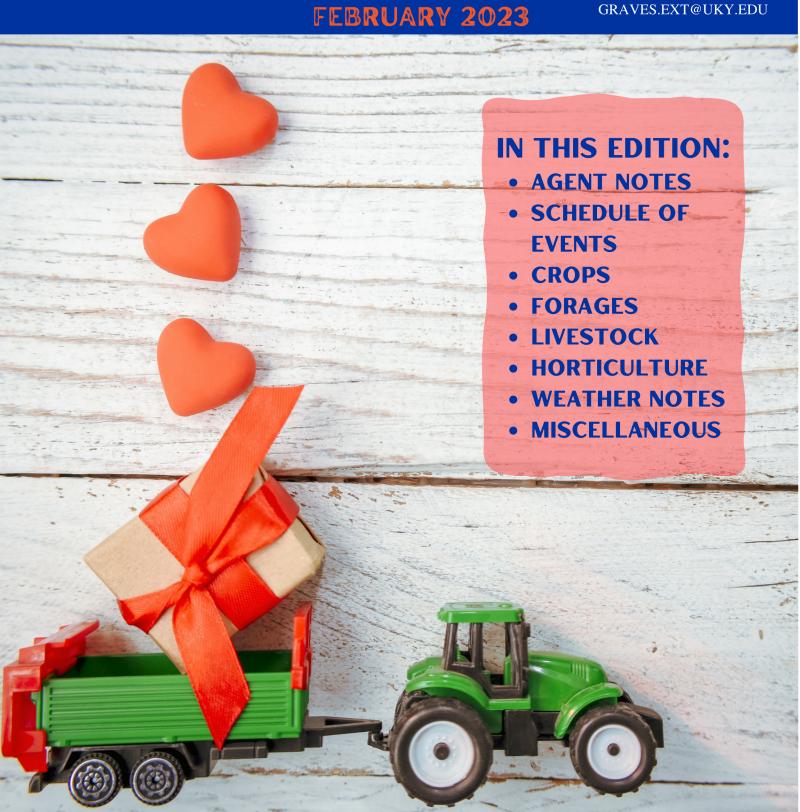
GRAVES COUNTY AGRICULTURE & NATURAL RESOURCES NEWS



University of Kentucky College of Agriculture, Food and Environment Cooperative Extension Service

GRAVES COUNTY COOPERATIVE EXTENSION SERVICE

> 4200 US HWY 45 MAYFIELD, KY 42066 (270)247-2334



AGENT NOTES

FEBRUARY 2023



Hello! My name is Miranda Rudolph. Some of you may already know me, but for those who do not I am your new Extension Agent for Agriculture & Natural Resources in Graves County. I wanted to take this opportunity to introduce myself and to tell you a little bit about me and what my role is here at the Extension Office.

I recently completed my Bachelor's degree at Murray State University where I majored in Agronomy. I have been dually enrolled in an accelerated Master's program as well and will be completing that after this spring semester. During my undergraduate work I worked in the student greenhouse for a semester learning about greenhouse production and I was chosen as a McNair Scholar where I completed 2 semesters of research work with my advisor studying soybean response to acetic acid applications during drought. My research was presented during Scholar's Week where it was chosen as the winner in the Soils and Sustainability Symposium. Next up, I'll be presenting at the American Society of Agronomists Southern Region Meeting this month in Oklahoma City, OK and in March I'm heading to Frankfort to present my research for the final time. I plan to complete my Certified Crop Advisor requirements this spring as well.

I have had the privilege of working in several capacities for Extension. When my children were younger I was a 4-H leader for the Calloway County Livestock Club, Country Ham Club, and Photography Club. When I began my college career I was chosen as a summer intern where I worked with Matt Chadwick at Calloway County. Last summer I was chosen to be Dr. Andy Bailey's summer intern and worked with him and his fantastic team in Dark Tobacco Research all over Western KY.

Outside of my formal education, my family has run a small farm for the last 10 years where we have raised livestock and a garden to meet the needs of our family. For a time, we ran a very successful business with our value added product of goat milk soap that we made from the milk of our dairy goats. Now that our season of life has changed we only raise beef cattle and have a horse that my son uses for team roping at his rodeos, but I will never forget the lessons I have learned raising other species!

On a personal note, I have been married to my husband John for 21 years and we have 2 sons. My husband is a Navy Veteran where he served 6 years in Submarine Service. Our oldest son, Hunter, is 19 and a Sophomore at Murray State studying Agronomy just like his mom! Our youngest son, Elijah, is almost 15 and a Freshman at Calloway County High School. He loves everything to do with livestock and rodeo and has plans to study Wildlife Biology one day at Murray State. For fun our family enjoys traveling, being outdoors, attending sporting events, and getting in touch with our Scottish heritage attending Highland Games around the area.

I am so excited to officially begin my journey as your Extension Agent. My role here is to educate and and support you on the latest research and technology in the industry, help you diagnose and treat issues with your crops and livestock, work with you on making short and long term plans to make your operation successful, and to serve Graves County at large as an agricultural educator and advocate. I work with urban and rural clients, as well as commercial agriculture to home horticulture. I believe I have the best job in the world where I get to work in an amazing industry with incredible people from all walks of life and experiences. Please do not hesitate to reach out to me with any programming ideas or questions you may have!

randa FudelpW Miranda Rudolph

Extension Agent for Agriculture & Natural Resources
Graves County

miranda.rudolph@uky.edu | 270.247.2334 | 270.978.7052

WHAT'S HAPPENING?

Highlighted events are hosted by the Graves County Extension Office. Please call the office at 270-247-2334 for more information or to sign up to attend!

- February 6- Pastures Please!!- Fayette County EO, 5:30-8pm
- February 9- KY Crop Health Conference, Bowling Green, KY 9am-5pm
- February 9- Estate Planning Seminar- GCEO, 5:30pm
- February 10- Winter Ag Conference- Lowry Farms, 8am-noon
- February 14- GAP Training- GCEO, 2-4pm
- February 15-18- Farm Machinery Show, Louisville, KY
- February 20- Private Applicator Training- GCEO, 8:30-11:30am
- February 22- Mid-South Stocker Conference- Bowling Green, KY
- February 23- KATS Training, Princeton, KY
- March 9- KATS Training, Princeton, KY
- March 14- Private Applicator Training- GCEO, 8:30-11:30am
- March 21- Private Applicator Training- GCEO, 5-8pm



Happy Valentine's Day! You're moo-velous!



Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.





PRIVATE APPLICATOR TRAINING **SESSIONS**



CHOOSE ONE SESSION TO ATTEND! MONDAY, FEBRUARY 20: 8:30-11:30AM TUESDAY, MARCH 14: 8:30-11:30AM TUESDAY, MARCH 21: 5-8PM

> **Graves County Extension Office** 4200 US HWY 45 N Mayfield, KY 42066









2023 WINTER AG CONFERENCE FEBRUARY 10 LOWRY FARMS

5183 ST. RT. 94 W. WATER VALLEY KY 42085

7:00 AM: REGISTRATION/SPONSOR SET UP

8:00 AM: ALEX HAYES - 2023 GRAIN MARKET OUTLOOK

8:30 AM: MATT DIXON - WEATHER IN KENTUCKY

9:00 AM: JOHN GROVE - SULFUR USE IN CORN AND SOYBEANS

9:30 AM: BREAK

9:45 AM: CARL BRADLEY - SOYBEAN AND WHEAT DISEASE UPDATE 10:45 AM:DALE DOBSON - THE POWER OF A HANDSHAKE - FARM SAFTEY

12:00 PM:LUNCH/DOOR PRIZES 1:00 PM: DICAMBA CERTIFICATION

> ***Sponsored Lunch and Product Vendors on Site** KY & TN Pesticide and CCA CEU's are pending

Call Your County Office to Register: Carlisle: 270-365-2787 Calloway: 270-753-1452 Graves: 270-247-2334 Fulton: 270-928-2168 Marshall: 270-527-3285 McCracken: 270-554-9520





College of Agriculture, Food and Environment Cooperative Extension Service

Hickman: 270-653-2231 Cooperative Extension Service

Agriculture and Natural Resources Family and Consumer Sciences 4-H Youth Development
Community and Economic Development LEXINGTON, KY 40546



Kentucky Crop Health Conference

Feb. 9, 2023 - National Corvette Museum - Bowling Green, Ky.

Speakers include University of Kentucky Extension Specialists and invited nationally prominent Extension Specialists from across the United States



Topic: Frontline Tactics to Manage Southern Rust of Corn



Topic: Managing insect pests of grain using neonicotinoid seed



Carl Bradley

Kiersten A. Wise Topic: Tar spot in Kentucky: Is it time to panic?





Topic: What we have learned from nearly 2 decades of research on foliar fungicides of soybean

Topic: Management of Italian ryegrass in a Kentucky grain crop rotation

Topic: Mollusks: Frequency, biological control, and management in soybeans



Travis Legleiter University of Kentucky



Scan QR Code to register or visit:
https://kentuckycrophealthconference2023.eventbrite.com Ticket sales end Feb. 1, 2023

Limited to 100 participants — Lunch included —

Credits — CCA: 5 (IPM); KY Pesticide Applicatorratedits: Specific CEUs for Categories 1A and 10; 1 Specific CEU for Category 4

••••••

HAVE YOU RAN YOUR SOIL TESTS YET? DROP YOUR SAMPLES OFF AT THE OFFICE! \$7 PER SAMPLE!

2023 GAP TRAINING TUESDAY, FEBRUARY 14, 2023

2PM

GRAVES COUNTY EXTENSION OFFICE 4200 US HWY 45, MAYFIELD, KY RSVP TO (270)247-2334



If you produce hay for sale or for your own livestock, make plans to attend the KY Alfalfa and Stored Forage Conference in Cave City, KY Feb. 21, 2022. Simply go to the Forage Website under events to register or call 513-470-8171. The theme of this years conference is Hay Production, Marketing and Mechanization. The topics and speakers include:

- National Producer and Consumer Survey: Increasing Alfalfa Hay Sales to Horse Owners-Krista Lea, UK
- Hay Production in the Deep South: Bermudagrass and Alfalfa-A Perfect Combination! – Dr. Jennifer Tucker, University of Georgia
- Options for Hay Mechanization: Producer Perspective-Dennis Wright
- Hay Mechanization and Equipment Update: Industry Noah Pendry, CNH Industrial (New Holland)
- Fall Armyworm Research -Dr. Chris Teutsch, UK
- Attacking the Yield Plateau: Assessing the Nutrient Status of Kentucky Alfalfa Stands – Will Fleming, UK
- One Big Idea that has Helped Improve My Haying Operation-Winners of the KDA Hay Contest
- Update on Options for managing thinning alfalfa stands-Dr.
 Jimmy Henning, UK

Increasing Alfalfa Hay Sales to Horse Owners

Bermudagrass and Alfalfa-A Perfect Combination!

Options for Hay Mechanization

Hay Mechanization

Research Study

Assessing the Nutrient Status o Kentucky Alfalfa Stands

KDA Hay Contest

Update on Options for managing thinning alfalfa stands

ALFALFA & STORED FORAGE

HAY PRODUCTION, MARKETING AND MECHANIZATION

CONFERENCE



FEB. 21 8AM

CAVE CITY CONVENTION CENTER

Click Here to Register Toda





MORE INFORMATION, CONTACT KATE AT (513) 470-8171

FORAGE TIMELY TIPS: FEBRUARY

- Continue grazing stockpiled tall fescue if available.
- Assess grass stands. If thin, consider adding legumes.
- Begin frost seeding with 6-8 lb/A red and 1-2 lb/A ladino white clover on closely grazed pastures.
- On pastures with lower fertility, consider also adding 10-15 lb/A annual lespedeza.
- Consider applying 40 lb/A nitrogen in mid- to late-February on some pastures to promote early growth.
- Sign up for shared use drills for spring renovation.
- Service and calibrate no-till drills.
- Apply lime and fertilizer according to soil test if not done in fall.



RED CLOVER TO THE RESCUE

BY: JIMMY HENNING

If ever there were an animal in trouble with toxic endophyteinfected tall fescue, red clover would likely have been able to
help prevent the issue. This legume can remedy
vasoconstriction in cattle, and new research suggests it has
other superpower-like properties as well. Vasoconstriction is a
condition caused by toxic endophytes that grow between tall
fescue's cell walls. Affected animals' blood vessels constrict,
and they can have difficulty regulating their body temperature,
which leads to heat stress in the summer and cold stress in the
winter. Jimmy Henning with University of Kentucky (UK)
Extension says red clover can help combat these negative
consequences.

"Red clover has been found to contain a natural compound that actually causes these constricted blood vessels to dilate, restoring blood flow and relieving temperature stress," the extension forage specialist explains. "These compounds, called isoflavones, are also present in white clover and alfalfa, but at lower levels than red clover."



Cattle do not need to consume large quantities of red clover to realize the benefit. Work by the USDA-ARS Forage-Animal Production Research Unit in Lexington, Ky., showed improved growth and vasodilation in steers grazing toxic tall fescue by supplementing hay with 15% red clover. Other studies found feeding mineral that contains 20% ground red clover leaves can reduce symptoms of toxic fescue in cattle fed toxic fescue seed.

Although isoflavones safeguard against vasoconstriction, they are phytoestrogens, which have been suspected to suppress livestock reproduction rates. To test this hypothesis, Brittany Harlow with the USDA-ARS in collaboration with UK researcher Les Anderson, the Kentucky Beef Network, and Burkmann Nutrition are conducting a study to compare the reproductive efficiency in heifers fed mineral containing 20% red clover versus mineral without.

Preliminary results suggest that the red clover mineral has no effect on heifers' reproduction. Further, the animals receiving this treatment appeared to shed their winter coats faster and experienced less heat stress in the summer as a result. A second year of data collection is planned.

Red clover can be introduced to pastures of tall fescue this time of year by frost seeding. Henning says the freeze-thaw cycles that occur in the winter create enough seed-soil contact for red clover to germinate in late spring. ~Jimmy Henning, Farmer's Pride. Read the full article here.

2023 POULTRY WEBINARS

ALL WEBINARS BEGIN AT 2PM CST/3PM EST

FEBRUARY 7: REPRODUCTIVE ISSUES WITH SMALL AND BACKYARD POULTRY

MARCH 7: RAISING TURKEYS IN SMALL AND BACKYARD FLOCKS
APRIL 4: DAILY MANAGEMENT OF A HOME POULTRY INCUBATOR
MAY 4: HATCHING WATERFOWL EGGS IN A HOME INCUBATOR

JUNE 6: DOING FECAL FLOTATIONS FOR THE IDENTIFICATION OF INTESTINAL PARASITES IN POULTRY ** THIS DATE IS SUBJECT TO CHANGE**

PARASITES IN POULTRY ** THIS DATE IS SUBJECT TO CH AUGUST 1: SANITIZING IN A POULTRY HOUSE

SEPTEMBER 5: ORGANIZING A COUNTY POULTRY SHOW OCTOBER 3: RESPIRATORY ISSUES WITH POULTRY

NOVEMBER 7: DESIGNING A SMALL FLOCK POULTRY HOUSE

DECEMBER 5: MANAGING A POULTRY FLOCK ON PASTURE

Visit

poultry.extension.org/webinars to register for upcoming webinars or watch past webinars!



Issues • Innovation • Impac

A Part of the Cooperative Extension System

MID-SOUTH STOCKER CONFERENCE

FEBRUARY 21, 2022 5:30PM REGISTRATION 6:00PM PROGRAM

FEBRUARY 22, 2022 8:30AM REGISTRATION 9:30AM PROGRAM

REGISTER HERE:



WKU L.D. BROWN AG EXPO CENTER
406 Elrod Road Bowling Green, KY 42104



LITA INSTITUTE OF AGRICULTURE

HEADS UP, LIVESTOCK OWNERS!

GFI #263
TAKES
EFFECT
JUNE
2023!
MAKE A
PLAN

WITH

YOUR VET

What is antibiotic stewardship?

Responsible stewardship practices include actions that preserve the effectiveness of antibiotics while maintaining animal health, such as:

- Only using antibiotics when necessary to manage illness in animals
- Establishing best management practices, like use of vaccines, and disease prevention plans to reduce the overall need for antibiotics
- Livestock owners and veterinarians working together to make decisions that improve animal health and welfare long-term

Lack of effective treatments can result in:

- · Poor animal health and welfare
- · Reduced livestock productivity
 - Increased health costs

However, by establishing an antibiotic stewardship plan, we can reduce the animals' risk to developing antibiotic-resistant infections. The more we understand how to effectively treat animals, the more sustainable our farms and practices can be.

Center for Veterinary Medicine (CVM) Food and Drug Administration (FDA) 7500 Standish Pl, HFV-1 Rockville, MD 20855

GFI #263

While some healthcare tasks can be performed by producers, a veterinarian is an invaluable partner in treating illness and infection, and in many cases necessary to get proper treatment. Under the FDA's Guidance For Industry (GFI) #263, in June 2023 all medically important antibiotics that were previously available over the counter will require a prescription from a veterinarian for legal use in animals.

For a full list of approved animal drugs affected by GFI #263, visit:

https://www.fda.gov/animal-veterinary/safety-health/

Antibiotic Stewardship in Veterinary Medicine



Antibiotics are a powerful tool for both human and animal health and can remain effective through responsible antibiotic stewardship.





UNIVERSITY OF KENTUCKY TURFGRASS SCIENCE PROGRAM & KENTUCKY HORTICULTURE COUNCIL INVITE YOU TO ATTEND THE

46th Annual Turf & Landscape Management

Short Course



TUESDAY

Pesticide Certification Course & Exam WEDNESDAY & THURSDAY

Concurrent sessions:

- Commercial Lawn & Landscape
- · Golf
- Sports Turf

\$40 per day **BEFORE FEB. 17**







Scan to

ARE YOU
PLANTING
ANY COOL-

SEASON

CROPS THIS

YEAR? A

LIGHT

FROST WILL
NOT INJURE

THEM, SO YOU CAN

PLANT

THESE AS

SOON AS
SOIL IS DRY

AND

WORKABLE!

Table 11. Crops for the spring garden.

Vegetable	Seeds	Transplants	Days to Maturity¹
Beets	х		55-60
Bibb lettuce	X	х	60-80
Broccoli		X	40-90
Brussels sprouts		X	80-90
Cabbage		х	60-100
Carrots	×		60-80
Cauliflower		х	50-100
Celery		x	100-130
Chinese cabbage	×	X	43-75
Collards	×		75-90
Endive	×	X	60-90
Kale	X	х	50-60
Kohlrabi	X		50-70
Leaf lettuce	×	X	40-50
Mustard greens	×		35-60
Onions ²	х	х	40-120
Peas	×		60-80
Potatoes ³			90-140
Radishes	х		20-30
Spinach	X		40-70
Swiss chard	X	X	55-60
Turnips	X		40-60
Turnip greens	×		30-50

- Days given are for the early to late varieties.
 Onions are also available in sets.
- Onions are also available in sets.
 Potatoes are available as seed pieces.

STOP BY THE
GRAVES COUNTY
EXTENSION OFFICE
AND GET YOUR
COPY OF 1D-128
FOR ALL OF YOUR
HOME GARDENING
INFO!

Seed Germination Test for Leftoyer Seeds

Supplies:

- paper towel
- spray bottle of water
- plastic resealable baq
- seeds



- 2. Place 10 seeds from your packet to test in a row on your damp paper towel.
- Fold paper towel over row of seed and place in resealable bag.
- Put bag in a warm place out of direct sunlight (the top of your fridge works great).
- Check seeds every few days for germination and dampness of paper towel. Lightly spray towel if needed.
- If less than 5 seeds have sprouted after specified germination time has passed, purchase new seeds.





Winter Areal and River Flooding

Jane Marie Wix - National Weather Service Jackson, KY



When we receive enough water that the ground can't absorb anymore, it begins to accumulate on the surface - we call that runoff. The water either begins to pond, or runs into the nearby creek and river channels. However, when ponding water begins to rise and blocks roadways or impacts residences, or the streams and rivers can't hold any more water and spill out of their banks - we call this flooding. This time of year areal flooding is more likely simply because the cold temperatures may keep part of the ground frozen and because there is a lack of vegetation - both of which cause a reduction in the amount of water the ground can absorb, and increases the amount of runoff. Flood waters can be the result of heavy rain, excessive or rapid melting snow and ice, or a combination of the two.

Thinking back to February of 2021 here in Kentucky - large portions of the state received 3 large snow and ice events, with quite a bit of snowpack on the ground. This was then followed by a round of heavy rain, which melted the snow. With the ground still frozen, the liquid had nowhere to go. Low lying areas, creeks, streams, and eventually the rivers all slowly filled up - leading to widespread areal and river flooding across the state, especially in the east and along the main stem rivers.

When weather conditions become more favorable for flooding, the National Weather Service will issue more directed products about conditions on rivers and large creeks.

- A Flood Watch will be issued on days when flooding is more likely on a river or large creek. A Flood Watch means flooding in the area is more likely than on a normal day, but that flooding is not currently expected.
- A Flood Warning will be issued when flooding is forecast or occurring. A
 Flood Warning means flooding is expected or has been reported at
 designated river forecast points.
- Flood Advisories may be issued for minor flooding on rivers and creeks.
- Areal Flood Warnings may be issued for flooding on parts of rivers or large creeks not covered by designated river forecast points.

In general, areal flooding along rivers and large creeks is somewhat gradual - meaning there will be some time to prepare. Make sure to monitor your nearby creeks and rivers in heavy rain events or during large snow melts. Listen to the NOAA Weather Radio for flood watch/warning/and advisory information, and have a plan in place for getting you and your animals out of danger. Connect with your family and neighbors about local flood risks and planning needs ahead of time. NEVER attempt to cross a flooded roadway or bridge!!! If you can't get out, seek higher ground.





Cabbage Jambalaya

1 pound lean ground beef

1 ½ cups chopped celery

1 ½ cups chopped onion

2 cloves garlic, minced

1 (13 ounces) package turkey smoked sausage, sliced

1 medium head cabbage, chopped (about 10 cups) 1 (14.5 ounces) can diced tomatoes

2 cups water

1 cup brown rice

1 teaspoon garlic powder

1 tablespoon Cajun seasoning

Heat a large stockpot over medium high. Add ground beef, and cook until it starts to brown, about 6 minutes. Add the celery, and cook for 2 minutes. Add onion and garlic, and cook 4 minutes while stirring. Add smoked sausage, and cook an additional 2 to 3 minutes. Stir in cabbage, and cook until it wilts, about 3 minutes. Add tomatoes, water, rice, garlic powder, and Cajun seasoning.

Bring to a **boil**, and **reduce** heat to medium. **Cover**, and **simmer** for 40 minutes. Serve hot.

Yield: 10, 1-cup servings

Nutritional Analysis:

250 calories, 8 g fat, 3 g saturated fat, 60 mg cholesterol, 400 mg sodium, 26 g carbohydrate, 4 g fiber, 6 g sugars, 0 g added sugars, 18 g protein



Honey Raisin Muffins

1/2 cup + 2 tablespoons all purpose flour

½ cup + 2 tablespoons whole wheat flour

3/4 teaspoon baking

powder

1 teaspoon ground

1/4 teaspoon salt

cinnamon

2 cups bran flake cereal with raisins

1/4 teaspoon baking soda 1 cup skim milk

1/2 cup honey

2 egg whites

3 tablespoons

unsweetened applesauce

2 tablespoons canola oil

 Combine flours, baking powder, baking soda, cinnamon and salt in a bowl and set aside.

2. In a large mixing bowl, combine cereal, milk and honey; let stand for 2 minutes to soften. Stir and oil; **mix** well.

Add dry ingredients and stir until moistened.

 Fill a greased or paperlined muffin pan ²/₃ full.

5. Bake at 400°F for 15-18 minutes.

in egg whites, applesauce **6. Cool** 10 minutes before removing from pan.

Yield: 12 muffins.

Nutrition Analysis:

150 calories, 3 g fat, 0 mg cholesterol, 170 mg sodium, 30 g carbohydrate, 2 g fiber, 15 g sugar, 4 g protein.

ninutes before



Buying Kentucky Proud is easy. Look for the label at your grocery store, farmers' market, or roadside stand.

ESTATE PLANNING SEMINAR

Thursday, February 9, 2023 at 5:30 PM

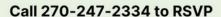
Featuring Guest Speakers: Elizabeth Wieneke - Whitlow, Roberts, Houston & Straub, PLLC

8

Penny Wade Smith-Wade Farm Financial Services



College of Agriculture, Food and Environment Cooperative Extension Service Graves County Cooperative Extension Office 4200 US HWY 45 N Mayfield, KY





Cooperative Extension Service Agriculture and Natural Resources Family and Consumer Sciences 4-H Youth Development Community and Economic Developmen Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, see, sexual orientation, enperid referritly experier expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability, University of Kentucky, Kentucky State University U.S. Deportment of Agriculture, and Kentucky Counties, Cooperative or Kentucky State University U.S. Deportment of Agriculture, and Kentucky Counties, Cooperative or Agriculture of the County of the Cou









We are updating our Graves
County Agriculture & Natural
Resources mailing list! Please
scan the QR code or contact
the office at 270-247-2334 to
make sure you are on there!

