

# GRAVES COUNTY AGRICULTURE & NATURAL RESOURCES NEWS

 **Martin-Gatton**  
College of Agriculture,  
Food and Environment  
University of Kentucky.

GRAVES COUNTY COOPERATIVE  
EXTENSION SERVICE  
4200 US HWY 45  
MAYFIELD, KY 42066  
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GRAVES.EXT@UKY.EDU

August 2024

## IN THIS EDITION:

- Agent Notes
- Schedule of Events
- Announcements
- Tobacco
- Crops
- Horticulture
- Weather notes
- Recipes







August is here and things are getting ready to get busy! Before we know it harvest and the holidays will be here! Several of you have had me out to check your gardens and fields this year. We have seen a lot of fungal and bacterial issues with garden produce, as well as just environmental issues with rainfall and heat. Don't hesitate to call if you ever have a question! Believe it or not, it's time to get those fall crops going!

State Fair is just around the corner! If you have 4H entries, check with our 4H agent, Allison, to get those projects that qualified in on time! If you're an adult interested in entering, check the State Fair website for the entry rules for your division! It's always fun to see all of the counties represented at the State Fair in all of the different divisions. I encourage you to take a day trip, at least, and see all of the sights!

I'm in the process of gathering names of interested volunteers who would like to serve on different councils within extension. If you'd be interested and willing, let's chat! I would love to have your input!

All of us here at the office have been planning a fun Fall Fest! See the flyer included in this newsletter for information, but if you'd like to run a booth let us know! If you think you make the best chili in Graves County, we invite you to join our chili cookoff! Prizes will be awarded to the top 3, and you will get to proclaim victory to all your friends and family! Pre-registration for the chili cookoff is required, so call the office for more information!

If you're a tobacco producer, my favorite field day of the year is coming up- the Twilight Tour that's held at Murray State will be Thursday, August 8th. The tradition of a catfish dinner continues as well! Make sure to call and let either the Graves or Calloway offices know you'll be attending so we can coordinate food numbers with our caterer.

Please reach out with any questions you may have and ideas of programs that you'd like to see are always welcome!

Miranda Rudolph

Extension Agent for Agriculture & Natural Resources

Graves County

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## ANR: What's Happening?

Bolded events are hosted by the Graves County Extension Office.

- August 4- Non-perishable 4H State Fair entries due!
- **August 8- Tobacco Twilight Tour, Murray State West Farm-5:30pm**
- August 9- Perishable 4H State Fair entries due!
- August 15-25 - Kentucky State Fair, Louisville, KY
- **August 20 - Trash or Treasure: Weed Management, GCEO-5:30pm**
- **September 5- Fall Fest & Chili Cookoff, GCEO-4:30pm**



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Agriculture and Natural Resources  
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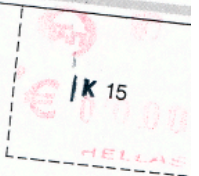
you're invited to

# Fall Fest



SEPTEMBER 5  
4:30-6:00PM

enjoy lawn games, treat walk,  
face painting, petting zoo + more!  
meet the staff, learn about our  
programs + register for door prizes



 **GRAVES COUNTY  
EXTENSION OFFICE**

4200 ST RT 45 N  
MAYFIELD, KY 42066





## GRAVES COUNTY EXTENSION OFFICE



### COOK RULES:

- ★ MUST PRE-REGISTER IN ORDER TO PARTICIPATE!
- ★ WILL RECEIVE GUIDELINES UPON REGISTRATION
- ★ BRING IN OWN SLOW COOKER!
- ★ ONE POT PER ENTRY!
- ★ TOMATO-BASED CHILI ONLY!
- ★ PRIZES AWARDED TO TOP THREE POTS!
- ★ BRING IN CHILI BEFORE 3PM ON DAY OF EVENT!

### FREE TO ENTER!


### THURSDAY

4:30PM

6:00PM



CALL TO REGISTER  
270-247-2334

 Cooperative  
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# GRAVES COUNTY HORTICULTURE CLUB

**\*\* This is a tentative schedule.  
Dates are subject to change.**

**All classes begin at 5:30pm unless  
otherwise noted.**

~~April 15~~

**Leaves & Buds & Stems, Oh  
My! Botany 101**

~~May 20~~

**What's Soil Got to Do With  
It? Soils & Soil Fertility**

~~June 11~~

**I'm Not a Doctor, but I Play  
One on TV: Plant Pathology**

~~July 9~~

**Gettin' Buggu With It:  
Entomology**

**NEXT**

**August 20**

**Trash or Treasure? Weed  
Management**

**September 9**

**It Takes 3 to Tango:  
Integrated Pest Management**

**Do not have to be a club member to attend classes!**

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University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.  
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Time to sign up for

## STATE COST SHARE!

Applications will be accepted until October 1, 2024.

Approval of applications is based on a statewide ranking criteria and the availability of funds. Cost share rates are maximum of 75% of the actual cost not to exceed \$20,000.

Contact the Graves County Conservation District for more information  
(270) 247-9525 ext: 8118

## Water Quality Best Management Practices Workshop for Limited Resource Farmers

A one-day, hands-on workshop to help farmers protect and improve on-farm water resources.

**AUGUST 6, 2024 | 8:30AM-3:00PM**  
PHONOGRAPHIC FARMS, 2855 REEVES RD, PADUCAH, KY 42201

Learn how climate change and water quality affects farm profitability, including best management practices, participate in farm tour, and gain hands-on experience using GPS and measuring water quality.

### FREE WORKSHOP

Includes breakfast and lunch, and all participants who complete the workshop will receive a \$25 gift card

REGISTER TODAY



LIMITED AVAILABILITY

<https://bit.ly/WaterQualityKY>

More Info: call 270.847.8726 or email [info@friendsofcherokeestatehistoricalpark.org](mailto:info@friendsofcherokeestatehistoricalpark.org)

NASDA FOUNDATION

BLACK SOIL KY OUR BETTER NATURE

HISTORIC CHEROKEE

This workshop is funded by a grant from EPA to the National Association of State Directors of Agriculture Foundation and is hosted by Cherokee Historical State Resort Part of Aurora and Black Soil KY.



## JOIN US FOR WAVE AG DAY!

**AUGUST 1st, 2024**

COLUMBUS BELMONT STATE PARK

BREAKFAST AND BROWSING -

7:30 - 9:00 a.m.

SPEAKERS AND PROGRAM -

9:00 a.m.

- ★ Support Agriculture in the 4 River Counties
- ★ Recognize Award Winners
  - ★ Networking with Vendors and Partners
- ★ Hear from Guest Speakers



Emcee- Mark Wilson



Guest Speaker- Commissioner Jonathan Shell



Keynote Speaker- Wayne Hunt

## FUTURE TECH SHOWCASE & FIELD DAY

PRESENTED BY



AUGUST 2ND, 2024

MSU EAGLE REST FARM - 7665 PADUCAH ROAD, KEVIL KY

### SCHEDULE:

9:30- REGISTRATION & NETWORKING

10:00- WELCOME & INTRODUCTIONS

10:30- PRESENTATIONS/EXHIBITS

11:45- LUNCH

FISH Fry MEAL SPONSORED BY



12:30- FIELD DEMONSTRATIONS & COMPANY FOLLOWUP

COMPANIES IN ATTENDANCE



COME JOIN US AND LET'S GROW WITH IT!

PLEASE RSVP TO THIS LINK!

[HTTPS://FORMS.GLE/dY6F7HXyE20WYKWS](https://forms.gle/dY6F7HXyE20WYKWS)





## 2024 TOBACCO TWILIGHT TOUR

**AUGUST 8TH, 5:30PM**

**MSU WEST FARM  
336 ROBERTSON RD N.  
MURRAY, KY**

**Dr. Andy Bailey, University of Kentucky**  
*MSU Tobacco Research*  
*Angular Leaf Spot Research Update*

**Dr. Mitchell Richmond, University of Tennessee**  
*UT Tobacco Research Update*  
*Starter Fertilizers in Transplant Water*

**Alyssa Thelin, University of Tennessee**  
*Impact of Tillage & Cover Crop Systems on Angular Leaf Spot*

**Sarah Graham, University of Tennessee**  
*Comparison of Yield in LC vs Unscreened Seed Sources*

**Kate Turner, University of Tennessee**  
*Management of Target Spot in Burley Tobacco*

**CATFISH DINNER TO FOLLOW TOURS!**  
**CALL 270-753-1452 OR 270-247-2334 TO RSVP**

**Cooperative Extension Service**

Agriculture and Natural Resources  
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4-H Youth Development  
Community and Economic Development

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Disabilities accommodated with prior notification.





## Optimizing Fertilizer Use for Kentucky Crops

Source: John Grove, UK plant and soil sciences professor

Proper fertilizer usage is essential for achieving high crop yields and farm profitability while maintaining soil health.

### The Importance of Soil Testing

Soil testing is the foundation of effective nutrient management. The process involves collecting soil cores from 15-20 locations within a field/field area, to a specific depth. This method ensures that the samples are representative of the entire area, providing more accurate data on nutrient levels and soil pH.

### Lime Application for Soil Health

Producers should apply lime based on soil test results to ensure that the soil pH is within the optimal range for their crops. By adjusting the soil pH, lime application can enhance nutrient uptake and improve overall soil health.

### Fertilizer Recommendations for Various Crops

Different crops have varying nutrient requirements, and it is important to tailor fertilizer applications accordingly. Here are some specific recommendations for major crops grown in Kentucky:

#### Corn

Corn requires significant amounts of nitrogen, phosphorus and potassium for optimal growth. Soil testing can determine the exact nutrient needs, but general guidelines suggest applying nitrogen in split applications: a portion at planting and the remainder during the growing season. Phosphorus and potassium should be applied before/at planting, based on soil test results, to ensure adequate nutrition throughout the growing period.

#### Soybeans

Soybean, being a legume, can fix atmospheric nitrogen through a symbiotic relationship with a soil bacterial species. However, the crop still requires adequate phosphorus and potassium. Soil tests help determine appropriate application rates for these nutrients. Phosphorus and potassium for soybean should also be applied before/at planting.

#### Wheat

Wheat benefits from nitrogen, phosphorus and potassium applications. Sufficient wheat nitrogen nutrition may benefit from multiple splits: a small amount at planting, followed by additional applications just prior to/during tillering and another at early stem elongation. Phosphorus and potassium should be applied according to soil test results, before/at planting.



### Tobacco

Tobacco has high nutrient demands, particularly for nitrogen and potassium. Nitrogen should be applied in split applications: a portion at planting and the remainder during the growing season. Potassium is critical for tobacco quality and should be applied according to soil test recommendations. Adequate phosphorus is also necessary, and both phosphorus and potassium are applied before/at planting, based on soil test results.

#### Benefits of Proper Fertilizer Usage

Following these fertilizer recommendations offers several benefits to farmers:

1. **Improved Crop Yields:** By providing crops with the right nutrients at the right times, farmers can achieve higher yields and a better-quality product.
2. **Enhanced Soil Health:** Proper nutrient management maintains soil fertility, ensuring long-term productivity.
3. **Cost Efficiency:** Applying fertilizers based on soil test results prevents both under and over application, optimizing yields and input costs while minimizing environmental impacts.
4. **Sustainable Practices:** Efficient fertilizer use supports sustainable farming by optimizing resource use and preserving soil quality for future generations.

Effective fertilizer use is crucial for successful crop production. By conducting regular soil tests and following crop-specific nutrient recommendations, growers can optimize their fertilizer applications. This approach not only enhances crop yields and soil health but also promotes sustainable farming practices. With careful management, producers can achieve productive and sustainable agricultural systems.

More info can be found at the University of Kentucky Martin-Gatton College of Agriculture, Food and Environment recommendation publication <https://www2.ca.uky.edu/agcomm/pubs/AGR/AGR1/AGR1.pdf>.

For more information on fertilizing crops and soil health, contact the Graves County office of the University of Kentucky Cooperative Extension Service.





### **Installing a Butterfly Garden Can Play a Crucial Role in Plant Pollination**

Source: Faye Kuosman, UK Food Connection coordinator

Butterflies aren't the only ones that can benefit from butterfly gardens. Honeybees, which are native to Europe and introduced to the United States, are also important pollinators for home gardens. Numerous other pollinator species including native bees, butterflies and moths, beetles, birds and bats benefit our gardens. Sadly, many of the pollinators have suffered from habitat loss, chemical misuse, diseases and parasites.

Butterfly gardeners play a critical role in nurturing and conserving both native and introduced pollinators. Butterfly gardens and landscapes provide pollinators with food, water, shelter and habitat to complete their life cycles. Urban areas typically feature large areas of pavement and buildings and offer little in the way of food and shelter for pollinators. Garden plantings can help bridge that gap.

Just like with any new flower bed, you want to pick a site for your butterfly garden with good drainage, full sun, and an area with good weed control. If you are starting a new butterfly garden, get a soil test, eliminate the weeds and add organic matter.

Butterflies, honeybees and other pollinators need protein from flower pollen and carbohydrates from flower nectar. Plan to provide a variety of different types of flowers and aim to have three different flower species in bloom throughout the growing season. Showy, colorful flowers and massed groups of flowers, particularly in small gardens, provide efficient feeding stations for the pollinators. Flowering trees and shrubs also provide excellent food sources. Native plants share a long history with their pollinators, including a wide variety of natives will make your garden a favorite destination for pollinators.

You want to have a variety of plants, preferably native and non-native ones that will bloom throughout the growing season. Some of these are purple cone flower, black-eyed susan, asters, golden rod, yarrow, tall blazing star, milkweed, coreopsis and many more. The Kentucky Native Plant Society has an updated listing of nurseries in Kentucky that sell native plants.

Be sure to have puddling spots for butterflies to get a drink of water. Pollinators also need shelter from the wind, scorching sun, and heavy rain. Fences can serve as windbreaks, which may make the garden more attractive to pollinators.

For information on starting a butterfly garden, contact the Graves County office of the University of Kentucky Cooperative Extension Service.





## Be Safe During Lightning

By Brandon Peloquin- National Weather Service Wilmington, OH



According to The National Oceanic and Atmospheric Administration (NOAA), in the last ten years (2013-2023), five lightning fatalities have been reported in Kentucky, along with 25 injuries. One of those fatalities occurred last year, when a 39 year old male was struck and killed by lightning just south of Sherburne in Bath County while bailing hay. Also in 2023, two boys sustained injuries from a lightning strike on a golf course in Lexington.

During the summer months, thunderstorms are much more common across the Commonwealth and this makes lightning awareness and preparedness much more important. There are two catchy phrases that can help you remember the most important message in lightning safety: “When Thunder Roars, Go Indoors!” and “See A Flash, Dash Inside!”. You do NOT want to be outside during a thunderstorm. Rather, you want to be inside in a sturdy building or hard-topped vehicle. Stay in your safe place until 30 minutes after the storm has passed.

Here are additional tips if you find yourself caught in the outdoors when a thunderstorm is near and you can’t immediately seek shelter:

Avoid open fields, the top of a hill, or ridge top.

Stay away from tall objects such as tall trees.

If you are in a group, spread out to avoid the electric current traveling between group members.

If camping, set up camp in a valley or other low area. Remember that a tent does not provide protection from lightning.

Avoid water, wet items and metal items. Water and metal are good conductors of electricity.

Ultimately, seeking shelter is the best course of action as the safest place to be is inside!



For more lightning safety information: visit the NWS lightning safety pages at:

<https://www.weather.gov/wrn/summer-lightning-sm>

<https://www.weather.gov/safety/lightning-safety>







## Farmer's Market Skillet Bake

½ small onion, finely chopped	<b>2 cups</b> shredded mozzarella cheese, divided	<b>4</b> medium sized tomatoes, sliced
<b>2</b> cloves garlic, minced	<b>1</b> medium summer squash, sliced	<b>1 teaspoon</b> salt
<b>4-5</b> small red potatoes, sliced	<b>1</b> medium zucchini, sliced	<b>1 teaspoon</b> pepper
<b>1</b> <b>tablespoon</b> olive oil		<b>5</b> fresh basil leaves, finely chopped, divided

**Preheat** oven to 375 degrees F. **Prepare** onion, garlic and sliced potatoes (about ¼ inch thick). **Heat** olive oil over medium heat in a 10 or 12-inch oven safe skillet. **Add** onion, garlic, and potatoes to pan and **stir** to coat with oil. **Cook** over medium heat, **stirring** occasionally until golden brown and tender. **Add** 1 cup mozzarella cheese. In a bowl, **toss** together the squash, zucchini and tomatoes with salt, pepper, and half of the finely chopped basil. **Layer** squash

and tomato slices over the potato and cheese layer. **Top** with remaining mozzarella cheese. **Bake** 35 minutes or until vegetables are tender and cheese is melted. **Remove** skillet from oven and **top** with remaining basil.

**Yield:** 8, 1 cup servings

**Nutritional Analysis:** 200 calories, 8 g fat, 4 g saturated fat, 20 mg cholesterol, 490 mg sodium, 24 g carbohydrate, 3 g fiber, 5 g sugars, 10 g protein.

## Summer Squash

**SEASON:** June through October.

**NUTRITION FACTS:** Squash is low in calories. One cup raw squash contains only 20 calories. It contains vitamins A and C, and is naturally free of fat, cholesterol and sodium.

**SELECTION:** Popular summer squashes include yellow crookneck, yellow straightneck, zucchini, cocozelle and patty pan. Summer squash should be picked or purchased when small and tender; both skin and seeds are eaten. The peel holds many of the nutrients so do not peel. It should be harvested when 6 to 8 inches in length. Patty pan squashes are ready when they are 3 to 4 inches in diameter or less.

**STORAGE:** Store unwashed squash in plastic bags in the crisper drawer of the refrigerator. Wash the squash

just before preparing. The storage life of summer squash is brief. Plan to use within two to three days.

**PREPARATION:** Summer squash is a mild flavored vegetable that combines well with herbs and seasonings. Try it with basil, allspice, rosemary and marjoram. Cook summer squash as a vegetable or use in stews, casseroles and main dishes.

Summer squash can be grilled, steamed, boiled, sautéed, fried or used in stir-fry recipes.

**PRESERVING:** Select small squash with small seeds and a tender rind. Wash and cut into ½ inch slices and heat in boiling water for 3 minutes. Cool promptly in cold water and drain. Pack in containers leaving ½ inch headspace. Seal and freeze.

### SUMMER SQUASH

**Kentucky Proud Project**  
County Extension Agents for Family and Consumer Sciences

University of Kentucky, Dietetics and Human Nutrition students

**June 2017**

**Source:** [www.fruitsandveggiesmatter.gov](http://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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## Sautéed Frog Legs



This institution is an equal opportunity provider. This material was funded by USDA's Supplemental Nutrition Assistance Program — SNAP.



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### Sautéed Frog Legs

- 1 pound cleaned frog legs
- Buttermilk, to cover
- ½ cup all-purpose flour
- Up to ¼ cup olive oil
- ¼ teaspoon salt
- Black pepper, to taste
- ½ teaspoon no-salt seafood seasoning
- 1 tablespoon lemon juice
- 1 tablespoon fresh parsley, if desired

In a covered container, soak frog legs in buttermilk for 3 hours or overnight in the refrigerator. Remove frog legs from buttermilk and dredge in flour. Sauté in oil over a low heat. As they cook, sprinkle frog legs with salt, pepper, and Old Bay seasoning. Cook frog legs about 12 to 14 minutes, browning each side, until a meat thermometer reaches 165 degrees Fahrenheit when inserted into the meatiest part of the leg. Remove frog legs to a platter, and sprinkle with lemon juice and parsley, if desired.

**Yield:** 4 servings

Nutrition Facts	
4 servings per container	
<b>Serving size 4 ounces (148g)</b>	
Amount per serving	
<b>Calories</b>	<b>260</b>
% Daily Value*	
<b>Total Fat</b> 14g	<b>18%</b>
Saturated Fat 2g	<b>10%</b>
Trans Fat 0g	
<b>Cholesterol</b> 55mg	<b>18%</b>
<b>Sodium</b> 260mg	<b>11%</b>
<b>Total Carbohydrate</b> 12g	<b>4%</b>
Dietary Fiber 0g	<b>0%</b>
Total Sugars 0g	
Includes 0g Added Sugars	<b>0%</b>
<b>Protein</b> 20g	
Vitamin D 0mcg	<b>0%</b>
Calcium 25mg	<b>2%</b>
Iron 3mg	<b>15%</b>
Potassium 349mg	<b>8%</b>

\* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

