#### December 2024

### **MCCRACKEN AG NEWS**









McCracken County's Agriculture and Natural Resources Update Cooperative Extension University of Kentucky McCracken County 2025 New Holt Rd Paducah, KY 42001 270-554-9520 Wartin-Gatton College of Agriculture, Food and Environment



Chacup Moffith

#### Meet the New Agent

Hello everybody! In case we haven't met, my name is Gracey Moffitt and I am the new Ag agent here in McCracken County. I am very blessed to have been chosen to take on this position and I am so excited to see what all the future holds! If you haven't taken it yet, please take my Program Interest Survey! The results from this survey will help me to plan programs. You can find the link on our website.

#### Agent Update

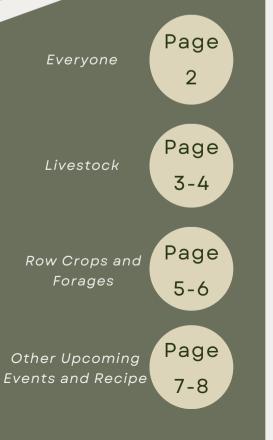
Well, harvest season has come and gone and now it is time for the holidays! I wish you all a very Merry Christmas and Happy New Year!

**Harvest Festival 2024** went great! We had about 150 people in attendance to this event. Everyone that I spoke to learned something new about agriculture regardless their age or background. Take a look at some of the pictures above!

I partnered with the McCracken County FFA to help out at their **Fall on the Farm** event at the high school. This all day event was for the various ag classes to come participate in different hands-on activities. I set up with the apple press station and the corn mill. We had over 500 McCracken County High School students participate in this event (as pictured above).

I had the chance to work with the **Paducah Tilghman High School Opportunities Group** to learn about cooking, making healthy choices, and eating healthy foods. This series will continue into the new year as they will continue to learn new things with hands on activities.

The **Morgan Elementary Life Skills Day** was a very successful day here at the extension office. I partnered with the 4-H program to help teach about hygiene and the importance of handwashing (as pictured above).



### Ag & Natural Resources Events and News for Everyone



# Livestock Events and News

#### Hay Supply is Likely Up, but Winter Feed Costs Still Matter

By: Kenny Burdine, University of Kentucky Date: 11/18/2024

Table 1. Non-Alfalfa Hay Production Estimates in Selected States and US (2023 and 2024)								
2023 Production	Est. 2024 Production	Change from 2023 to						
(1,000 tons)	(1,000 tons)	2024						
2,204	2,684	21.8%						
2,781	3,201	15.1%						
4,158	5,075	22.1%						
1,102	1,276	15.8%						
4,380	5,400	23.3%						
6,630	5,580	-15.8%						
3,740	3,360	-10.2%						
8,280	9,800	18.4%						
68,853	72,871	5.8%						
	2023 Production (1,000 tons) 2,204 2,781 4,158 1,102 4,380 6,630 3,740 8,280	2023 Production (1,000 tons)     Est. 2024 Production (1,000 tons)       2,204     2,684       2,781     3,201       4,158     5,075       1,102     1,276       4,380     5,400       6,630     5,580       3,740     3,360       8,280     9,800						

		Estimated Hay Cost per Ton					
		\$60 per ton	\$80 per ton	\$100 per ton	\$120 per ton		
Storage and	15%	\$1.03	\$1.38	\$1.72	\$2.06		
Feeding	25%	\$1.17	\$1.56	\$1.95	\$2.34		
Losses	35%	\$1.35	\$1.80	\$2.25	\$2.70		

\*Mississippi Estimates include Alfalfa and Alfalfa Mixtures Source: USDA-NASS October 2024 Crop Production Report

By mid-November, most cow-calf operators are either feeding hay, or will be starting to feed hay very soon. As a general rule, winter feed costs are the largest expense for a cow-calf operation. Hay supply was very tight coming out of 2022, but generally improved throughout the course of 2023 as production levels were higher. For estimation purposes, USDA groups hay into two categories: Alfalfa and Alfalfa Mixtures and All Other Hay. Non-Alfalfa hay (referred to as All Other Hay) is likely most representative of hay that is typically fed to beef cows. In the October Crop Production report, USDA lowered their 2024 non-Alfalfa hay production estimates from August. While this is significant, the October estimate was still more than 5% higher than 2023. With greater hay production, higher hay stocks in the spring and a likely smaller cowherd, hay should be more readily available this winter across the US.

It is also interesting to look at hay production in different parts of the US. Table 1 shows 2024 non-Alfalfa hay production estimates, as compared to last year, for several states and the US as a whole. A similar table was included in Cattle Market Notes Weekly after the August crop report back in the summer (<u>link</u>). Note that hay production is projected higher in most states shown with Tennessee and Oklahoma being two notable exceptions. The decrease in Oklahoma is driven by a sharp drop in harvested acres, while Tennessee is predominantly driven by lower yield.

Hay values can be very different across regions and placing a value on hay is further complicated by the fact that the majority of hay fed to cows is produced on the farm. While hay value is an important starting point, winter feed costs are also impacted by how efficiently hay is stored and fed by the cow-calf operation. For this reason, I often show Table 2 during Extension programs as a way to discuss winter feed costs across a range of hay values and hay storage and feeding loss rates. Costs are expressed on a daily basis with the assumption of a 1,300 lb cow consuming 2.25% of her body weight each day.

During the winter of 2022 / 2023, I felt like we had moved to the right half of table 2 in Kentucky. Grass hay was in short supply and what hay was moving was selling at pretty high prices. As I write this in November of 2024, we have likely moved back to the center of the table. Regardless, the point to be made is that both hay cost and storage / feeding efficiency significantly impact winter feed costs. For illustration, a \$20 per ton decrease in hay production cost (or purchase price) leads to a decrease of \$0.34 per day at the 15% loss level and \$0.45 per day when losses are assumed to be 35%. Similarly, reducing storage and feeding losses from 25% to 15% can result in a savings of \$0.14 per day when hay is valued at \$60 per ton and \$0.28 per day when hay is valued at \$120 per ton. Having a feel for winter feeding costs can be a crucial first step in understanding cow-calf profitability and strategies to reduce winter feeding costs are likely worth consideration.

#### **Cattle Market Notes Weekly**



# Livestock

### BEEF MANAGEMENT WEBINAR SERIES

If you are interested and would like to be registered send an email to dbullock@uky.edu with Beef Webinar Series in the Subject and your name and county in the message to receive a Zoom link and password. You will receive an invitation and password the morning of the presentation.

#### November

12

### Shooting the Bull: Answering all your Beef Related Questions!

Updates and Roundtable discussion with UK Specialists



#### Winter Feeding Strategies to Extend Short Hay Supplies

Dr. Lawton Stewart, Professor, University of Georgia



#### Important Traits for Bull Selection in Kentucky

Dr. Matt Spangler, Professor, University of Nebraska



Marketing Opportunities for the Spring Dr. Kenny Burdine, Professor, and Kevin Laurent, Extension Specialist, University of Kentucky



Preparing for a Successful Spring Breeding Season

Dr. Les Anderson, Extension Professor, University of Kentucky



#### Health Update and Internal Parasite Field Study Results

Dr. Michelle Arnold, Extension Veteromarian, and Jeff Lehmkuhler, Extension Professor, University of Kentucky

If you have any questions or need additional information please email dbullock@uky.edu. If you are already registered you will get a Zoom invitation the morning of each session with the link and password.



## Row Crops & Forages Events and News

Soybean Seed Quality Issues Due to Fungal Infections

Source: Dr. Carl Bradley, UK Extension Plant Pathologist Date: 11/15/24



Fig. 3. Soybean leaves affected by Cercospora leaf blight (C. Bradley photo)

Little rainfall during August and most of September in parts of the state has led to poor soybean pod integrity and earlier than expected maturity. With the rains that the remnants of Hurricane Helene had dropped, along with the warm temperatures, a scenario developed that has led to soybean seeds being infected and contaminated with fungi. Phomopsis seed decay (usually caused by Diaporthe longicolla, formerly known as Phomopsis longicolla) and purple seed stain (caused by Cercospora kikuchii and Cercospora flagellaris) generally are the two main culprits of poor-quality seed. Seeds affected by Phomopsis seed decay may appear shriveled, misshapen, and/or chalky white in color (Fig. 1). As the name suggests, seeds affected by purple seed stain will be discolored with purple blotches, or the entire seed may be purple in color (Fig. 2). Purple seed stain may be more prevalent in fields that showed symptoms of Cercospora leaf blight (Fig. 3). Certain varieties in some areas had severe Cercospora leaf blight develop late in the season this year. The largest economic losses associated with these seed diseases to farmers occur at the grain elevator, when loads of harvested seed may be docked due to "damaged seed". Of the two diseases, Phomopsis seed decay generally causes the greatest reduction in seed germination. The two most common questions that I am receiving about these diseases are: why am I having this problem this year?; and what could I have done to prevent these seed disease issues?

#### Why am I having this problem this year?

The primary reason why Phomopsis seed decay and purple seed stain occur in a field has a lot to do with the weather that has occurred since soybeans have been at physiological maturity. Fields in areas of the state that have received frequent rainfall since soybeans have been mature have been hit the hardest with seed disease problems. Along with wet weather, the very warm temperatures that the state was experiencing up until recently also helped promote infection by these fungi. The Phomopsis seed decay pathogen is best able to infect seeds after physiological maturity, and the longer that soybeans sit in the field in wet and warm conditions after they are mature, the greater the likelihood of Phomopsis seed decay problems.

#### What could I have done to prevent these seed disease issues?

Harvesting soybeans as soon as possible after physiological maturity and at optimal seed moisture is the primary way to avoid problems with Phomopsis seed decay and purple seed stain; however, when rainy conditions prevail, seeds take longer to dry down, and harvest becomes delayed. Planting soybean varieties with relative maturity ratings that match your region and your farming operation also may help with a timely harvest. Since these seed pathogens survive in soybean debris, rotating fields with a non-legume crop may help reduce inoculum levels in the field. Since these pathogens also survive on seed, planting bin-run seed may help perpetuate the problem in a field by continually introducing the pathogen back into the field. Although soybean germplasm lines have been identified with resistance to Phomopsis seed decay, no commercial soybean varieties are marketed as having resistance to this disease, and soybean breeding programs may not intentionally screen their lines for resistance to Phomopsis seed decay. When applied at later growth stages, such as R5 (beginning seed stage), foliar fungicides have been shown to inconsistently reduce Phomopsis seed decay in research trials. Unfortunately, even when reductions in Phomopsis seed decay have occurred with late-applied fungicides, often-times the magnitude of the reduction would not have been enough to prevent levels of disease that would still be discounted at the grain elevator. Overall, the wet and warm harvest season that parts of the state experienced was likely so favorable for infection and disease development, that there was little that could have been done to avoid some losses due to these

diseases this year.

Fig. 1. Symptoms of Phomopsis seed decay on soybean seeds (C. Bradley photo)





Fig. 2. Symptoms of purple seed stain on soybean seeds (C. Bradley photo)

# **Row Crops & Forages**



#### February 4, 2025

**Bruce Convention Center** Hopkinsville, KY 42240

9am-3pm central

Registration 8:30 ct

CCA and Pesticide Credits pending.

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What are We Learning From YEN in KY? - Phil Needham

Herbicide Residual Application Timing for Ryegrass Control - Dr. Travis Legleiter

**On-farm Grain Fumigation Options** - Josh Wilhelm

Dealing with DON: Management of Fusarium Head Blight and DON in Wheat - Dr. Carl Bradley

How Nitrogen and Sulfur Fertility Influences Wheat Grain Yield and Protein Content - Dr. Edwin Ritchey

Current Wheat Crop Update - Dr. Chad Lee

Wheat Varieties Tolerance to Metribuzin and Opportunities to Improve Italian Ryegrass Management - Dr. Samuel Revolinski

**Overview of Kentucky Wheat Yield Contest 2015-2024** - Dr. Mohammad Shamim





Cooperative Extension Service





Needing to get your Private Applicator Pesticide Licensing or Recertification? Contact me via email at gracey.moffitt@uky.edu or by calling the office at 270-554-9520 and we can set up a time.

## **Upcoming Office Events**

	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
	2:	9:	16:	23:	30:
MON	Holidays around the World 4:30-6	District Board Meeting 11 (RSVP) 4-H Clover Teen	Upcycled Shrink Plastic Ornaments 10- 12 (RSVP)	CLOSED FOR Holidays	CLOSED FOR Holidays
		Council Info Night 5			
	3:	10:	17:	24:	31:
	Adult Sewing 9-11	Adult Sewing 9-11	Bags of Love 9:30-1:30	Phyinterror	New Year's Eve
TUE	Game Day 9-12	4-H Amateur Radio Club 5 (RSVP, 12+)	Laugh and Learn 11-12 (at Library)	Claintruan Ere	we
		4-H Poultry Club 6	Interracial Women's Group 12-1 (\$5 fee)		
	4:	n:	18:	25:	
WED	McCracken Co Beautification Board Meeting 10-11	Tech Class: Facebook 10-11 (RSVP)		Merry CHRISTMAS	
		Paint Fan Dance 1-3 (RSVP)			
	5:	12:	19:	26:	
	Needlework Circle 10-12	PAMHAC:	Game Day 9-12	CIOSED FOR	
THURS	Crochet Alley & Knit Row 1-3	Merry & Bright Brunch and Bingo 10-12	Needlework Circle 10-12	CLOSED FOR Holidays	
		4-H Chess Club 5-7	Crochet Alley & Knit Row 1-3		
	6:	13:	20:	27:	
FRI		Arts & Crafts Day: Candy Exchange and Felt Ornament 9:30 (RSVP, <b>\$</b> 5	Santa's Elves Workshop 9-1 (FULL)	CLOSED FOR Holidays	
		fee)			

#### Event Calendar for December 2024

If you have questions or would like to RSVP, call the office at 270-554-9520.

The full calendar with event descriptions is located on our website. https://mccracken.ca.uky .edu

## **Recipe of the Month**



### Yummy Sweet Potato Casserole

6 medium sweet potatoes ¼ cup maple syrup 2 tablespoons brown sugar 2 eggs ½ teaspoon salt  ¾ cup low-fat vanilla Greek yogurt
¼ teaspoon vanilla extract
1 tablespoon cinnamon

Topping: <sup>1</sup>/<sub>2</sub> cup brown sugar <sup>1</sup>/<sub>2</sub> cup ground rolled oats 1 tablespoon maple syrup 3 tablespoons melted butter ¼ teaspoon salt ½ teaspoon cinnamon ½ cup chopped pecans

Preheat oven to 325 degrees F. Peel sweet potatoes and cut into 1-inch cubes. Place sweet potato cubes in a medium saucepan and cover with water. Cook over medium-high heat until tender. Drain and mash. In a large bowl, mix together mashed potatoes, maple syrup, brown sugar, eggs, salt, yogurt, vanilla and cinnamon. Blend until smooth. Pour into a 13-by-9 inch baking dish. Topping: In a medium bowl, mix the brown sugar and oats. Add in syrup, melted butter, salt and cinnamon; **blend** until mixture is coarse. **Stir** in pecans. **Sprinkle** over sweet potato mixture. **Bake** 30 minutes, or until topping is lightly browned.

Yield: 12, 1/2 cup servings

Nutritional Analysis: 190 calories, 7 g fat, 2.5 g saturated fat, 10 mg cholesterol, 190 mg sodium, 31 g carbohydrate, 20 g sugars, 4 g protein.

### Kentucky Sweet Potatoes

**SEASON:** The peak season is October through March, however sweet potatoes are available all year in Kentucky.

NUTRITION FACTS: Sweet potatoes are a good source of fiber, complex carbohydrates and vitamins A and C.

SELECTION: Two varieties of sweet potatoes are grown in Kentucky. The pale sweet potato has a light yellow skin and pale yellow flesh that is dry and crumbly. The darker variety has a dark skin and orange sweet flesh that cooks up moist. Choose small to medium-size sweet potatoes with smooth, unbruised skin.

**STORAGE:** Store unwrapped in a cool (50 degrees F), dry, dark place with good ventilation for up to 2 months or at room temperature for 2 weeks.

**PREPARATION:** Scrub well. Leave whole or peel, then slice, dice or shred.

**Baking:** Pierce skin in several places and rub with margarine, if desired. Arrange on a baking sheet in a single layer and bake uncovered in a 375 degree F oven until soft when squeezed (45-60 minutes).

**Boiling:** In a 3-quart pan, boil four whole medium-size potatoes, covered in 2 inches water, until tender when pierced with a fork or knife. Drain. **Microwaving:** Pierce skin, place on a paper towel in microwave. If cooking more than two at a time, arrange like spokes of a wheel. Microwave on high, turning halfway through cooking time. Allow 4-5 minutes for one potato.

#### KENTUCKY SWEET POTATOES

Kentucky Proud Project County Extension Agents for Family and Consumer Sciences University of Kentucky, Dietetics

and Human Nutrition students September 2017

Source: www.fruitsandveggiesmatter.gov

Buying Kentucky Proud is easy. Look for the label at your grocery store, farmers market, or roadside stand. http://plateitup.ca.uky.edu



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