



AG NEWS

SHAD MARSTON
COUNTY EXTENSION AGENT
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Caring for Our Pets and Outside Livestock this Winter by Shad Marston

Winter weather can be rough on all of us, including our furry friends. Don't forget to consider the safety of your pets during cold weather. Follow these steps to help ensure your pet's safety when chilly weather hits our area. Provide animals with access to feed and water during and after extreme weather events. Allow your pet to be indoors or in a warm place. Remember, antifreeze is a deadly poison. Wipe up spills on garage floors and store antifreeze out of reach. Seek veterinary care for any animals that need it. Increase your pet's food intake to help them keep warm. Check your pet for frostbite, especially on paws and ears. Prevent your pet's water from freezing. Take care of their coat and skin. To avoid itchy, flaking skin, KSRE recommends keeping your home humidified and towel dry your pet as soon as he or she comes inside. Pay special attention to paws and in-between the toes. Remove any snow from between foot pads. If possible, keep your dog's coat longer in winter for warmth. If your dog is short-haired, consider getting a coat or sweater for your pet. Keep pet bathing to a minimum when it's cold to avoid dry skin. If your pet needs a bath, use a moisturizing shampoo. If pets cannot come indoors, you should make sure they are protected by a dry, draft-free enclosure large enough to allow them to sit and lie down, but small enough to hold in the pet's body heat. Raise the floor a few inches off the ground and cover it with cedar shavings or straw. Turn the enclosure away from the wind and cover the doorway with waterproof burlap or heavy plastic. If the animals are outside, make sure their access to food and water is not blocked by snow drifts, ice or other obstacles.

For Livestock: Throughout the winter, extreme cold, wind, and snow leave animals housed outdoors (particularly cattle, horses, sheep, and goats) vulnerable to cold-weather-related injuries and illnesses, such as frostbite and hypothermia. Have a plan ahead of time to protect your outside livestock from severe conditions that can happen in the coming months. Move all livestock to sheltered areas or a wind break and make sure they have access to non-frozen drinking water. Water is the most important nutrient. Higher quality feed is needed when extreme cold temperatures are present to keep their body temperature up. A dry cold is much easier to manage than a wet cold. Unfortunately, each year animals are lost in the aftermath of extreme weather events. Let's do our part in coming up with a plan to protect our outside friends this winter, before the severe weather hits.

Don't wait to perform garden equipment maintenance

Preparing the garden for winter includes equipment and tool maintenance. Kansas State Research and Extension provides several tips to extend the longevity of garden tools and equipment. Hoses should be drained by stretching them and coiling for storage. Water will drain as you pull the hose toward you for coiling. Ultraviolet light can make hoses brittle and decay over time, so proper storage is necessary. Irrigation lines for lawn sprinkler systems should also be winterized by shutting off the main valve for the system and opening manual drains to prevent freezing in the lines. Lawn irrigation systems usually have shallow lines, and most lines are self-draining. These systems should be blown out with an air compressor. Lawn irrigation companies often offer this service.

To clean garden tools, it is suggested to use a steel brush to remove dirt and debris from previous uses. Once this has been done, clean the metal portion of the tool with oil and a paper towel to prevent rusting in storage. Store these tools in an area where they will not be exposed to poor weather conditions. This will help prevent splintering of the handles. Wooden handles that are becoming rough can be sanded lightly and coated with a light application of wood preservative, boiled linseed oil or polyurethane. After a few minutes, wipe off the excess coating. Some quick maintenance will increase the life of your tools and save you money from having to replace them.

Considerations for fall applications of anhydrous ammonia

Soils across Kansas are still running above 50°F at the 4-inch depth (Figure 1). It is best to delay anhydrous ammonia applications until soil temperatures drop below this threshold. Applying anhydrous ammonia in the fall ahead of the following corn crop has some appeal to producers. For one thing, fall fertilizer application spreads out the workload, so there's more time to focus on corn planting in the spring. Secondly, wet conditions in the spring sometimes prevent producers from applying lower-cost anhydrous ammonia ahead of corn planting and force them to apply more expensive sources after planting. Equally important for many producers have been issues with anhydrous ammonia availability at times in the spring.

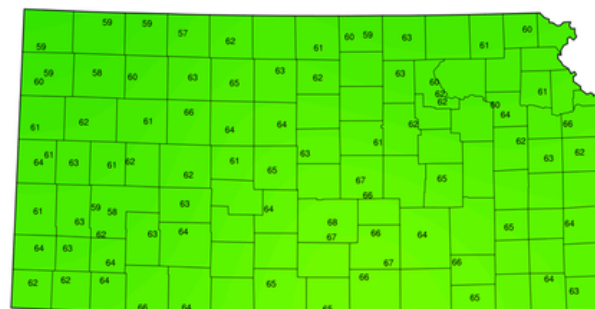


Figure 1. Average soil temperature (°F) at 4 inches for the 7-day period ending on October 26, 2023. Soil temperatures in individual fields in any given area will vary with differences in vegetative cover, soil texture, soil moisture, and other factors. (Kansas Mesonet)

Reactions of anhydrous ammonia in the soil

Anhydrous ammonia has a strong affinity for water (hydrophilic) and readily reacts with water in its surrounding environment. This hydrophilic nature can be detrimental if the ammonia comes in direct contact with plants or exposed skin, but it can also be advantageous when applied correctly as a fertilizer.

When anhydrous ammonia is injected into the soil, the ammonia gas (NH₃) reacts rapidly with moisture in the soil and is converted to ammonium (NH₄⁺). This ammonium is no longer in a gas form, and, being positively charged, it can be bound to clay and organic matter particles within the soil. This bound ammonium does not readily move in most soils, and leaching is not an issue except for some sandy soils with very low cation exchange capacity (CEC).

While this process does require moisture, the amount of water needed is quite low. The physical properties of dry soils cause the most common problems when applying anhydrous ammonia to dry soils. Poor closure of the injection furrow and voids and cracks in the dry soil can allow the ammonia to escape to the surface before converting it to ammonium. Using deeper injection depths and wing sealers in dry soils increases the amount of soil the gas comes into contact with and can significantly reduce ammonia losses back through the surface. Closing disks can also help seal the injection furrow and prevent losses at the injection site. More information on applying anhydrous to dry soils is available in this previous eUpdate article: https://eupdate.agronomy.ksu.edu/article_new/can-dry-soils-affect-anhydrous-ammonia-applications-510-4.

When is nitrogen lost?

When considering fall applications of N, remember that loss of N during the fall and winter is not usually a problem in Kansas. The conversion of “protected” ammonium to “loss-prone” nitrate during the fall and winter can be minimized by waiting to make applications until soils have cooled and using products such as nitrification inhibitors. The fact that essentially all the N may remain in the soil as ammonium all winter, coupled with our dry winters, means minimal N is likely to be lost over winter. However, soils often warm up early in the spring, allowing nitrification to start well before planting corn. Generally, if the wheat is greening up, nitrification has begun! Thus, one of the potential downsides of fall application is that nitrification can begin in early March and essentially be complete by late May and June.

At soil temperatures above freezing, ammonium is converted by specific soil microbes into nitrate-N (NO₃-) in a process called nitrification. Since this is a microbial reaction, soil temperatures strongly influence it. The higher the temperature, the quicker the conversion will occur. Depending on soil temperature, pH, and moisture content, converting all the ammonia applied in the fall can take 2–3 months or longer to nitrate.

By delaying application until cold weather, most of the applied N can enter the winter as ammonium, and over-winter losses of the applied N will be minimal. Producers should wait until soil temperatures are less than 50°F at a depth of 4 inches before applying ammonia in the fall or early winter. Nitrification does not cease below 50°F, but the soil will likely become cold enough to limit the nitrification process. In many areas of Kansas, soils may stay warmer than 50 degrees well into late fall and only freeze for short periods during the winter.

Using a nitrification inhibitor can help reduce N losses from fall N applications under specific conditions, particularly when soil temperatures warm back up for a period after application.

One should also consider soil physical properties when considering fall application. Fall applications of N for corn should not be made on sandy soils prone to leaching, particularly those over shallow, unprotected aquifers. Instead, fall N applications should focus on deep, medium- to heavy-textured soils where water movement through the profile is slower.

Summary

If anhydrous ammonia is to be applied in the fall, several factors must be considered, including soil texture, temperature, and soil moisture. Consider the following guidelines:

- Do not apply anhydrous ammonia in the fall on sandy soils.
- On silt loam or heavier-textured soils, wait to apply anhydrous ammonia until soil temperatures at the 4-inch depth are below 50 °F. Grass-covered soil at the 2-inch depth typically reaches 50 degrees around November 20 in central Kansas (Figure 2). You can expect the 4-inch depth to lag behind that date depending on soil type and earlier if the ground is bare.
- Deeper injection depths (6 to 8 inches), wing sealers, and closing disks can help mitigate application problems when soils are dry.
- Use a nitrification inhibitor with anhydrous ammonia to help reduce fall nitrification.
- To check the soil temperature in your area, visit the K-State Research and Extension Weather Data Library at:

<http://mesonet.k-state.edu/agriculture/soiltemp/>

Dorivar Ruiz Diaz, Nutrient Management Specialist



**TAX STRATEGIES FOR
MIDWESTERN FARM
AND RANCH WOMEN**

NOV. 28 | DEC. 5 | DEC. 12

K-STATE Research and Extension
NEBRASKA EXTENSION
PURDUE UNIVERSITY

Tax Strategies for Midwestern Farm and Ranch Women is a three-part extension workshop produced in collaboration between Women in Agriculture programs in Kansas, Indiana, and Nebraska. It will focus on the basics of tax planning for farms and ranches. Speakers will be broadcast virtually via Zoom. Attending this series offers you the chance to build your tax management knowledge and skills. Participants are encouraged to attend all three sessions and recordings will be provided to registered participants.

The sessions are open to anyone.

Program runs 6:30–8:00 pm Central Time each night.

Nov. 28th, Dec. 5th, Dec. 12th

Fee: \$30.00 for entire series.

Zoom connection information will be emailed upon registration.

REGISTER AT:

<https://web.cvent.com/event/1bfff2f5-14e7-41a6-a158-76fa65e2737c/summary>

Note: the registration link is a UNL site, but the program is hosted jointly by K-State, UNL and Purdue.

MORE INFO

Questions?

Robin Reid: robinreid@ksu.edu



FCW News

CHUCK LAUGHLIN
COUNTY EXTENSION AGENT
FAMILY & COMMUNITY WELLNESS



Teach & Taste – Fall Veggie Casserole

Looking for a new addition to that Thanksgiving family meal? Then mark your calendar now for November 8, 2023 at 6:30pm at the Extension Office for our feature Fall Veggie Casserole!

Please RSVP to ensure we have enough for everyone.

Use the link below to register and come join us and try out a new recipe.

<https://tinyurl.com/TeachandTasteNovember>

Living Well Wednesday Series

'It's Not Cool to JUUL': Expert warns of vaping use among teens

Among teens – and those in Kansas are no different – it may have seemed ‘cool’ years ago to puff cigarettes, or today’s version: e-cigarettes.

But tobacco use among teens has never really been cool, says Donna Gerstner of Live Well Finney County in Garden City. Consider:

- 60.4% of students that use e-cigarettes – also known as vaping – on a regular basis have reported symptoms of depression, compared to 29.1% of those who have never used e-cigarettes.
- 42.5% of those who use e-cigarettes are more likely to self-harm; 42% plan on it; 37.5% will attempt self-harm.
- 8 out of 10 youth who use e-cigarettes reported additional substance abuse, including alcohol and marijuana.

“So you see that it’s really scary that youth are using vapes because it causes suicidal behavior,” said Gerstner, who coordinates grants aimed at chronic disease risk reduction (known as CDRR) and e-cigarette prevention.

In Kansas, more than 48% of high school students have tried e-cigarettes and 22% are currently users, according to surveys done by the state’s Division of Public Health.

Health officials say tobacco use among youth, including vaping, has negative consequences that ultimately cause more than 60,000 Kansans under age 18 to die prematurely from smoking.

“The tobacco industry is creating vaping products that appeal to young people,” Gerstner said. “This includes vaping pens that look like USB drives, ballpoint pens, watches and even vape wear, such as a hoodie where the vape comes out of the drawstrings.”

Vaping gained popularity in part because youth believed it was less harmful than smoking, was less expensive and many e-cigarettes came in various flavors.

But, Gerstner says, don't be fooled by the lack of smoke produced from e-cigarettes. The cloud produced by e-cigarettes may appear to be water vapor, but in actuality it is a harmful aerosol of poisons that actually sticks to surfaces and creates a phenomenon known as third-hand smoke.

"Think of hairspray...what does it do? It doesn't go away when you spray it on your hair," Gerstner said.

"When somebody is vaping in an area, they leave chemicals on nearby surfaces, then dust reacts to other chemicals in the environment to form toxic chemicals. That's third-hand smoke. These are potentially harmful chemicals that people and animals can be exposed to through the respiratory system. Small children are especially at-risk for third-hand smoke exposure because they always put everything in their mouth."

In Garden City, Gerstner has been involved in efforts to pass a city and county ordinance that banned the sale of vaping products to teens. Currently, a group is working to change a school policy to eliminate a first-offense suspension for youth caught with vaping products, which only serves to give the opportunity for youth to stay home and vape there.

"Instead," she said, "we need to give those youth the tools that they can use to help themselves."

"We also have a statewide youth program called RESIST to fight against the tobacco industry's manipulative marketing tactics," Gerstner said. "Local chapters work to educate their peers and advocate for local policies that restrict access to tobacco products."

Gerstner spoke at length on the topic during the K-State Research and Extension online series, Living Well Wednesday. Her presentation, titled 'It's Not So Kool to JUUL,' is available to view online.

The Living Well Wednesday series continues Nov. 1 with a presentation titled Teen Stress and Anxiety: How Worried do Parents Need to Be? The series is free, but those interested are required to register online to receive a link where the session can be accessed.

*Reprinted excerpt by Pat Melagres,
K-State Research and Extension news service.*

Link to It's Not So Kool to JUUL webinar recording:
<https://youtu.be/8M4e8cKdP64>.



First Friday e-Call- Housing Lessons Learned from Office of Rural Prosperity Rural Champions

Kerri Falletti, Grassroots Strategy Developer, Office of Rural Prosperity will facilitate a panel of presenters about what they learned during their year as Rural Champions.

Registration Link:

https://www.ksre.k-state.edu/community/business/entrepreneurship/#sign_up

Turkey with a Side of Food Safety!

by Karen Blakeslee

Whether it is a simple meal for two, or a large gathering with a buffet, food safety is a priority at any meal, and especially at the holidays. Nobody wants the gift of foodborne illness!

Are you the host for the holiday meal? Reduce your stress by starting a list now to plan the location, food and recipes, activities and games, and what your guests could bring. Put it in a timeline or on a calendar to stay on schedule.

Are you buying a fresh or frozen turkey? If you choose fresh, be sure to place an order with your grocer or butcher shop and pick it up 1-2 days before the meal. Frozen turkeys can be purchased any time and stored in the freezer. Pay attention to grocery sales to save some money.

Frozen turkeys are best thawed in the refrigerator or in cold water. In the refrigerator, plan on at least five days for a 20 pound turkey. In cold water, allow about 30 minutes per pound of turkey.

Do you only have one oven? Use a slow cooker for hot dishes. A table top roaster oven can be used like a regular oven for many items. Even electric pressure cookers can cook up some tasty dishes! Some items, such as dessert or bread can be made ahead and frozen.

When cooking the turkey, remember that 325 degrees F is the lowest oven temperature to safely cook turkey. Use a food thermometer to be sure it reaches a minimum internal temperature of 165 degrees F.

Learn more at: www.ksre.k-state.edu/foodsafety/topics/holiday.html

Learn more at: www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation/poultry/turkey-farm-table

November is National Diabetes Month by Karen Blakeslee



Diabetes affects about 37 million Americans at all ages. Diabetes can damage your eyes, kidneys, nerves, heart and is linked to some types of cancer.

You can take steps to help prevent diabetes health problems. Manage your blood glucose, blood pressure and cholesterol. Change your lifestyle by eating healthy meals, get more physical activity, get enough sleep, and stop smoking. These steps can also reduce weight. If you need medications, take them on time. Seek mental health support to make your way through diabetes care. And always consult you medical professional for guidance.

Learn more at: www.niddk.nih.gov/health-information/community-health-outreach/national-diabetes-month.

Learn more at: www.k-state.edu/diningwithdiabetes/

DINING WITH DIABETES COMING TO MCPHERSON COUNTY IN 2024.

Cleaning and Storing Canners by Karen Blakeslee

As canning season winds down, it's time to clean and store the equipment for next year. Here's some tips for pressure canners.

- Clean the vent and safety valve with a pipe cleaner or small piece of cloth.
- Check the gasket for cracks and food debris.
- If the inside of canner has darkened, fill it above the darkened line with at mixture of 1 tablespoon cream of tartar to each quart of water. Place the canner on the stove, heat water to a boil, and boil covered until the dark deposits disappear. Sometimes stubborn deposits may require the addition of more cream of tartar. Empty the canner and wash it with hot soapy water, rinse and dry.

For more information: http://nchfp.uga.edu/tips/fall/store_canning_supplies.html



Last Call for 2024 Events to be included in McPherson County 2024 Calendar

Does your business or organization have an event scheduled for 2024? We are in the process of finalizing the McPherson County 2024 My Hometown calendar. If you have an event that is open for anyone in the county (or beyond), please submit them to claughlin@ksu.edu.

Please submit your Business and contact information to Chuck at claughlin@ksu.edu to be considered for inclusion in the 2024 calendar.



To schedule time with Chuck follow the link below or scan the QR code.

<https://calendly.com/claughlin-ksu/meeting-with-chuck>

County Connection E-News

To register to receive updates on upcoming events, calendar updates, webinars, senior and military discounts available, county resource phone numbers, as well as tips and tricks to make life easier.



<http://eepurl.com/iicSFn>



Clover Corner

SHYANNE JONES
COUNTY EXTENSION AGENT
4-H YOUTH DEVELOPMENT



It's time to fall back..... into the rhythm of a new 4-H year! Remember, enroll for incentives by November 15th, and make sure your friends do, too! As you start to plan your projects and activities for this year, pull out your record books and pin applications to create a rough draft of your participation, and make sure you're filling in each section. I'm excited to see all that McPherson 4-H does this year!

Enrollment Incentives

Have YOU enrolled in 4-H Online? Remember that those enrolled by November 15th will have their dues covered by the county! In addition, early enrollees will have the option to select their choice of curriculum (up to two books) for FREE! Select your choice from the Shop 4-H website and email Shyanne a link to your choice or the SKU number by November 15th!

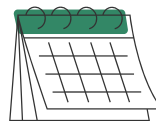
4-H Fair Theme

Already dreaming of warmer days? Me, too! Let's put those dreams to good use and start planning the 2024 4-H Fair theme! Each club should submit one theme to the extension office by January 29th. Our Council members will narrow the ballot down to the top two or three, and individual members will be able to vote for their selections at Club Day (tentatively scheduled for April 6th – pending location availability). Happy dreaming!

4-H Council

Congratulations to our new Council Officers:

President: Karly Durr
Vice President: Gentry Regier
Secretary: Matt Seeger
Treasurer: Lexi Shandy



Calendar of Events

November

- 11/5 - Achievement Banquet
- 11/15- Early Enrollment Incentives Deadline
- 11/18-11/19 - Kansas Youth Leadership Forum

SAVE THE DATE:

- 12/7- Council Meeting

Host rotations:

- December – Country Cousins
- February – Friendly Fremont
- April – Golden Opportunities
- June – K-State Wild Kids
- August – Livewires-Empire Best
- October – Santa Fe Sunflowers

Our next meeting will be December 7th at 7pm (modality TBD). Mark your calendars now for Council meetings on the first Thursdays of February, April, June, August, and October!

Get Published

Have project news or reports of fun 4-H happenings? Please email or bring in any articles to Lauralee at Lhelm@ksu.edu by November 20 to get them into the Clover Corner!

Community Mitten Tree

When: Between Thanksgiving & Christmas

Where: Home State Bank and Trust's Main or Euclid Street locations OR the Extension Office

Things you can donate:
Hats—Gloves—Scarves—Socks
Coats—Monetary Donations

*Items donated will be distributed to all elementary schools in McPherson County



K-State Research & Extension
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RETURN SERVICE REQUESTED

AGENT CONTACT INFORMATION

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