Sunflower Extension District #6

October 2023

Go to www.sunflower.ksu.edu for more details on these programs.

Inside Your Newsletter...

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Dining with Diabetes, Stay Strong Stay Healthy.........................Family & Consumer page

Sunflower Extension District Appreciation Award

Extension Appreciation Awards are selected in October and given annually to our local community members who go above and beyond to support Extension Programming and the mission of K-State Research and Extension. We are excited to honor these deserving recipients!

Sherman County
Recipient Jen Sanderson, presented by Travis Gattshall, Extension Board member

Cheyenne County
Recipient Ruth Millikan, presented by Amy Hendricks, Extension Board member

Wallace County
Recipient Connie Hudson, presented by Melinda Daily, Extension Agent
In recent years, a common question from farmers is related to the dry down rate for sorghum when approaching the end of the season. Based on historical information, the average dry down rate depends on the weather, primarily temperature and moisture conditions. If the weather outlook for October and November favors below normal precipitation, the dry down rate for sorghum could be faster than average. However, any sorghum impacted by freeze (should an event occur) will present challenges in how quickly the grain will dry down. This is because if the grain has not reached physiological maturity, there is quite a bit of moisture in the grain, especially in the interior portions of a kernel.

From a crop perspective, we predict growth stages based on growing degree days (GDD). These growing degree days can be tracked for each crop at the Kansas mesonet website, http://mesonet.ks-state.edu/agriculture/degreedays/. This will show how many GDD have been accumulated during this growing season for your local mesonet station and compare that to the normal number of GDDs.

The overall cumulative GDD from flowering to maturity is about 800-1200 (based on 50 degrees F as the base temperature), with the shortest requirement in GDD for short-season hybrids. Before maturity, from beginning of grain filling (soft dough until maturity), grain moisture content within a grain will go from 80-90% to 25-35% where black layer is usually formed (Figure 1). From maturity (seen as a “black-layer” near the seed base; Figure 1) to harvest time, sorghum grain will dry down from about 35 to 20% moisture, but the final maximum dry mass accumulation and final nutrient content will have already been attained at maturity.

Grain water loss occurs at different rates but with two distinct phases: 1) before “black layer” or maturity (Figure 1), and 2) after black layer. For the first phase, Figure 1 presents the changes in grain moisture from soft dough until physiological maturity of sorghum.

To answer the rate of dry down question from many of our farmers, a study was conducted in central KS to investigate the effect of the grain dry down rate from the moment of “black layer” until commercial harvest grain moisture is reached. For the conditions experienced in 2019 (from early September until early October), the overall dry down rate was around 0.7% per day (from 34% to 17% grain moisture) – taking an overall of 26 days (from September 9 to October 10).

This dry down process can be delayed by:
- Low temperatures
- High humidity
- High grain moisture content at black layer (38-40%)

It is expected that the dry down rate will decrease to around <0.5% per day for late-planted sorghum entering reproductive stages later in the growing season. A similar decrease is also expected for sorghum that was exposed to late-season stress conditions (e.g., drought, heat, and freeze). Under these conditions, maturity may be reached with high grain water content and the last stages after black layer formation could face lower temperatures and higher humidity. These main factors should be considered when the time comes to predict harvest.
K-State releases app for animal record-keeping

CalfDex now available for IPhone, Android devices

K-State Research and Extension news service

MANHATTAN, Kan. – Kansas State University agricultural economics and veterinary medicine staff are taking their knowledge on animal record-keeping to mobile phones with an app that is now available in app stores for IPhone and Android devices.

K-State livestock economist Ted Schroeder said the app, called CalfDex, is free to download. It was developed by agricultural economist master’s graduate Jake Hefley (who now works at the University of Missouri), master’s candidate Audrey Marchek, K-State veterinarian Bob Larson and Schroeder.

The project was funded by a grant from the USDA Federal-State Marketing Improvement Program.

“Our team is eager to provide users with a convenient and easy-to-use modern animal data management tool to keep pace in an ever-changing industry,” Schroeder said. “Considering the growing importance of information exchange in the beef supply chain, there is value in an application that has the ability to store and upload data at the whole-herd and individual animal levels, while also facilitating easy downstream data sharing.”

The app is designed for use in the field even where cell phone service is not available. Schroeder said CalfDex enables producers to maintain efficient and accurate calving, weaning and treatment records – mitigating the risk of clutter, data loss and misplacement that is commonly seen with paper records. The data is also stored across calving seasons for easy access.

Schroeder said the app allows users to protect information with a unique email address and password, established by the user.

“Because it has the capability to track multiple herds and individual animal information, CalfDex is tailored to meet the needs of all sizes of calving operations, from large purebred enterprises to a 4-H or FFA student beginning their first beef breeding project,” Schroeder said.

More information on the app, including a description of its functions, is available online, as well as on Ag-Manager, a website maintained by K-State’s Department of Agricultural Economics. A tutorial is available at https://calfdexapi.azurewebsites.net/, or questions can be directed by email to CalfDex@ksu.edu.
Family & Consumer Science  By: Melinda Daily

**GREAT PROGRAMS COMING YOUR WAY**

**What is Stay Strong, Stay Healthy Strength Training?**
Strength training has been scientifically proven to be safe and effective for both men and women at any age.

**Why Strength Training?**
Strength training keeps your body and mind functioning at their best! Regularly completing strengthening exercises will help you build muscle and increase bone density, preventing frailty and osteoporosis.

**What are the benefits?**
- Increases muscle strength
- Strengthens bones
- Lifts depression
- Improves balance
- Relieves arthritis
- Reduces stress
- Enhances flexibility
- Helps control weight
- Reduces risks for heart disease

**In St. Francis at the United Methodist Church at 10:30 c.t. for 1 hour on Tuesday & Thursday for 8 weeks. Starting date Oct. 31 through December 21st.**

Call the Sunflower Extension Office to sign up at 785-332-3171. I will be offering a Level 2 for those that have done the level 1 and are ready for more. Cost for the 8 week program is $10.00.

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**Dining with Diabetes schedules:**

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<tr>
<th>Location</th>
<th>Dates</th>
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<tr>
<td>Sharon Springs</td>
<td>Monday, October 30th&lt;br&gt;Monday, November 6th&lt;br&gt;Monday, November 13th&lt;br&gt;Monday, November 20th</td>
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<tr>
<td>St. Francis</td>
<td>Thursday, November 2nd&lt;br&gt;Thursday, November 9th&lt;br&gt;Thursday, November 16th&lt;br&gt;Thursday, November 30th</td>
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**RECIPE DEMO AND TASTING EACH CLASS**

Call Melinda Daily at 785-852-4285 or email her at mdaily@ksu.edu

Maximum 16 participants

Program fee is $25.00

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**Coming the end of November:**

“Harvest of Holidays”

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K-State Research and Extension is an equal opportunity provider and employer.
OCTOBER 1 OPEN ENROLLMENT BEGINS!

October 1, 2023
https://v2.4honline.com/#/user/sign-in

Choose Your Club!

Cheyenne County
Go-Getters
Leaders: Heidi Ketzner
Plum Creek
Leaders: Sharissa Andrist

Pleasant Hill
Leaders: Erika Zimbelman
Lawn Ridge
Leaders: Crystal Ludowese & Matt Wilson

Sherman County
Prairie Dale
Leaders: Amanda Schilling & Kelsey Stephens
Ruleton Eager Beavers
Leaders: Travis & Colleen Gattshall

Country Clovers
Leaders: Penny Nemechek & Mandi Martin
Sunflower
Leaders: Peggy Berls & Julie Quain

Wallace County
Harrison Endeavors
Leaders: Becky Vandike
Weskan Windmills
Leaders: Heavenly McQuillan & Stacy Riedel

Ladder Creek
Leaders: Lynn Perry & Lindsay Hartman
Smoky Valley
Leaders: Peggy Fischer & Jori Daily & Brynne Wright

Choose Your 4-H Projects
https://www.sunflower.k-state.edu/4-h/county_projects/index.html  Sunflower District Website
https://www.kansas4-h.org/projects/  Kansas 4-H Website

Choose a project area to explore or re-explore and do something new!
Find ideas of things you can choose to learn or do in each project.
Learn about available project resources. (County offices have check-out copies of many of these.)
State and regional offered workshops and learning opportunities will be listed.
Find Kansas Clover Classroom learning activity—if you are a junior leader, these work for a project meeting.

“GOOD LUCK” to the “2023”
Sunflower Extension District #6
“SHOOTING SPORTS TEAM”
24 members will be competing on October 14th & 15th
**Kansas Youth Leadership Forum (KYLF)**

**What:** Build your leadership skills and potential through workshops, consulting groups, inspirational speakers and more. In addition, the 2024 State 4-H Youth Leadership Council will be elected and up to six National 4-H Conference delegates will be selected through an interview process at KYLF.

**Objectives:**
- Broaden your understanding of the meaning of leadership and the qualities of a leader.
- Practice leadership skills you can use in other situations, like your local club, school and community.
- Improve interpersonal communication skills.
- Gain confidence.

**When:** November 18-19, 2023
**Where:** Rock Springs 4-H Center
**Who:** Youth 14-18 years of age before January 1, 2024
**2023 Fees:** $200 and additional optional $50 for Friday overnight and breakfast.

**Registration Deadline:**
Deadline - Monday October 16, 2023 by 11:59 p.m.

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**District Achievement Banquet Dates**

- **Wallace County**—November 5th *with Officer’s Training to follow*
- **Sherman County**—November 19 *with Officer’s Training to follow*
- **Cheyenne County**—No date set yet
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<tr>
<th>Sunday</th>
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<td><strong>4-H Online 2.0 Open Enrollment begins:</strong></td>
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<td>4-H Spirit Day</td>
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**National 4-H Week October 1st—7th**

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<td>Extension Office Closed</td>
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<td>SH—Kansas Project Record Books due to the Extension Office</td>
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<td>4-H State Shooting Sports Competition October 14th &amp; 15th</td>
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<td>SH—Match Day Applications due</td>
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<td>Halloween/Trunk or Treat</td>
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Sunflower District 2023
Sunflower Extension District #6
Goodland Office
813 Broadway, Room 301
Goodland, KS  67735

Sunflower Extension District #6 Offices
www.sunflower.ksu.edu

Goodland Office
Karen Nelson
4-H Youth Development Agent/Director
karennelson@ksu.edu

Sherri Keith
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sherrik@ksu.edu

Sharon Springs Office
Melinda Daily
Family & Consumer Science Agent
mdaily@ksu.edu

Wendy Benisch
Office Professional
wbenisch@ksu.edu

St. Francis Office
Vacant

Linda Elfers
Agent Assistant
lelfers@ksu.edu

K-State Northwest Research and Extension Center - Colby
Jeanne Falk Jones
Multi-County Agronomist for Cheyenne, Sherman, and Wallace Counties
jfalkjones@ksu.edu

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