

GRAVES COUNTY AGRICULTURE & NATURAL RESOURCES NEWS

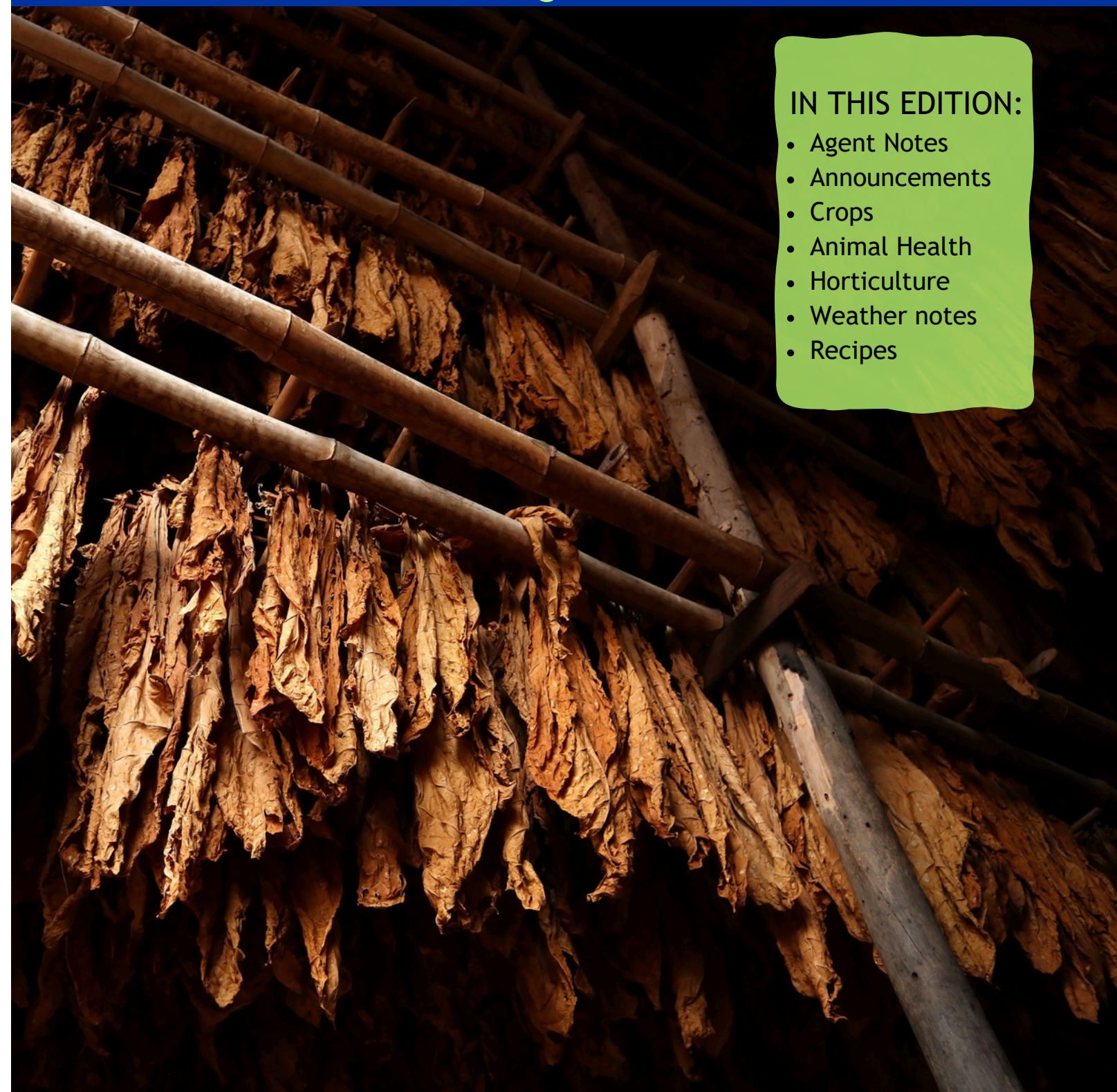
 **Martin-Gatton**
College of Agriculture,
Food and Environment
University of Kentucky.

*GRAVES COUNTY COOPERATIVE
EXTENSION SERVICE
4200 US HWY 45
MAYFIELD, KY 42066
(270)247-2334
GRAVES.EXT@UKY.EDU*

August 2025

IN THIS EDITION:

- Agent Notes
- Announcements
- Crops
- Animal Health
- Horticulture
- Weather notes
- Recipes





I hope this newsletter finds you well. It was a very busy and exciting July for the extension office!

The team of agents that work every year to bring you the Winter Ag Conference were named as State Winners in our professional association.

We accepted the award at our state meeting in Hopkinsville, and I was glad to be able to travel to our national conference and accept our award there, on behalf of our team, in Billings, Montana.

We had a great crowd for our florals class and for our beef and forage field day! Thanks to all for coming out in the heat to learn with us!

We are excited to be bringing the Master Cattlemen program back to the Purchase! If you are a cattle producer and haven't done the Master Cattlemen series in the past, I highly encourage you to attend these sessions. Check out the information in this newsletter to learn more about the program!

I look forward to seeing you this fall!

Miranda Rudolph

Extension Agent for Agriculture & Natural Resources
Graves County

miranda.rudolph@uky.edu | 270.247.2334 | 270.978.7052



Upcoming Events:

- August 14th: Tobacco Twilight Tour - 5:30pm - Murray State West Farm
- September 3rd: Turf Field Day - 11am -2pm - Marshall County Extension
- September 16, 23, 30- Master Cattlemen Sessions- Graves County Extension
- September 25th - Fall Florals & Fizz- 5:30pm - Graves County Extension
- October 14, 21, 28 - Master Cattlemen Sessions- Graves County Extension
- October 30th: Trunk or Treat- 4:30-6pm - Graves County Extension
- November 4th: Master Cattlemen Session - Graves County Extension

Cooperative Extension Service

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

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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, physical or mental disability or reprisal or retaliation for prior civil rights activity. Reasonable accommodation of disability may be available with prior notice. Program information may be made available in languages other than English. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating. Lexington, KY 40506



Disabilities
accommodated
with prior notification.





Highlights
from
July!



2025 TOBACCO TWILIGHT TOUR

August 14, 2025

5:30pm

MSU West Farm

336 Robertson Rd. N.

Murray, KY

Dr. Andy Bailey, University of Kentucky Extension Professor
Update on New Variety Development and Angular Leaf Spot Management

Dr. Mitchell Richmond, University of Tennessee Extension Professor
Optimizing Plant Populations for Burley Tobacco

Kate Turner, University of Tennessee Ph.D. Student
Assessing Quadris Effectiveness in Target Spot Populations

Catfish Dinner to Follow Tours!

Call 270-753-1452 or 270-247-2334 to RSVP



Altria



**Cooperative
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Agriculture and Natural Resources
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University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.
Lexington, KY 40506



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Kentucky Master Cattlemen's Program Returns to the Purchase Area

The Kentucky Master Cattlemen's Program is returning to the Purchase area this fall, bringing with it an invaluable educational opportunity for local beef producers. Hosted by all the Purchase area Agriculture and Natural Resources Extension agents, this year's program will be held at the Graves County Cooperative Extension Office. Classes will take place weekly on Tuesday nights, beginning September 16 and running through November 4th.

This intensive, seven-session course is designed to strengthen the management skills of Kentucky's beef producers—whether you're a beginner eager to start strong or a seasoned producer looking to brush up on the basics. Participants will explore a wide range of topics, including genetics, nutrition, reproduction, herd health, forages, environmental stewardship, facilities and handling, marketing, and emerging issues in the beef industry.

Each session is led by University of Kentucky specialists and industry professionals who provide the latest research-based information and practical insights that participants can immediately apply to their operations. The program is also a great networking opportunity, connecting producers with one another and with Extension resources across the region.

Graduates of the Kentucky Master Cattlemen's Program receive a farm gate sign, a certificate of completion, and ongoing access to educational resources and updates from the University of Kentucky Beef Extension team. More importantly, they leave the program better equipped to make informed decisions that improve profitability, animal welfare, and sustainability.

Whether you're expanding your herd, improving your pasture management, or simply wanting to stay current in a fast-evolving industry, the Master Cattlemen's Program is for you. Space is limited, so early registration is encouraged. There is a \$100 fee to attend all sessions, and attendance is required for all sessions for certification. For more information or to register, contact your local county Extension office today. Don't miss this chance to invest in your future as a Kentucky cattle producer!

See the flyer on the next page for more details!



2025 Master Cattlemen Program



Session 1

Sept. 16,23,30

- Management Skills-
- Genetics-
- Facilities and Animal Behavior-
- Reproduction and Herd Health-



Session 2

Oct. 14,21,28 & Nov. 4th

- End Product-
- Forages-
- Marketing and Profitability-
- Environmental Stewardship-



Location: Graves County Ext. Office

4200 US-45,
Mayfield, KY 42066

Time: 5:00-5:30 Dinner
5:30PM- Meeting

Cost: \$100/Individual
+\$50- for each additional member
of the same operation.

Free- Next-Generation (14-22)

All Sessions Required For Certification



Scan Here



UK Cooperative
Extension Service



West Kentucky Turf Field Day

September 3rd, 2025
11:00-2:00pm



Topics:

- Live cool season planting demo
- Warm season sod plots tours
- Fertilizers & pests
- Weed identification & Much More!



Certification Hours

- Commercial Pesticide
- Certified Crop Advisor
- Extension Agent In-service
- Master Gardener CE

See back for details.



Lunch Provided

Join us for a free lunch!

RSVP Required!
☎ 270-527-3285

Marshall County Cooperative
Extension Service
2081 Mayfield Hwy.
Benton, KY 42025

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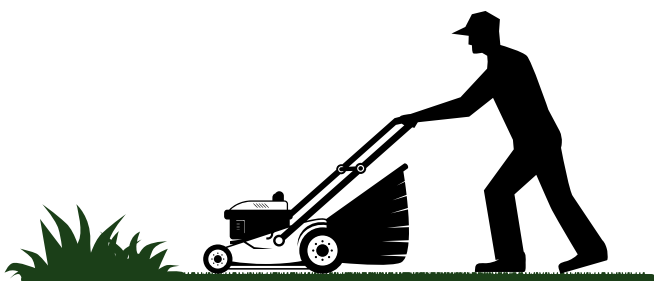
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MARTIN GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT
Marshall County Cooperative Extension Service is a proud member of the National Association of County Extension Agents (NACSEA) and the National Association of Agricultural Extension Agents (NAEEA). We are committed to providing high-quality, research-based information and services to our clients. For more information, please visit our website at www.marshallcountycos.org.



Certification hours will be given
for participation!

Make sure to RSVP to
270-527-3285



Join us for a Turf Field Day!

September 3, 2025

11am- 2pm

at

Marshall County Cooperative Extension

FREE LUNCH!

Live demos!

Plot tours!

So much more!

West Kentucky Turf Field Day



Certification Hours Available:

*Certifications are NOT required to
attend. All are welcome!



KY Commercial Pesticide:

1 CE



Certified Crop Advisor:

1 NM, 1 IPM & 1 CM



KY Master Gardener:

3 CE



KY Extension Agents

3 In-service

Don't Forget!
RSVP is Required!
270-527-3285

Program provided by the Marshall, Calloway, Livingston, McCracken and Graves County Extension Offices.

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Time to sign up for

STATE COST SHARE!

Applications will be accepted until September 15, 2025.
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

The new Mayfield Downtown Farmers Market is looking for more vendors!



If you grow produce, raise meat, eggs, or any other farm product please consider being a vendor!

You can find more information at mayfieldfarmersmarket.com

**Certifications and permits are required for some things. Please contact the market at MayfieldFarmersMarket@gmail.com*




FLORALS & FIZZ

THURSDAY, SEPTEMBER 25
5:30 - 8 PM

\$30 FEE
payment due by August 22

Enjoy snacks & a soda bar while
Dakota Moore, KHC, teaches about
Kentucky flowers and principles of
floral design!

 Cooperative
Extension Service



An Equal Opportunity Organization

270-247-2334

Graves County Extension Office

story walk TRUNK OR TREAT



 Cooperative
Extension Service

October 30
4:30-6PM

4200 St Rt 45 N
Mayfield, Ky 42066



Ten or More Farmed or Forested Acres in Kentucky? Summer is a Good Time to Update Your Agriculture Water Quality Plan

Amanda Gumbert, UK Water Quality Extension Specialist

The Agriculture Water Quality Act was passed by the Kentucky Legislature in 1994, mandating that landowners with 10 or more acres in agricultural production must develop a water quality plan. Ten or more acres of crops, livestock or trees that will be harvested qualify for a plan and implementation by law.

This plan documents the best management practices you're using to protect water resources. These best management practices could include planned grazing systems, rotational grazing for livestock, filter or buffer strips around crop fields, animal waste manure storage structures and nutrient management plans. It should also include plans to limit livestock access to streams. Additionally, the document should include information on the proper handling of herbicides and pesticides, as well as the maintenance of septic systems.

To implement a water quality plan, first look at the activities in your operation. You can use a [web-based planning tool](https://soilandwater.ca.uky.edu/awq) (<https://soilandwater.ca.uky.edu/awq>) to answer questions about the operation. By answering these questions, you can identify the appropriate best management practices needed. Then, you document that these practices are being used and properly maintained.

In many cases, proper practices are already in place, and creating an agriculture water quality plan provides a document stating that you are following proper procedures to protect the water quality on your farm.

However, keep in mind that an agriculture water quality plan is not a voluntary document; it is a mandatory document required by the Kentucky Agriculture Water Quality Act. Periodically review and update your plans to reflect changes in farming and forestry practices or land ownership. Additionally, a water quality plan is required by the local Soil and Water Conservation District if you plan to apply for state cost-share programs.

By implementing an agriculture water quality plan, you help protect both surface and groundwater from agricultural contaminants. Keeping the state's water resources clean protects human and animal health and reduces the cost of treating drinking water.

For more information on the Kentucky Agriculture Water Quality Act, please contact the Graves County Cooperative Extension Service.

Related resources:

Kentucky Agriculture Water Quality Act and Planning - <https://soilandwater.ca.uky.edu/awq>



New World Screwworm *A Recent Threat to U.S. Farm Animals* Dr. Jessie Lay, DVM, University of Kentucky



Adult New World screwworm flies resemble the common blowfly but have multiple distinguishing features.

Recent news headlines have brought attention to the northward movement of a foreign animal disease towards the United States from Mexico: **New World Screwworm (NWS)**. This parasite has been eradicated from the United States since 1966 with the most recent outbreak occurring in Florida Key deer in 2016. All living, warm-blooded animals, including birds and humans, can be infested with NWS.

What makes this fly and larvae different?

While our normal, US-borne flies lay eggs that can cause wounds to be infested with maggots (called myiasis), the flies that cause NWS are much more aggressive and the maggot (NWS) feeds on living flesh.

What causes infestation?

The female NWS fly lays eggs near or on a wound of an animal. The eggs hatch and the larvae (maggots) burrow into living flesh, enlarging the wound, attracting more flies and debilitating the animal. NWS flies seed out wounds from fighting injuries, tick bites, newborn navels and even human-made wounds from castration, ear tagging and dehorning procedures. After a week of feeding in the wound, the larvae drop to the ground and burrow where the adult NWS fly emerges.



New World screwworm flies, eggs and larvae around and deep within a wound.

New World Screwworm cont...

What strategies are there for control?

Three main tactics are used for controlling NWS. The first two are dependent on veterinarians and animal caretakers and include visual examination of wounds with subsequent treatment and quarantine, as well as movement controls from impacted areas. The third tool, called sterile fly release, takes advantage of the fact that a female fly mates only once in her lifetime. Male NWS larvae can be raised in specialized laboratories, sterilized and released into the wild to mate with females. The female NWS fly's eggs will not hatch after mating with a sterile male NWS fly.

What is the urgency?

Recent northward detections of NWS in Mexico prompted the United States Department of Agriculture Secretary Brooke Rollins to temporarily stop importation of cattle, horses and bison from Mexico at U.S. land ports. A detection in the United States could cost millions of dollars in livestock losses, trade restrictions and control efforts. Livestock, pets, wildlife and even humans could suffer and die from screwworm infestation. Look for animals that are depressed, not eating and off to themselves with enlarging, foul-smelling wounds. You may notice eggs laid near the wound and possibly moving maggots. NWS flies and maggots look like the common blowfly and maggot. If you suspect a case of NWS, contact a USDA veterinarian (502-395-2368) or Kentucky state veterinarian (502-573-0282) for help identifying it. We can work together to protect the United States from the re-introduction of this terrible disease. Find more information at: <https://www.aphis.usda.gov/livestock-poultry-disease/cattle/ticks/screwworm>



Help Your Garden Weather a Heatwave

Source: Rick Durham, extension professor, Department of Horticulture

If you think you're hot, ask your plants (not literally). They can suffer under high summer heat, too. Most vegetables and native plants can withstand a periodic heatwave, but once the soil dries out in the top few inches, all plants can feel the stress. Some vegetables like beans and tomatoes may delay producing fruit during hot weather but this is usually temporary. A layer of mulch around your plantings can help hold moisture for those important surface roots and moderate the soil's temperature. A light-colored mulch like straw, pine needles or grass clippings can help to reflect heat back and away from the plant's roots.

But don't worry. There are ways to protect your plants!

Water your plants in the early morning before the heat of day to prevent water loss to evaporation. If you use sprinklers, most of that water can be lost through wind drift and evaporation, so try to water on a calm morning. Hand watering gives you the best control and directs the water exactly where you need it. If you can, it is best to soak the soil directly beneath the plant and avoid getting the leaves wet. Soaker hoses are good for directing the water where it's needed most.

Watering in the morning also discourages slugs and fungal diseases. An evening dousing can leave the soil and foliage wet for longer periods of time and encourage snails, slugs and the spread of disease.

You may have to water container gardens two or even three times a day, depending on how large the container is and how much foliage is present. If they are small enough to be moved, shifting containers to a place where they can get partial shade will help manage the plants' stress, but some plants may not bloom as well when exposed to prolonged shady conditions.

During normal weather, young trees need at least 10 gallons of water a week for the first three years directed toward their developing root systems. If you find yourself in a hot dry spell, provide your young trees and shrubs with more water. They are at their most susceptible during those early years. A tree bag contains a reservoir of water that is released slowly to the plant and can help keep the tree well-watered during the hottest spells. You'll only have to fill the bag occasionally rather than watering every few days. They can be purchased at most garden shops.

Shade cloth, which comes in varying thicknesses, can help protect plants that are withering under the sun's rays. Support it above or to one side of the plants, which will shelter them like a porch protects us from the strongest sunlight. Tree branches with leaves can also be placed over plants to provide shade.

Now is not the time to cut your lawns short. Mow them to at least a three-inch height. That way, the grass blades will provide shade for their own roots and help hold in soil moisture. Avoid fertilizing lawns and gardens during heatwaves, because roots' capacity for taking up nutrients are reduced during hot weather. You'll just be wasting your money. Most Kentucky lawns are comprised of bluegrass and tall fescue. Once established, both of these species and withstand quite a bit of drought.

Many cool-season crops are planted in August, but the late summer heat can be hard on young transplants. Again, shade cloth can come in handy. Or plant them under more mature plants, so they can benefit from the shade the larger plant throws. For more information about how to weatherproof your lawn and garden, contact the Graves County office of the University of Kentucky Cooperative Extension Service.



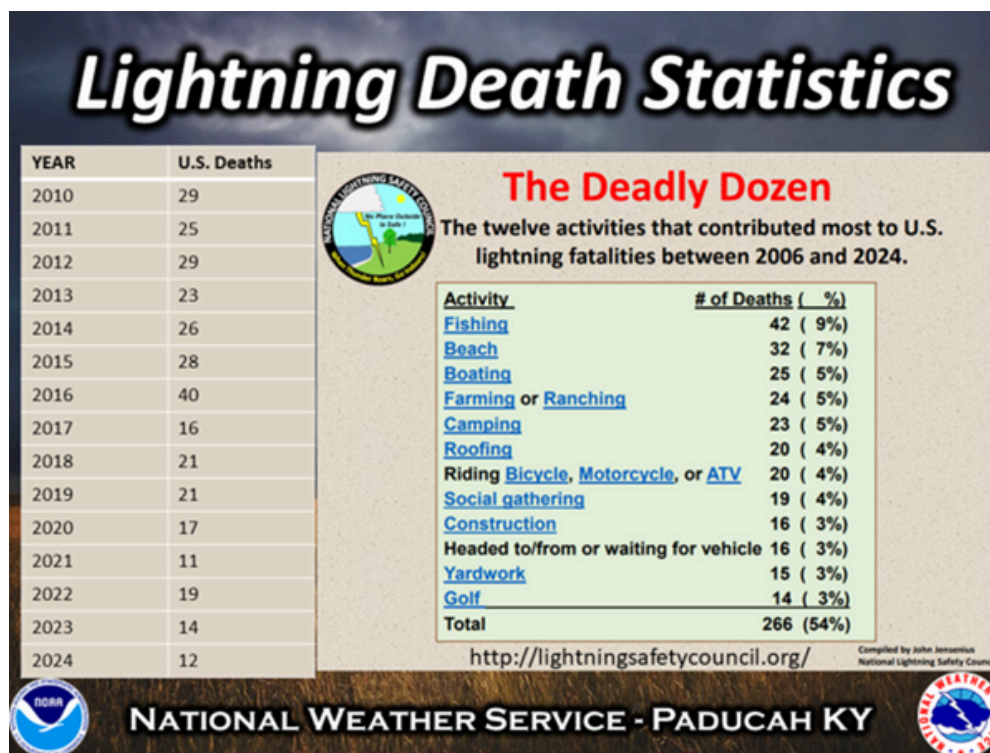


Lightning Safety

By Derrick Snyder - National Weather Service Paducah, KY



While the risk for severe thunderstorms that produce tornadoes, large hail, and damaging winds is greatest during the spring across most of the country, the dangers of lightning can occur during all times of the year. Every year, hundreds of people are seriously injured from lightning strikes. The good news is that lightning deaths have trended downward in recent years thanks to greater preparedness and education. However, numerous people are still killed every year. Looking at the statistics for lightning fatalities, the majority of lightning deaths occurred while people were doing outdoor activities.



The deadliest activity when it comes to lightning strikes is fishing, followed by beach going, boating, camping, farming/ranching, riding bikes/motorcycles/ATVs, roofing, gathering outside, working construction, walking to a vehicle, yardwork, and playing soccer or golf. If you are caught outside during a thunderstorm, remember that there is no safe place outside from lightning. If a thunderstorm is occurring or nearby, seek shelter inside a sturdy enclosed structure. A hard-topped vehicle can also provide good shelter.

Keep these things in mind when it comes to lightning safety:

1. Your chances of being struck by lightning depend on how you react when storms are in the area.
2. Remember: "When Thunder Roars, Go Indoors!". If you can hear thunder, you are close enough to be struck by lightning!
3. The threat of lightning increases as a storm approaches, peaks when it is overhead, and gradually diminishes as it moves away.
4. Many people wait too long to get to a safe place and then go back outside too soon before the threat is over. Wait about 30 minutes after you hear the last rumble of thunder to return outside.





Farmer's Market Skillet Bake

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

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.



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

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
Serving size 4 ounces (148g)

Amount per serving
Calories 260

	% Daily Value*
Total Fat 14g	18%
Saturated Fat 2g	10%
Trans Fat 0g	
Cholesterol 55mg	18%
Sodium 260mg	11%
Total Carbohydrate 12g	4%
Dietary Fiber 0g	0%
Total Sugars 0g	
Includes 0g Added Sugars	0%
Protein 20g	
Vitamin D 0mcg	0%
Calcium 25mg	2%
Iron 3mg	15%
Potassium 349mg	8%

* 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.

