

# K-STATE

Research and Extension

## Sunflower Extension District #6



November 2024

Online! Newsletter

[www.sunflower.ksu.edu](http://www.sunflower.ksu.edu)

Sunflower Extension  
District

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## November 2024

Go to [www.sunflower.ksu.edu](http://www.sunflower.ksu.edu) for more details on these programs.

### Inside Your Newsletter...

Updated K-State Publication on Soil Test Interpretations & Fertilizer Recommendations  
.....Crop Production page  
Short-term Supplementation Strategy.....Ag & Natural Resources page  
Harvest of Holidays, Dining with Diabetes.....Family & Consumer page



## This years theme is "A Taste of Alaska"

Included will be some Cooking Gadgets that I have used in previous programs. Learn about the different gadgets and find out if they work and how to use them.

I will have taste testing of different items that are favorites in Alaska, some that I will make in the Instant pot and the Jam and Jelly maker.

**Cost for the program is \$8.00**

### PROGRAM DATES:

- St. Francis at the High School in the Life Skills room **November 19, 2024** at 6:00 p.m. (CST) **RSVP by November 12, 2024**
- Goodland at the First Baptist Church, **November 26, 2024** at 6:00 p.m. (M.T.) **RSVP by November 19, 2024**
- Sharon Springs at the CAB on **December 3, 2024** at 6:00 p.m. (M.T.) **RSVP by November 26, 2024**



## Updated K-State Publication on Soil Test Interpretations & Fertilizer Recommendations

The Agronomy Soil Fertility Working Group at K-State, led by soil fertility specialist Dorivar Ruiz Diaz, has released an updated version of the popular publication [MF2586 “Soil Test Interpretations and Fertilizer Recommendations in Kansas.”](#) This publication contains the most recent soil test interpretations for the major crops for the most commonly deficient plant nutrients in Kansas.

Developing sound nutrient management programs involves understanding a wide range of information. Soil test records are an important piece of that information, but other factors, such as soil moisture conditions, land ownership/tenure, crop and crop rotation, pest management, cultural practices, environmental issues, and other management items, are vital for developing sound nutrient management programs. It is beyond the scope of this publication to detail the ramifications of all these factors, but they should not be overlooked when finalizing nutrient application programs.

One of the key changes in nitrogen recommendations is including efficiency factors for the application method and soil type (Figure 1). These efficiency factors are part of the equation for calculating a fertilizer recommendation and will allow you to tailor the recommendations to your production system.

The tables, equations, and accompanying information in this publication are the most recent soil test interpretations for major crops for the most commonly deficient plant nutrients in Kansas. These interpretations are valid for interpreting soil test values from the KSU Soil Testing Laboratory and other laboratories using the same soil testing procedures.

Suggested recommended application rates are tied to expected yields for several nutrients. Yield records should be used to set an individual and realistic but progressive expected yield for each field. An appropriate expected yield for a specific field should be high enough to take advantage of high production years when they occur but not so high as to jeopardize environmental stewardship and/or profitability when environmental conditions are unfavorable. Appropriate expected yield should be about 105% of the average yield obtained in a field over the past three to five years.

The full publication is available online at <https://bookstore.ksre.ksu.edu/pubs/MF2586.pdf>

### Nitrogen Recommendations

#### Corn

$$N \text{ (lb/a)} = (ie/fe) EY - (se) \text{ Profile N} - (\% \text{ SOM} \times 20) - \text{Manure N} - \text{Other N Adjustments} + \text{Previous Crop Adjustments}$$

##### ie (corn internal efficiency) lbs/bu

Irrigated	0.84
Non-Irrigated	0.88

##### fe (fertilizer recovery efficiency)

High efficiency	0.65	Injected or split applied
Default	0.55	Broadcast, fall-applied pre-plant

##### se (“soil” NO<sub>3</sub> efficiency)

Low risk for N loss	1.0	Medium texture or western KS
High risk for N loss	0.7	Coarse texture or eastern KS

##### Efficiency factors:

- ie: internal crop efficiency
- fe: fertilizer efficiency
- se: soil nitrate-N efficiency
- EY: expected yield (bu/a)
- Profile N: profile NO<sub>3</sub> (lb/a)
- SOM: soil organic matter (x20 for summer crops) lb N/a
- Previous crop adjustment: lb/a (see pages 3 and 4)

- Maximum fertilizer N recommendations are 230 lb N/a for dryland corn production and 300 lb N/a for irrigated corn production.
- A minimum fertilizer N application of 30 lb N/a is recommended for early crop growth and development.

Figure 1. Corn Nitrogen Recommendations from the K-State Soil Test Interpretations and Fertilizer Recommendations for Kansas publication.



Dear community members of Cheyenne, Sherman and Wallace Counties,

It has been a great pleasure to start to meet everyone! I look forward to spending some time getting to know you, your families, and your businesses.

In the time that I have been here we have had several folks come into the Cheyenne County Extension office to check out our forage testing equipment, looking at protein and nitrate levels. Remember that we also have water testing kits and specifically Radon testing kits available. If you have any questions about testing and results from tests please feel free to give me a call!

On a horticulture note, for all those that had a garden this summer, now is a good time to remove plant debris and compost healthy material to use later. If you have any houseplants that are outside to enjoy the summer weather, prepare to bring them indoors. Fall is a great time to lay sod or sow cool season grasses such as Kentucky bluegrass. If you planted trees this year remember to water deeply but infrequently. Keeping in mind we are still experiencing drought conditions, water about 10 gallons for trees and 5 gallons for shrubs. Our older trees do not need as much water like that first and second year. A healthy tree is better able to fight off insects and disease.

Take care,

*Rheanna Melcher*

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### Short-term Supplementation Strategy

MANHATTAN, Kan. — Many people start their day by taking a vitamin to help fill the gaps in their diet. Similarly, when forage quality declines in the fall, beef producers turn to protein supplements for the cow herd to help optimize performance, said the experts at Kansas State University's Beef Cattle Institute.

Speaking on a recent [Cattle Chat](#) podcast, K-State veterinarian Bob Larson and K-State beef cattle nutritionist Philip Lancaster addressed a listener question about how to best manage native grass pastures for the next six weeks when the ability to deliver protein is limited to once per week.

“When forage quality declines, the recommendation is to offer a protein supplement to the herd a few times a week. That allows the cow to recycle the protein through the rumen for overall health,” Larson said. Recycling, he said, refers to how cattle use nitrogen in protein sources, which means they get more than one day's benefit from the supplementation.

The producer who submitted the question said he was offering the herd four pounds of distiller's grains once a week and wanted to know if that was enough to get cattle by for six weeks.

“Research has shown that there is a little bit of a drop off in forage digestibility for cattle that are offered protein supplementation once a week compared to every other day or every few days, but it is still better than giving them no supplementation,” Lancaster said.

For this scenario, Lancaster recommended the producer increase the protein supplementation to eight pounds per week for six weeks.

“From a protein perspective, you've got to give the animal excess protein that they can recycle,” Lancaster said. If cattle don't have enough protein in their diet and are eating lower quality forages, it can cause them to lose body condition, he added.

Another way to monitor the health of the cattle is to look at the feces, Larson said.

“If the cow piles (feces) are tall and dry, then you probably need to increase either the amount or frequency of the protein supplementation,” he said.

*By Lisa Moser, K-State Research and Extension news service*



## Celebrating 22 Years for this Program

### This years theme is “A Taste of Alaska”

I will also include some Cooking Gadgets that I have used in previous programs.

Cost for the program is \$8.00

Pay at the door or at your local Extension Office



**Learn about gadgets that are out there for you to purchase and find out if they work and how to use them.**

I will also have taste testing of different items that are favorites in Alaska, some that I will make in the Instant pot and the Jam and Jelly maker.

In Alaska, sour dough bread has been very prominent especially a long time ago. And it is coming back now to be a big thing to make your own sour dough bread here in the land of Kansas. It is a lot different then when my mother used to make it. It set out on the counter and you had to deal with it everyday. Not anymore!

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- Sharon Springs at the CAB on **December 3, 2024** at 6:00 p.m. (M.T.) **RSVP by November 26, 2024**



This program will be held in Goodland at the **First Baptist Church**. Starting on **Monday, November 18**, from 5:30-7:30 P.M. (M.T.) There will be 4 sessions and the last session will be on December 9th. All classes will be held on Monday evenings.

Nutrition and physical activity are keys to managing your type 2 diabetes, but where do you start? The Dining with Diabetes program can help! Designed especially for people with type 2 diabetes this program will help you learn the skills needed to promote good health.

Dining with Diabetes is taught by a trained caring educator. Program includes: ▪ Planning meals and snacks ▪ Cooking demonstrations ▪ Motivation and support ▪ Ideas for being more active. **RECIPE DEMO & TASTING AT EACH CLASS.**

Call Melinda Daily at 785-852-4285 or email her at [mdaily@ksu.edu](mailto:mdaily@ksu.edu). Program fee is \$30.00. Pay at the door or at your local Extension Office **RSVP by November 4th, 2024.**

**SAVE THE DATE FOR LIVING WELL WEDNESDAY'S Webinar FALL 2024 LINE UP!!!**

November 13th, Fall Proof Your Life: A Guide to Better Balance

December 11th—Simplifying Your Space: A Guide to Downsizing and Decluttering





## The 4-H year begins October 1 and ends September 30 of the following year.

- Members live in towns, in the country, and on farms. 4-H is open to youth regardless of race, color, national origin, sex, sexual orientation, or disability.
- Kansas 4-H Youth Development has a policy for open enrollment. Eligible youth may enroll in Kansas 4-H Youth Development programs at any time of the year.
- Youth wanting to join must be 7 years old and not older than 18 as of December 31 of the New 4-H Year in order to be eligible for 4-H. 4-H members who are selected as winners in late summer or fall, and who turn 19 before January 1, cannot compete in state or national contests, awards, or recognition programs.
- Youth ages 5—6 years old as of December 31 of the New 4-H Year are eligible to participate in the Cloverbuds project which is offered through the 4-H clubs. Cloverbud members are encouraged to attend Cloverbud county-wide project meetings where available.



### Re-enrollment for Returning 4-H Member



#### Are you a continuing 4-H member?

Are you planning to show in your local county fair in the 4-H Division?

**Re-enroll by December 1** each year to be eligible to show in the 4-H division at the county fair!

**Wallace County kids** your annual fee will be paid by the 4-H Council if enrolled by December 1st

**Sherman County kids** you can pay by credit card online or pay by check or cash at the Sherman Co. Extension Office.

**Cheyenne County kids** your annual fee will be paid by the 4-H Council if enrolled by December 1st



## 2024 Achievement Award Banquet Dates:

### Wallace Co. Achievement Awards

The *4-H Achievement Awards* is on  
**Sunday, November 10, 2024,**  
at 12:30 PM MT at the  
CAB Building

### Sherman Co. Achievement Awards

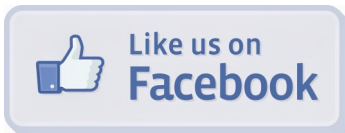
The *4-H Achievement Awards* is on  
**Sunday, November 17, 2024,**  
at 2:30 PM MT at the  
Sherman Theatre.

### Cheyenne Co. Achievement Awards

The *4-H Achievement Awards* is on  
**Sunday, November 17, 2024,**  
at 6:30 PM CT at the  
Bird City Legion Hall

*4-H Grand Champion Hoodies*  
will also be awarded.

## Congratulations to all of the State Archery & Shotgun Contestants from the Sunflower District!!!



<http://www.facebook.com/sunflowerextensiondistrictcheyennecounty4h>  
<http://www.facebook.com/sunflowerwallace>  
<https://www.facebook.com/sunflowerextensiondistrictshermancounty4h/>

New 4-H policy Guide: <https://www.kansas4-h.org/resources/policy-guide/Kansas%204-H%20Policy%20Handbook%202023.pdf>

# Sunflower District

## November 2024



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1.	2.
3.	4. <b>SH-4-H Council</b> 7:00 PM MT 4-H Bldg.	5. <b>WA-Matter of Balance</b> 9:00 AM MT Senior Center	6. <b>SH-Foods</b> 3:30 PM MT 4-H Bldg.	7. <b>WA-Matter of Balance</b> 9:00 AM MT Senior Center	8.	9.
10. <b>WA-Achievement Awards</b> 12:30 PM MT CAB <b>Officer Training</b> following	11. <b>Extension Office Closed</b>  	12 <b>WA-Matter of Balance</b> 9:00 AM MT Senior Center	13.	14. <b>WA-Matter of Balance</b> 9:00 AM MT Senior Center	15.	16.
17. <b>SH-Achievement Awards</b> 2:30 PM MT Sherman Theatre <b>Officer Training</b> following @ Goodland Baptist Church <b>CN-Achievement Awards</b> 6:30 PM CT Bird City Legion Hall	18. <b>SH-Dining with Diabetes</b> 5:30 -7:30 PM MT Goodland Baptist Church	19. <b>CN-Harvest of Holidays</b> 6:00-8:00 PM CT High School <b>CN- Officer Training</b> 7:00 PM CT Courthouse <b>WA-Matter of Balance</b> 9:00 AM MT Senior Center	20	21. <b>WA-Matter of Balance</b> 9:00 AM MT Senior Center  <b>PDC Mtg</b> Goodland 4-H Building	22	23. <b>KYLF</b> Rock Springs
24 <b>KYLF</b> Rock Springs	25. <b>SH-Dining with Diabetes</b> 5:30 -7:30 PM MT Goodland Baptist Church	26. <b>SH-Harvest of Holidays</b> 6:00-8:00 PM MT Goodland Baptist Church	27	29. 	29. <b>Thanksgiving Break Extension Closed</b>	30.



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K-State Research and Extension is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to physical, vision or hearing disability, or a dietary restriction please contact Karen Nelson at (785)890-4880. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. K-State Research and Extension is an equal opportunity provider and employer.