr>
<tr>
<td></td>
<td>Reduced 40-60% by ensiling.</td>
<td>Reduced 40-60% by</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ensiling.</td>
</tr>
<tr>
<td>Green Chop</td>
<td>High risk</td>
<td>Less risk than hay, not</td>
</tr>
<tr>
<td></td>
<td></td>
<td>as much reduction as</td>
</tr>
<tr>
<td></td>
<td></td>
<td>silage.</td>
</tr>
<tr>
<td>Time of Death</td>
<td>Several hours after</td>
<td>Within minutes of</td>
</tr>
<tr>
<td></td>
<td>consumption.</td>
<td>consumption, treatment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>an rarely occur fast</td>
</tr>
<tr>
<td></td>
<td></td>
<td>enough to save the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>animal.</td>
</tr>
<tr>
<td>Blood/Oxygen</td>
<td>Chocolate brown colored</td>
<td>Blood bright cherry red,</td>
</tr>
<tr>
<td></td>
<td>blood, hemoglobin converted</td>
<td>hemoglobin contains</td>
</tr>
<tr>
<td></td>
<td>to methemoglobin and unable</td>
<td>oxygen, but not</td>
</tr>
<tr>
<td></td>
<td>to carry oxygen.</td>
<td>available to cells.</td>
</tr>
</tbody>
</table>

In dry areas of the state, cattle may be removed from pasture early. Bringing hungry cattle into pens with weeds can be very dangerous as the nitrate concentration may be elevated throughout the plant and animal intake high. Manure in corrals can contribute to the elevation of nitrates in the weeds. Elevated nitrates may not result in death but could cause abortions.

The current KSU forage fact sheet on prussic acid poisoning indicates that prussic acid potential dissipates as the forage dries. Additionally, hay or silage that likely contained high cyanide concentrations at harvest should be analyzed before it is fed. This second statement is often forgotten and it’s assumed that when the plant dries, all the cells are ruptured and any HCN is released. To confirm this, we measured dhurrin content in sorghum hay. The dhurrin content was stable from 1 to 10 weeks of dry storage. In the plant, dhurrin (the precursor to HCN in sorghum species) and the enzyme that converts it to cyanide, are stored in separate compartments within the cell. When the plant is eaten, the compartments are ruptured, and the cyanide formed and released. While the enzyme that converts dhurrin to cyanide is inactivated with drying, rumen enzymes can make the same conversion after consumption. If hay is made from forages in the sorghum family or other susceptible species, testing for prussic acid in forage that has suffered from drought, hail or fertility issues is advised. The frequency of issues with prussic acid in harvested forages may be relatively low, however, testing is cheaper compared to the cost of losing even one animal.

Management recommendations common to both prussic acid and nitrates include:

- Test first, don’t gamble. Keep in mind, different labs use different tests that have different scales.
- Feed animals with a known safe feedstuffs and have them full before introduction to potentially problematic feeds. Don’t turn in hungry.
- Ensiling will reduce concentrations of either by 40-60% in well-made silage, but silage put up under less-than-optimal conditions could still contain very high levels. If extremely high before ensiling, a 50% reduction may not be enough to result in safe feed.
- Dhurrin concentrates in the upper portion of the plant and with more plant growth (~24"), concentration levels may be diluted if measuring the whole plant.
- Nitrate concentrates in the base of the plant and is least in head and leaves, grazing or cutting high can reduce nitrate levels in the forage.
- Do not harvest drought stressed forage within 7 to 14 days after good rainfall to reduce the levels of accumulated nitrates.

If testing before grazing, samples should reflect what the animals are expected to consume, generally leaves and upper portion of the plant. Sample a minimum of 15 sites across a given field. One method is to sample from each corner and the center by walking diagonal lines and sample plants every 50-100 steps or as appropriate for field size.

We expect levels of nitrates and prussic acid to be variable across a field, so more samples are better than less. A rule of thumb is to sample 10 to 20 % of the bales per field or cutting as a minimum. Be aware of areas of the field that exhibited more plant stress than others. If large enough areas, you may want to sample them separately. Your acreage size and feeding methods likely factor into this decision. Use a forage probe that cuts across all plant parts in a bale rather than a grab sample from individual bales or windrows. Most county extension offices can help with sampling procedures and equipment.

Prussic acid in sorghum following a freeze event

Frost causes plant cells to rupture and prussic acid gas forms in the process. Because the prussic acid is in a gaseous state, it will gradually dissipate as the frosted/frozen tissues dry. Thus, risks are highest when grazing frosted sorghums and sudangrasses that are still green. New growth of sorghum species following frost can be dangerously high in prussic acid due to its young stage of growth. Prussic acid content decreases dramatically during the hay drying process and during ensiling. It is recommended to wait ten days until after a killing freeze before grazing. Sorghum and sudangrass forage that has undergone silage fermentation is generally safe to feed.
Management Considerations for No-Till Wheat Following Summer Crops

With fall harvest progressing at earlier than normal rates, favorable wheat prices, and many row-crop acres chopped for silage, producers may consider planting wheat back into freshly harvested summer crop residue, especially if they receive some essential precipitation. While the current drought conditions offer significant challenges (see recent eUpdate article on planting wheat into dry soil), there are additional considerations when seeding wheat immediately after harvest of a summer crop. Following are several key management considerations to keep in mind, a more detailed discussion on these can be found in K-State publication MF-2641, Managing No-Till Wheat Following a Summer Crop in Eastern Kansas.

Variety Selection: If planting wheat after corn, adapted varieties with the best ratings for fusarium head blight (scab) should be used. Due to moisture use by the previous summer crop, varieties with high levels of drought tolerance should be used. As wheat after a summer crop is generally planted later, varieties with good ratings for winter hardiness and late fall tillering should be selected. These ratings are available in K-State publication MF991, Wheat Variety Disease and Insect Ratings 2021.

Planting Date: Wheat should be planted as soon as possible after harvest. Later planting dates shorten the window available for the formation of fall tillers, which are the more productive than spring-initiated tillers.

Seeding Rate: Seeding rates should be increased with delayed planting or in challenging high-residue environments where adequate stand establishment may be difficult. As previously mentioned, delayed planting reduces the opportunity for the initiation of fall tillers, increasing seeding rates can overcome some of that reduction.

Harvest Considerations: Evenly spreading crop residue at harvest is a key action that can positively affect the productivity of the subsequent wheat crop. Uneven distribution of the summer crop residue can make it difficult to maintain adequate depth of seed placement and can also result in uneven nutrient availability as areas with higher crop residue will likely immobilize more nitrogen.

Seeding Equipment and Seeding Depth: Seeding to adequate depth in high-residue conditions is necessary to ensure healthy crown development, maintain access to sufficient soil moisture in drying conditions, and reduces the potential for winter injury. Producers should make sure that their drill is set to achieve adequate depth in the thickest layers of crop residue. Drills and air-seeders often need additional ballast (weight) added to the drill to maintain adequate downforce to cut through the residue and place seed at the target depth. Producers should use ground speeds that maximize the performance of the seeding operation. Often increasing ground speed aids in the flow of residue through the seeding tool, however increasing speed also increases the ballast and downforce requirements necessary to achieve the target seeding depth.

Nutrient Management: In general, higher rates of fall applied nitrogen are necessary for wheat when planted after corn or sorghum. This is especially true for after sorghum which generally has residue that is lower in nitrogen content, making it more likely to immobilize available nitrogen. An additional 30 lb/ac of Nitrogen should be applied for wheat following grain sorghum or sunflowers as compared to other crops. Wheat planted after soybeans should not have its nitrogen application lowered relative to continuous wheat as the organic nitrogen release from the soybean crop is likely to occur too late to significantly benefit the wheat crop.

Herbicide History: Producers should check the label of all products used in the proceeding crop and their plant back restriction to wheat. Precipitation received since application can play a large role in potential injury to the wheat crop by any herbicide residual.

Weaning Calves

As the days seem to be getting shorter, nights are cooler and fall is approaching our thoughts of a cow/calf producer change. Weaning spring born calves is just around the corner and we need to start preparing and planning our operation for this big event. Still weaning, without a doubt, is one of the most stressful events in the life of a calf. Anytime we, as producers, can remove stress from weaning, it can be very beneficial to the cow/calf operator and beyond. Most overlook that fact that weaning is also our opportunity as cattle producers to prepare calves for the next phase of the beef production cycle. “We are trying to make a productive member of our feedlot society or a reproductive heifer coming back into our herd,” says Dr. AJ Tarpoff, Beef Extension veterinarian at Kansas State University. Everyone’s goal of weaning should be a have calves that can make it without their mothers, consume feed and successfully acclimate to a new environment. To do this calves need go thru the separation process, learn a new environment, get acclimated to new feedstuffs and stay healthy all at the same time. Improving on these steps can add value to your animals.

Important steps to follow...

Establish a herd health program. “The solution for starting cattle does not start with a syringe and a needle” says Dr. Mark Handlin of Heartland Veterinary Clinic. When bringing in cattle, cattle source and handling, feed, water and environment (both weather and pen condition) have a greater effect. I cannot stress this enough, producers should consult with their local veterinarians and develop a herd health plan the meets a sound vaccination program as well as a treatment plan for calves if they do become sick. Planning ahead of time can save lots of money when ordering supplies and cuts back on wasted time running for this or that. Don’t add stress during weaning. Castration, dehorning, and branding can add stress. Plan to complete these tasks well in advance of weaning, (minimum of 3 weeks) or a month after. Prepare weaning pen with proper placement of feed bunk and a good water source. Clean pens to try to minimize dust and allow pens to drain during wet weather. Providing access to the weaning pens prior to weaning helps the calves adapt to their new environment. Provide fence line contact, if you can, to soften and reduce behavioral stress and minimize post-weaning weight loss of the weaned calf. Help calves adjust to the new feedstuffs. At the K-State Research Center in Hays, a feeding protocol for weaning calves has been developed that works well for transitioning weaned calves to a total mixed ration. It starts with high-quality grass hay and the weaning ration being offered each at 0.5% of the calves’ current bodyweight, dry basis, on the day of weaning. The weaning ration should be placed on the bottom of the bunk and the hay over the top. Each day the weaning ration is increased while hay remains the same. On day 4, place the hay on the bottom of the bunk. Over a period of 7-10 days, the dry intake should be reached at approximately 2.2-2.5% of the calves’ bodyweight. Simply by pre-conditioning, producers are trying to maximize health and well-being of the animals prior to and at weaning, not just post-weaning. Remember, no two groups of cattle are the same and using a one herd health plan that fits all phases of your operation might not work in all situations. Establish a health/vaccination plan that fits your operation by consulting with your veterinarian. Try to reduce stress of weaning as much of possible, along with preparing your weaning pen ahead of time. Getting your weaning calves up to the bunk and eating should be a top priority. This all plays an important part of the successfullness of weaning and keeping your calves headed in the right direction. More will come on vaccinations, injection sites and proper equipment to be used on livestock in my next article.
October Preschool Programming – PUMPKINS!

Our monthly preschool programming will be held on Thursday, October 20th, 10 am -11 am at the McPherson County Extension Office (600 West Woodside, McPherson). This month’s theme will be pumpkins! Come join us for a story and fun activities all about pumpkins! This program is free, but we do ask that you register at tinyurl.com/OctoberPreschoolFun.

Trick or Treat!

Bring your trick or treaters by McPherson County Extension office on Halloween, 9 am – 4:30 pm! We will have a free light up surprise for the first 20 youth (ages 3+) that stop by. We will also have a fun treat for kids under 3!

Need a Youth Enrichment Program?

McPherson County Extension office also offers youth programming for a variety of settings, including child care centers (our programs are great for no school days!), after school programs, and community recreation centers! Our most popular current programs can be found at Community Programming For Youth (k-state.edu). We are frequently adding to this list. If you are interested in scheduling a youth program, please reach out to Audrey Seeger, Program Assistant, at aseeger@ksu.edu. We can help find just the right program to suit your group or organization!

Information Request

Want more information about any of the programs listed here? Are you interested in scheduling a program? Do you want to know about new programs as we make them available? Fill out the information request at https://tinyurl.com/Enrichmentinfo or scan the QR!
Thank you for an awesome 2021-2022 4-H year!
RETURN SERVICE REQUESTED

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