

## Livestock and Natural Resources



Ross Mosteller, Extension Agent

### Drought Planning – Pasture Trigger Dates

The grazing livestock manager needs to have a plan in place to deal with shortage of forage related to drought. The 2025 grazing season ended dry, little moisture was accumulated over the winter/early spring, and these factors combined with warm temperatures and wind, have depleted soil moisture. Long-range forecasts indicate a warmer and dryer than normal summer, making drought planning for the 2026 growing season essential. (See Figure 1).

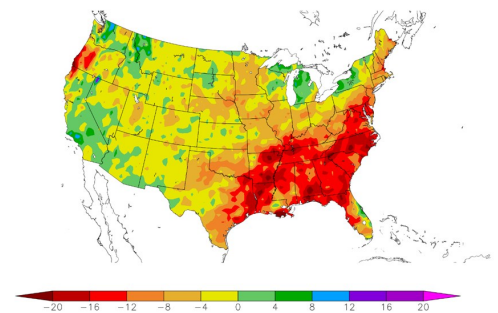
Lack of precipitation will limit forage growth and grass available for livestock. With reduced forage resources expect to lower the stocking rate during the grazing

season. Stocking rates can be adjusted by shortening grazing periods or reducing livestock numbers. Critical trigger dates can help producers adjust stocking rates if precipitation, and the resulting forage production, is expected to be below average. Trigger dates will vary depending on the dominant forage species, but here are some suggested dates .

- **May 15 to June 15** If March-May precipitation was 50-75% of the long-term average, reduce stocking rates 30-40% or more, depending on grass species and plant health.
- **June 15 to June 30** Approximately 75 to 90% of grass growth on cool-season dominated sites and 50% of grass growth on warm-season dominated range sites will have occurred. Rainfall after this point provides limited benefit to cool-season grasses but can still benefit warm-season.
- **July 15 to September 1** Precipitation after this date will have limited benefit to warm-season tallgrass production. Monitor stands and be prepared to move off cool season stands, reduce stocking rates or supplement with other forages.
- **September 1 to September 15** Smooth brome grass and other cool-season dominated pastures need adequate precipitation by these dates to produce enough fall forage for grazing. Allow six weeks of regrowth/recovery period for cool-season grass prior to killing freeze events.

**Figure 1:** ACIS Climate Map from the High Plains Regional Climate Center showing the percentage of normal precipitation. Most of Kansas is below normal by up to 8 inches.

Departure from Normal Precipitation (in)  
8/18/2025 – 5/17/2026



Generated 5/18/2026 using provisional data.

ACIS Web Services

### Stocking Rate Creep

In the last newsletter we looked at cow size increase. This month will illustrate the hidden cost of larger cows using the same forage resource. Stocking rate is the number of animals on a given piece of land over a certain period. “Stocking rate creep” happens when the same number of head are run on a given land area, but the cows (or sheep, goats, or other grazing animal) become larger over time.

Grandpa might have based stocking rate on a 1,200 pound cow, but if your cows are now 1,400 pounds you’ve unintentionally added another “cow” for every six, in terms of forage demand. On average, a grazing cow eats 2.2 to 2.3% of her body weight in dry matter (DM) every day. A good practice is to convert animals into Animal Units (AU). One AU = 1,000 pounds of grazing animal. If the average cow size is 1,400 lb, one cow = 1.40 AU. An AU does not count the calf if less than 3 months of age. For calves 3 months and older, add their weight to the AU calculation. Example: 1,400-lb cow + 400-lb calf = 1,800 total lb ÷ 1,000 = 1.80 AU

Today we look at the grazing animal side of the equation, forage production and availability is another important part of the equation, one that Meadowlark District Crops and Soils Agent David Hallauer addresses in his portion of the newsletter. Questions for producers to ask yourself are:

- Have cows gotten bigger over the years?
- Are the same number of head being run on the same acres as 10-20 years ago?
- Is pasture/range condition improving, maintaining, or declining?



Cindy Williams, Extension Agent

## Shift to More Seafood

If you can cook a fish fillet, you can have a healthy, easy dinner on the table in 10 to 15 minutes. If you think of seafood as fast food, shifting to include more in your diet might be easier than you think.

Current Dietary Guidelines for Americans recommend at least 8 ounces of seafood each week to get essential omega-3 fatty acids, which help keep your heart and brain healthy. These important nutrients are found in every kind of fish, especially those high in fat, such as salmon, trout, sardines, herring, canned mackerel, canned light tuna, and oysters. Other foods also contain omega-3s, although in smaller amounts. These include walnuts, walnut oil, flaxseeds, flaxseed oil, pecans, canola oil, cod liver oil, soybeans, and most greens.

Cooking fish is fast and easy, but it can be intimidating because it is delicate and easy to overcook. The best way to prevent this is to use a food thermometer and cook fish to an internal temperature of 145°F. Fish can easily be prepared by baking, pan searing, grilling, or cooking in a pouch made of parchment paper or foil.

Leftover fish, or any seafood, can be served the next day in tacos or on a bed of salad greens and vegetables.

## Habit Shift Challenge

This week, and for several weeks in the near future, attempt to stand up and stretch every hour. Think about how you can “trigger” yourself to accomplish this. Set a timer on your phone, watch, or computer, or search for an app that will remind you to take a mental and physical break.

It doesn't have to be a big deal. Just stop what you are doing, stand up, reach over your head, touch your toes, roll your shoulders, take a deep breath, and move on with your day.

## Add Crunch with Celery

Do you like celery? It's a versatile, affordable vegetable used in soups, salads, snacks, and many other dishes year-round.

Choose celery that is light green, crisp, and free of bruises. A fresh bunch should feel heavy and “squeak” when squeezed. Avoid limp or spreading stalks.

Wash celery under running water, trim the ends, and store it in a plastic bag in the refrigerator crisper drawer for up to 1–2 weeks. Celery can be frozen, but it may lose its crunch. It is low in calories and provides vitamins C, A, and K, along with folate and potassium.

## Summer Fairs and Food Stands

As summer approaches, so do county fairs, community fairs, and summer food stands. Keep food safety in mind when working at food stands, judging exhibits, and handling animals.

Operating temporary food stands can be challenging. Post handwashing signs near sinks, food preparation areas, and bathrooms. Handwashing is one of the most important steps in safe food handling. Never handle ready-to-eat foods with bare hands; use gloves or utensils instead.

Animals are common at fairs, so always wash your hands after handling animals or visiting animal areas. Avoid eating or drinking around animals, and remind children to keep their hands away from their mouths. Enjoy the fair, but remember to wash your hands before eating.

## Red, White and Blue Salad

In honor of America's 250<sup>th</sup> celebration this summer, consider making this Red, White and Blue salad. It is easy, tasty and very refreshing for a warm summer day. This recipe makes 2 servings.

### Ingredients:

- 1 slice watermelon, 1-inch thick
- ½ cup low fat vanilla yogurt
- ½ cup low fat blueberry yogurt

### Directions: (Remember to wash your hands first!)

1. Cut watermelon slice in half. Then cut each half into 5 wedges and cut off rind.
2. On a plate, arrange each group of 5 wedges into a star shape with the points out.
3. Spoon half of each flavor yogurt in center of each star.

### Helpful Hints:

When shopping for yogurt, watch for sales and buy flavors your family likes. Be sure and check the “sell by” date on each container for freshness. Like milk, yogurt comes in whole, low fat and nonfat varieties. Yogurt can also be flavored with fruit—even whole berries in some containers. Compare brands and sizes when shopping for yogurt.

**Nutritional Information:** 150 calories per serving; 20 calories from fat; total fat 2 g; cholesterol 5 mg; sodium 70 mg; total carbohydrates 29 g; sugars 28 g; protein 6 g.

Recipe source: *K-State Kids a Cookin'*



David Hallauer, Extension Agent

## Fall Armyworm: Looking Ahead

If dealing with the aftermath of last season's fall armyworm feeding injury has the potential for 2026 issues on your mind, keep these points in mind:

1. Previously damaged stands are likely still in some level of recovery mode and will benefit from TLC ranging from supplementation to reduced stocking rates to weed control, etc... Read more in the Meadowlark Extension District Agronomy Blog: <https://blogs.k-state.edu/meadowlarkagronomy/> plus a companion article from District Livestock and Natural Resources Agent Ross Mosteller on the cover of this newsletter.
2. Fall armyworm annually migrates from the south. Even as early as this season has felt, it's likely still too early for their arrival. If you *do* find larvae feeding on forages, it *could* be an overwintering pest like true armyworm.
3. Fall armyworm monitoring will begin soon (one local pheromone trap is already out). More information will be available soon on how to access alert reports.
4. Be prepared. Implement active scouting. Plan management triggers in advance so decisions can be made quickly. Hopefully, you won't have to do anything but having a plan in place certainly won't hurt.

What 2026 will bring is anyone's guess. If you want to discuss what's next, email me at [dhallaue@ksu.edu](mailto:dhallaue@ksu.edu). We'll hit on those topics – and others – in this summer's 'Tailgate Talk' series, <https://www.meadowlark.k-state.edu/crops-soils/>.

## Did You Know? Grass Growth:

If you've ever looked at your hay field and thought maybe delaying harvest would help increase yields, the reality might not be what you think.

When grass tillers are kept vegetative, plants continue to produce leaves. However, when that tiller enters reproduction, not only is the growing point exposed to potential harvest removal. Production of vegetative tillers will be considerably reduced as well as shown in the graph on the right.

Once we reach reproduction, biomass accumulation flattens and plant height comes predominantly from stem elongation and seedhead emergence. It also means declining quality and if harvest is delayed too long, potential removal of basal tillers that help with ground cover while providing some protection from summer drought, fall armyworm feeding, etc... Bottom line: think twice before delaying harvest too much.

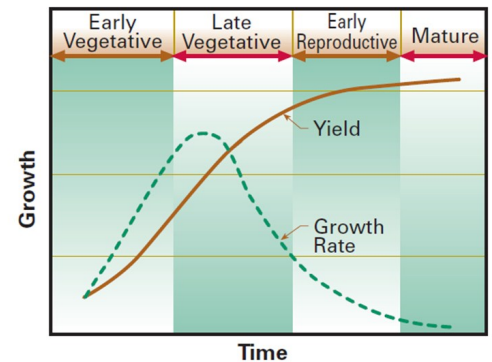
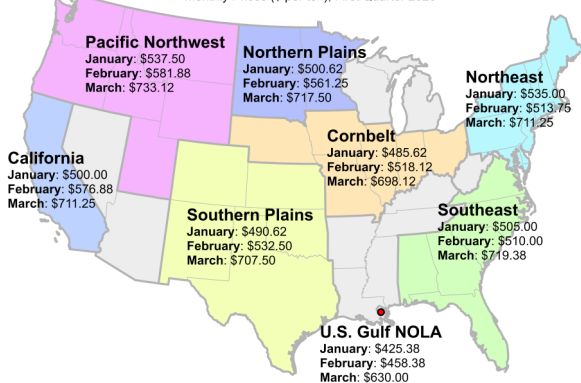


Figure 4. Growth rate changes during a growth cycle  
Source: *How Pasture Plants Grow*, Iowa State University

## Urea

Monthly Prices (\$ per ton), First Quarter 2026



Source: Green Markets

## N Management Video

This graph courtesy of USDA shows some of the fertilizer volatility challenges Midwest growers are facing. I recently sat down with K-State Research and Extension Nutrient Management Specialist, Dr. Dorivar Ruiz Diaz, to get his thoughts on topics ranging from the current efficiencies of our N management programs plus what we can be thinking about for in-season N – and other nutrients – as the season progresses. Check it out at: <https://www.youtube.com/@meadowlarkextensiondistrict>.

## Tools You Can Use: Crop Disease Lookout

Nothing can substitute for in-season scouting of our own fields, but sometimes a little 'guide' can help focus our efforts. That's where the Crop Protection Network's Crop Lookout tool can help.

This interactive, real-time mapping tool tracks emerging crop issues across the United States as reported by a network of university Extension specialists, researchers, and agricultural professionals. It visually provides reports of diseases, pests, and abiotic challenges as they develop throughout the growing season and can best be used as a guide for local scouting efforts. Not sure if Southern Rust is even on the horizon? The Crop Lookout tool shows other reports from across the country to help guide scouting efforts. Check it out at <https://cropprotectionnetwork.org/crop-lookout>.



**David Key**, *Extension Agent/Director*

## 5 Common Meeting Mistakes Volunteer Boards Make

Volunteer boards play an important role in organizing community celebrations, festivals, nonprofit programs, and local projects. Most board members are volunteers who donate their time and energy to improve their community. Because of this, making the most of meeting time is important.

Even experienced boards occasionally struggle with meetings that run too long or fail to reach decisions. Fortunately, many common meeting challenges can be avoided with a few simple practices.

### 1. Meetings Without a Clear Purpose

- One of the most common problems occurs when meetings begin without a clear objective. Members may spend time discussing topics that are not urgent or related to the organization's priorities.
- Before each meeting, the chair or facilitator should ask:
  - What decisions need to be made?
  - What information must be shared?
  - What tasks need to be assigned?
- Starting with a clear purpose helps keep discussions focused.

### 2. Trying to Cover Too Many Topics

- Volunteer boards sometimes try to address every possible issue in one meeting. This can lead to long discussions and fatigue among board members.
- Instead, focus on the most important two or three issues that require attention. Other topics can be scheduled for future meetings.



### 3. Allowing Discussions to Drift Off Topic

- Meetings can easily lose focus when conversations wander into unrelated topics. While discussion is valuable, the facilitator should help guide the group back to the issue being discussed.
- A simple reminder such as "Let's return to the main question" can keep the meeting productive.

### 4. Failing to Assign Responsibilities

- A meeting may end with several good ideas, but without clear assignments those ideas often do not move forward.
- Before closing the meeting, confirm:
  - Who is responsible for each task
  - What steps need to be taken
  - When the task should be completed
- Clear responsibilities help ensure progress between meetings.

### 5. Not Recording Decisions

- Meeting minutes provide an important record for nonprofit organizations. Even brief notes should capture:
  - Key decisions made
  - Tasks assigned
  - Important follow-up actions
- Accurate records help boards remain organized and accountable.
- Volunteer board members dedicate their time to strengthen their communities. By avoiding a few common meeting mistakes, boards can make better use of their meeting time and focus their energy on programs and events that benefit the community.



**Laura Phillips, Extension Agent**

## Beware Ticks: What to Know and How to ID Them

With our recent warm weather, you may notice that ticks are out and about. Ticks are small, slow moving wingless parasites that feed on human and animal blood. Ticks can be classified into two groups: soft ticks (Argasidae) and hard ticks (Ixodidae). Generally,

the ticks that target humans and dogs are hard ticks. Hard ticks have a hardened shell, and the head sticks out in front of the body.

TickEncounter Resource Center

**Dermacentor variabilis (American Dog ticks)**



ticks are reddish brown and have no markings on their backs. They prefer to feed on dogs but will bite humans if no dogs are available to them. Adult female deer ticks have a two-toned back. Near the head of the female deer tick is a dark brown to black semi-circle, and the rest of the back is orange-brown. The back of a male deer tick is nearly all black.

In Kansas we see a few different types of tick-borne diseases. Different ticks can transmit different diseases, so it is important to know what type of tick bit you. This will make diagnosis easier if you become sick from a tick bite.

The lone-star tick can transmit Ehrlichiosis, Rocky Mountain Spotted Fever and other Spotted Fever Group Rickettsioses (SFGR), and Tularemia. The American dog tick can transmit Rocky Mountain Spotted Fever and Tularemia. The deer tick can carry Lyme disease. Tularemia and Lyme disease usually require a tick be attached over 24 hours, while Ehrlichiosis and Rocky Mountain Spotted Fever, can be transmitted within hours.

Lone-star ticks can also cause a condition called Alpha-gal syndrome, also known as red meat allergy. This condition causes a person to develop allergies (often hives or nasal congestion) after consuming red meat. It is not yet clear how long a tick must be attached before it can cause Alpha-gal syndrome.

While tick bites often seem like a fact of life in Kansas, there are several steps you can take to prevent tick born illnesses. First is to stick to trails instead of going into tall grass or weeds. Using insect repellents with DEET or permethrin works well to discourage ticks, although permethrin can only be applied to clothing, not to skin. Light colored clothing makes it easier to spot ticks before they reach the skin.

If you have been hiking or out in tall grass, it is a good idea to check for ticks, shower, wash and dry your clothes as soon as you can. While a washing machine might not kill a tick, the heat of a dryer will kill any ticks. If you are bitten by a tick, promptly remove it to reduce chance of disease transmission. It is best to use fine point tweezers to remove the tick. If you pull it off with your fingers, you may squeeze the tick, causing it to release more saliva into your bloodstream and put you at higher risk of a tick-borne illness. Save the tick in a vial with rubbing alcohol so it can be identified if you become ill after the bite. Be sure to monitor tick bites for discoloration, swelling, or rash. Should you notice any issues with the bite or develop any flu-like symptoms see a physician and have the tick identified.

TickEncounter Resource Center

**Ixodes scapularis (Blacklegged ticks or Deer ticks)**



TickEncounter Resource Center

**Amblyomma americanum (Lone Star ticks)**



TickEncounter

**Brown Dog Tick (Rhipicephalus sanguineus)**



## Welcome our New District 4-H Agents



### Megan Vrbka—4-H Agent, Holton



My name is Megan Vrbka, and I am originally from Staplehurst, NE. Growing up, I was very involved in my local 4-H program. Throughout my time in 4-H, I showed livestock (beef cattle and sheep), competed in shooting sports, and participated in various static events, including sewing, baking, and photography. As I got

older, I also held leadership roles in our 4-H Council and 4-H Junior Leaders Program.

I earned my degree in Agricultural Education, with a minor in Animal Science, from the University of Nebraska–Lincoln. At the university, I was a member of the collegiate Meat Judging Team, Sigma Alpha, Nebraska Cattlemen, and served as an Ag Sack Lunch Ambassador. During my time at the university, I completed internships with the National Western Stock Show, Pioneer Hi-Bred International, and the University of Nebraska Extension in Seward County. I also completed my student teaching experience in Burwell, NE, during my final semester.

Following graduation, I accepted a position as an Agriculture Teacher and FFA Advisor at HTRS Public Schools in Humboldt, NE, where I have served for the past two years. I am now excited to return to extension and begin the next chapter of my career in Kansas!

### Ashtyn Humphreys, 4-H Agent—Oskaloosa



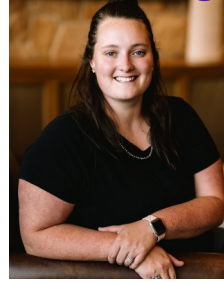
Hello everyone, my name is Ashtyn Humphreys, and I am the new 4-H agent in Jefferson County. I grew up in Odell, NE, on my family's farm. Growing up, I was very involved in 4-H and was a 12-year 4-H member in Gage County. I exhibited in most project areas throughout my years as a member, including showing breeding heifers and market swine, clothing, quilting, and baking.

I graduated from Diller-Odell High School in 2020, which led me to the University of Nebraska–Lincoln, where I earned my Bachelor of Science in Agricultural Economics. Upon graduation, I decided to continue my education at Oklahoma State University, where I earned my Master's degree in Agricultural Education and Leadership. While at Oklahoma State, I served as a teaching assistant and helped lead and facilitate a variety of agricultural leadership courses. Some of my hobbies

include reading, spending time with my friends and family, traveling, sewing, cooking, and cheering on the Nebraska Cornhuskers.

Agriculture and youth are areas I have always been passionate about, and I am excited to combine those passions in working with your youth through 4-H.

### Abbie Burger, 4-H Agent—Seneca



Hi! My name is Abbie Burger, and I am excited to join the Meadowlark District as the new 4-H Agent in the Seneca office.

I bring a strong background in agriculture, leadership, and youth development, fueled by my lifelong passion for the 4-H program.

Having been raised just outside of Wathena, KS, I understand the value of rural communities and the important role 4-H plays in shaping young leaders. I graduated from Kansas State University in 2019 with a degree in Animal Science and a minor in Business. I worked as an Office Professional/Program Assistant in Brown County for 2.5 years, focusing on STEM and wildlife programming while assisting with the 4-H program.

My connection to 4-H runs deep. As a 12-year member of the Doniphan County 4-H program, I actively participated in many aspects of the organization. From county fairs and state leadership events to the Interstate Exchange Program, I experienced firsthand the incredible opportunities 4-H provides. These experiences significantly shaped my leadership skills and passion for working with youth.

Outside of my professional role, I enjoy spending time outdoors, fishing, and making memories with friends and family. I have been married to Zach for six years, and we have three children: Drew is 3, and Wyatt and Knox are 6-month-old twins. We are big K-State Wildcat fans.

I look forward to this new chapter and am excited to connect with 4-H members, families, and volunteers across the community. Please feel free to introduce yourself when you see me—I'm thrilled to be part of this district and eager to see the positive impact we can make together in our 4-H program.



**Teresa Hatfield, Extension Agent**

### A Healthy Body Supports a Healthy Brain

As the Family and Community Wellness agent with K-State Research and Extension's Meadowlark District, I often partner with local organizations to promote health and well-being in our community. Currently, I am working with the Alzheimer's Association as a community educator, sharing information about Alzheimer's disease and brain health.

While the causes of Alzheimer's disease are still being studied and there is no cure, research shows there are steps we can take to care for our bodies in ways that support brain health. Although these steps cannot guarantee prevention

of dementia, they can help reduce risk and support overall health.

The Alzheimer's Association outlines **10 healthy habits** that may promote better brain health. These include protecting your head protection, not smoking, staying physically active, managing diabetes, getting quality sleep, eating a healthy diet, challenging your mind, controlling blood pressure, continuing education or lifelong learning, and maintaining a healthy weight. Let's take a closer look at a few of these habits.

#### Eat for Your Brain

The *Healthy Brain, Healthy Body* fact sheet from K-State Research and Extension notes growing evidence that the gut acts like a "second brain." In addition to helping with digestion, it also affects mood and overall health. Eating a variety of nutrient-dense foods can support both gut and brain health.

Foods associated with brain health include green leafy vegetables, nuts, berries, beans, whole grains, fish, poultry, and olive oil. Try incorporating these foods into meals and snacks on a regular basis.

#### Get a Good Night's Sleep

Sleep plays an essential role in overall health, including heart and brain health. During sleep, the body processes the day's events and allows time for repair and renewal. Most adults should aim for seven to nine hours of sleep each night, while children and teens need even more.

Establishing a consistent sleep routine can help. Try going to bed and waking up at the same time each day, sleeping in a dark, cool, and comfortable environment, and limiting alcohol before bedtime. Alcohol can interfere with rapid eye movement (REM) sleep, which is important for brain restoration.

#### Challenge Your Brain

Keeping your brain active is another key component of brain health. Engaging in a variety of mentally stimulating activities helps keep the brain sharp and encourages new neural connections.

Try challenging your brain with more complex activities such as learning to play a musical instrument, studying a new language, taking a class, or expressing creativity through painting or other visual arts.

The heart and brain are closely connected, so caring for one supports the other. Small, healthy choices can add up over time and make a meaningful difference. It is never too late to start making decisions that support a healthier body and brain.

#### America at 250: Trivia Time!

1. We celebrate our independence on July 4<sup>th</sup>, what date did the delegates begin signing the Declaration of Independence?
2. Who ruled England when the Colonies established independence?
3. Who made a mid-night run to Lexington Massachusetts, to warn the British were coming?
4. Who was the primary author of the Declaration of Independence?
5. Where was the Declaration of Independence stored during World War II?
6. Which two U.S. presidents died on the same day—July 4, 1826—exactly 50 years after the Declaration of Independence?
7. In what city was the Declaration adopted by Congress?
8. How many delegates eventually signed the Declaration?
9. What is the nickname of the U.S. flag?
10. What was the name of the treaty that was signed on September 3, 1783, that officially recognized American independence?



1. King George, III; 2. August 2, 1776; 3. Paul Revere; 4. Thomas Jefferson; 5. Fort Knox, Kentucky; 6. Thomas Jefferson & John Adams; 7. Philadelphia; 8. 56; 9. "Old Glory"; 10. Treaty of Paris

**Meadowlark Extension District**

**Holton Office**

114 W 5th St.  
Holton, KS 66436

Address Service Requested

**Holton Office**

114 W 5th St.  
Holton, KS 66436-1778  
785-364-4125

**Oskaloosa Office**

100 E Washington  
Oskaloosa, KS 66066-0326  
785-863-2212

**Seneca Office**

1615 Branch St.  
Seneca, KS 66538-1504  
785-336-2184

**District Office Hours:**

**Open Monday-Friday**

8:00 AM-Noon; 12:30-4:30 PM

**Closed on designated holidays**

<https://www.meadowlark.k-state.edu/>

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

**Publications & Resources For Sale**

Caregiver Helpbook  
Family Account Book  
Farm Account Book  
Radon Kits  
Predator Calls  
IMR Calving Books (red)  
Pesticide Manuals  
Soil Tests - Crop, Pasture, Lawn & Garden  
Water Test Kits (pay SDK Labs, not us)  
Geo Textile Fabric (12 1/2' wide-sold per linear ft.)  
Neutroleum Alpha®  
Mosquito Briquets  
Forage Tests  
Grazing Sticks  
911 Signs  
Pesticide Application Field Record Book (free)  
Cow/Calf Record Book (free)  
Body Condition Record Book (free)  
K-State Publications (free)

**Items to Check Out**

Soil & Hay Probes  
Pesticide Manuals  
Mole Trap  
Freeze Branding Irons  
Buzzers

**Upcoming Events**

Dining with Diabetes—**June 9 thru 30 (Tues.)**, 10:30–11:30,  
Circleville  
Dining with Diabetes—**June 11 thru July 2 (Thurs.)**, 10:30-11:30,  
Valley Falls  
Stay Strong, Stay Healthy—**July 23-September 24 (Tues. & Thurs.)**  
- 10:00, Seneca  
Medicare Open Enrollment —**October 15-December 7**

**Some Programs That We Offer**

- A Matter of Balance
- Dining with Diabetes
- Gray for a Day
- Master of Memory
- Stay Strong, Stay Healthy
- Walk With Ease
- Bonding Through Board Games
- School Enrichment
  - Butterflies
  - Chick Embryology
  - Glo-Germ Hand Washing
  - Wheat Science