AUGUST

Horticulture Newsletter

2025

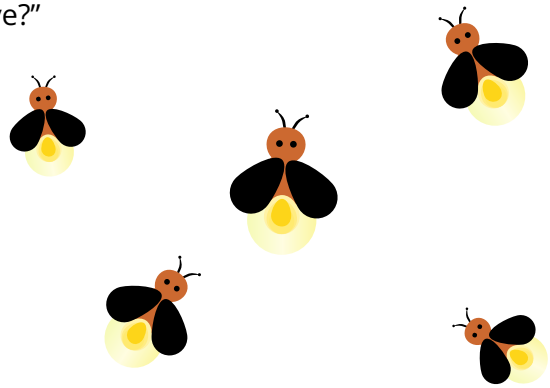
Martin-Gatton College of Agriculture, Food and Environment

Are Firefly Population Numbers Declining?

By Caleb Barnes June 27,2025

As the sun sets on sticky summer evenings in June, tiny, hovering blinks fill the sky. They first start off in the shadows and the trees, moving out into the open while daylight turns to dusk. These lights, of course, belong to fireflies.

“It is just an iconic piece of summer,” said Jonathan Larson, an extension entomologist at the University of Kentucky. “It's something that I think a lot of people have a lot of love for. They don't cause problems. They're just interesting-looking insects, and they do a weird thing. Their butts glow. I mean, how, how hard is that to love?”



From late May to early July, fireflies begin their daily process of flying around at dusk to signal one another. “The male is flying through the air, he's making a blinking pattern, sometimes making a flying J pattern depending on the species,” Larson said. “Then there's a female down on the grass below that's signaling back, and then he'll fly down to find her and mate.”

In recent years, people have reported that they feel there are fewer fireflies coming out. Is there any truth to that, though?

“In the normal American backyard there probably are fewer fireflies that people are seeing,” Larson explained. “This is just going to boil down to logistics of how that place was built, what's happened to the natural habitat around that suburb, around that apartment building, around that town, and some of the things that we may strip out and alter about the landscape are going to decrease the number of fireflies that can persist there.”

Mary Dossett
Agent for Horticulture
Advisor for McCracken County
Extension Master Gardeners

Savannah Gilbert
Horticulture Assistant

https://mccracken.ca.uky.edu/

According to Larson, firefly numbers are on the decline. However, it follows a larger pattern with insect life overall. “I would say they're declining in the same fashion as other insect life,” he said. “It's probably more noticeable because they do glow, and there's something that people are on the lookout for.”
Because of their status as an ‘iconic’ bug, people are more aware of a decrease in fireflies, even though there are contributing factors that affect all insects. One unique factor that affects fireflies – but not other bugs – is light pollution. Bright, continuous lights can inhibit the ability of fireflies to see other signals.
“If it's too bright outside, they can't see that glow,” Larson said. “They're not going to be able to facilitate that mating.”

Despite the decline, there are a few ways that you can contribute to the fireflies, helping bring them back to your backyard. “One big thing is to get lights that are motion activated on your property rather than constant security lights that are always on,” Larson explained, adding that directional lights are also better than lights that illuminate large spaces for long periods of time. “We can also replace parts of our lawns and landscapes with firefly habitat. This would be kind of thicker, bushier grasses that you're planting, taller grasses that are going to grow up about waist high, places that will be far less managed than a typical lawn. You can put kind of logs and things in there, things that'll help them to have places for their eggs to be hidden. “In those ways, we can help their numbers to try and bounce back up a little bit so we can all keep enjoying these summer flashes that we all love so much.”

AGR-270

Restoring a Flood-damaged Lawn

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

Kenneth Clayton, Plant and Soil Sciences, and Beth Wilson, Andy Rideout, and Jason Vaughn, Cooperative Extension Service

Figure 1. Complete submersion of turfgrass, if prolonged, can result in death of the plants. (Photo: Kenneth Clayton, University of Kentucky)

Flooding across Kentucky has been an increasing problem in recent years and has caused significant damage to many properties, including home lawns. The deterioration or death of turfgrass is often caused by grass being smothered with silt and sand deposits left from the flood or grass being submerged under water for prolonged periods (Figure 1). Lack of oxygen to the plant can cause death when submerged, and the rate of death is often worse with higher water temperatures. Repairing these areas is important for reducing chances of erosion as well as allowing a return to the regular use of the lawn.

Repairing Flooded Lawns

When flooding has killed the grass, reseeding is often the most economical way to repair a lawn. Species selection may be the most important part of the process. In Kentucky, turf-type tall fescue is the best adapted species for our growing conditions. It is more drought resistant than Kentucky bluegrass and is quite tolerant of flooded conditions. Turf-type tall fescue germinates quicker than Kentucky bluegrass and will stand a better chance of providing a quality lawn in years to come with relatively low maintenance requirements. Perennial ryegrass can be used when extremely quick germination is needed, but in the long term it will not hold up well in this climate.

When reseeding a flooded area, you want to ensure good seed-to-soil contact while avoiding planting too deep. Seed should be planted between ¼" and ½" deep. Planting deeper than ½" will reduce the amount of germination achieved. If you are seeding into an area that has been covered with silt or sand, you may only need to lightly rake or drag the seed bed after broadcasting the seed to get the proper planting depth. If you are seeding into a dead area still covered by plant material, you will have better success using a machine such as a slit seeder. A slit seeder will place the seed in direct contact with the soil, where it can remain moist. Slit seeders have blades that dig shallow furrows into the soil and drop seed directly into the slits, which should give better and more consistent results than simple broadcast seeding. These machines are often available at rental companies.

Seeds must have adequate water to germinate. Water frequently to prevent the seeds from drying out, but not so much as to wash seeds off-site. Continue watering daily until the grass has germinated and begun to mature. With sufficient water, the seed should germinate in about 10 days. As the root system develops and gets deeper, the frequency of watering can be reduced. If access to water is limited, germination will be improved by the addition of a light coating of straw or grass hay.

Figure 2. Standing water damaged this area in the turfgrass and weeds will quickly invade the bare areas. (Photo: Kenneth Clayton, University of Kentucky)

Adding 1 lb. of nitrogen per 1,000 sq. ft. will promote quicker recovery and establishment of new grass. It is best to complete in two applications at ½ lb. of nitrogen each time to reduce the potential for tip burn on new seedlings. Slow-release forms of nitrogen fertilizers have the least potential for damaging new seedlings, but other sources can be used successfully. Try to apply at a time when the air temperature is not very high (<80°F), and then water the fertilizer in immediately following the application to reduce burn potential. Ideally, submit a soil sample from the area to be planted to your local Cooperative Extension Office to determine if the addition of lime, phosphorus, or potassium are warranted and to determine the recommended amounts needed. If the flooding left deposits of mainly sand, the addition of these nutrients may be required.

September is the best time to seed grass in Kentucky, but earlier or later seedings can be successful. The cooler temperatures and shorter daylight hours of September (and fall in general) favor grass establishment because the seed zone stays moist for longer periods than in the summer. Fall seedings typically have less weed competition than spring seedings (Figure 2).

With new seedings, there is no need to wait for extended growth of 4 to 5 inches before mowing. Aim to mow when the grass is approximately ⅓" higher than the desired mowing height. With fall plantings, winter annual broadleaf weeds can become highly competitive with new seedlings. Many herbicides are available to control these weeds. Waiting until after the third mowing before herbicide applications will ensure the new grass has matured enough to handle the application. With all herbicides, always read the label closely to ensure you will not damage the new stand of grass.

For additional information please see UK Extension publications:
AGR-50: Lawn Establishment in Kentucky
http://www2.ca.uky.edu/agcomm/pubs/agr/agr50/agr50.pdf
AGR-51: Renovating Your Lawn
http://www2.ca.uky.edu/agcomm/pubs/agr/agr51/agr51.pdf

Keys to Success

- Select a turf-type tall fescue seed.
- Plant at a depth of ¼" to ½" to ensure good soil-to-seed contact.
- Maintain adequate moisture to achieve maximum germination.
- Apply approximately 1 lb./1,000 sq. ft. of nitrogen to promote growth.

Issued 03-2023

Cooperative Extension Service

2025 HORTICULTURE PROGRAMS

LAWN MANAGEMENT

5pm-6pm

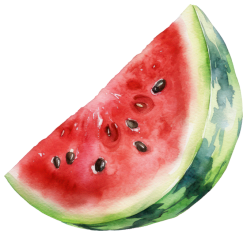
Join us at the Extension Office to learn all about lawn management. This free program is RSVP required. To RSVP, call our office at (270) 554-9520

September 2nd, 2025
McCracken County Extension Office
2025 New Holt Rd
Paducah, KY 42001

MARY DOSSETT,
HORTICULTURE AGENT

★FREE SOIL SAMPLES FOR MCCRACKEN COUNTY RESIDENTS★

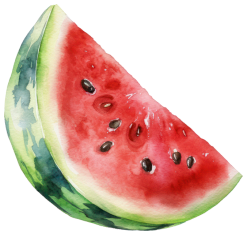
Did you know, as a McCracken County resident, you can get up to 5 soil samples sent to the lab for FREE each year? We offer multiple soil sampling packages for yards, pastures, row crops, gardens, wildlife plots, etc. If you're interested in more information, come to the office or call 270-554-9520.



How to Tell If a Watermelon Is Ripe

When to Harvest (and Eat!) Watermelon

By Robin Sweetser Last Updated June 25, 2025



Every year, I face the same dilemma: how to tell if a watermelon is ripe. Muskmelons are easy—they will slip right off the vine at the peak of perfection. However, watermelons remain firmly attached even when they are overripe.

I am no good at the "thump" test. Old-timers swear they know when a watermelon is ripe just by rapping it with a knuckle. It is ready if the sound is low-pitched, hollow, and deep like a drum. Johnny's Seed Company explains further, saying that it should sound like a "punk" rather than a "pink" or a "pank" when you flick it with your finger. I have failed miserably at this test in years past, picking unripe melons that are still white inside. Once they are detached from the vine, watermelons won't continue to ripen. You only get one chance to do this right!

When all else fails, I guess I should look at the seed packet. It says that my Sugar Babies should be ripe in 80 days from planting, and though we started the seeds indoors in early May, they did not get planted in the garden until early June. I think they should be ready any day now, but since they do most of their ripening in the last 2 weeks of growth, it is important not to jump the gun.

Tricks to Tell if a Watermelon is Ripe

Here are other subtle cues to look out for:

- The green color becomes dull.
- On striped melons, the color between the stripes gets darker.
- The rind will get hard.
- The blossom end will soften.
- They will stop getting larger.
- The ground spot will turn from white to yellow.
- The end of the main vine nearest the fruit may start to crack or turn brown.
- The curly tendril on the main vine, closest to the fruit, will turn brown.

Watermelon Tomato Salad

5 cups seeded watermelon cubes (¾ inch)
3 cups of cubed tomatoes (¾ inch)
¼ teaspoon salt
1 small red onion, quartered and thinly sliced
¼ cup red wine vinegar
2 tablespoons extra virgin olive oil
1 teaspoon black pepper
6 lettuce leaves

Directions: Combine watermelon and tomatoes in a large bowl. **Sprinkle** with salt; toss to coat. Let stand 15 minutes.

Stir in onion, vinegar, and oil. **Cover** and chill 2 hours.

Serve chilled on lettuce leaves, if desired.

Sprinkle with cracked black pepper to taste.

Yield: Makes 6, 1½ cup servings

Nutritional Analysis: *100 calories, 5 g fat, 2 g protein, 18 g carbohydrate, 0 mg cholesterol, 105 mg sodium.*

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

Kentucky Proud

Sick of Summer? So Are Copperheads. Where and When You'll Find Them in Kentucky

By Aaron Mudd June 30, 2025

If you're sick of this summer heatwave, know that Kentucky's most common venomous snake is right there with you. To avoid overheating during the hottest parts of the day, copperheads will change up their routines and become more active in the evening hours or at night during the summer, said Steven Price, a University of Kentucky herpetologist. While bites against humans are relatively uncommon and copperheads generally prefer forested areas away from people, bites have been known to happen at night. "Most people that get bit by copperheads step on them at night," Price said, adding people often go barefoot or are wearing sandals in those cases. "The person doesn't see them and it startles the copperhead." If you prefer to walk the dog, go for a jog or mow the lawn in the evening hours to escape the heat, here's what to know about where you can expect to find copperheads in Kentucky this summer.

What are Kentucky copperheads doing in the summer?

This time of year, copperheads are between their two mating seasons in the spring and fall. So the biggest activity they're devoting their energy to is feeding, particularly if the females are due to give birth to their live young in August or early September. That's right, copperheads do not lay eggs.

"One interesting thing is copperheads really like to eat cicadas," Price said. "I suppose this last cicada boom was a really important food resource for them." While people often think of reptiles as cold-blooded, Price says that's a bit of a misconception. Scientists prefer the term "ectotherms," which essentially means the animal dependent on external sources of body heat. Reptiles do not pant or sweat as mammals do, so they rely on sources of shade to stay cool. That adaptation lends itself well to copperhead's choice of habitat: densely forested areas or at least those with woody debris and vegetation. Copperheads can be found throughout Kentucky, though they are less common in the inner Bluegrass region around Lexington, per UK. If you live near such an area, it's possible you may encounter a copperhead. That said, you don't need to live in fear of them, just be mindful and give them space. "They don't want to interact with you," Price said, adding snakes see humans as giant predators. "They're afraid of you and want to get away."

How to keep copperheads out of your yard

First, it helps to think about what might attract a copperhead to your yard. Copperheads feed on small mammals, frogs, lizards, birds and insects, such as cicadas, according to a University of Kentucky profile of the snake species. Areas that attract rodents could also be a draw for a copperhead. Excess clutter or vegetation on your property could also attract copperheads seeking shelter from the open sun. Some potential draws for copperheads, and snakes in general, include:

- Tall grass, thick vegetation and other plants that offer cover.
- Water sources like rivers and streams. Those could be a draw for water queensnakes or garter snakes, neither of which are venomous.
- Wood piles, rock walls and similar debris.
- Feeders that can draw small birds or rodents that are prey for snakes.
- Quiet storage areas, like basements or crawl spaces, which can serve as safe spaces for snakes to overwinter or shed their skin.
- Underneath structures, such as a backyard deck. According to Price, it's not unheard for a snake to sun itself on a deck. More typically though, decks provide a structure they can quickly duck under if needed.

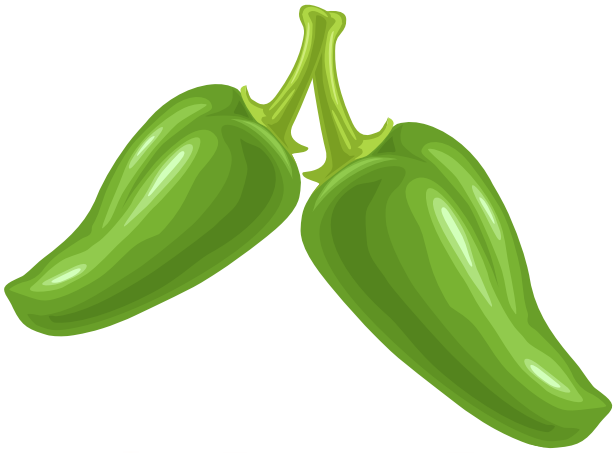
Fresh Corn with Jalapeño Peppers

2 cups water
1 cup jasmine rice
2 teaspoons cumin
6 ears fresh corn
2 to 4 fresh jalapeño peppers
1 large tomato
2 tablespoons chopped pimento peppers
⅓ cup diced red onion
2 tablespoons butter
¼ teaspoon salt
Pinch of black pepper

Bring water to a **boil** in a medium saucepan. **Stir** in rice and cumin, **cover** and **reduce** heat to low. Do not remove lid while rice is cooking. **Simmer** 12 minutes then stir. **Cover**, **turn off** heat and let rice **set** an additional 10 minutes or until tender and all the water is absorbed. **Wash** all fresh ingredients. **Cut** corn kernels off cob. **Dice** jalapeño peppers and tomato. You may want to wear gloves while dicing the hot peppers. **Combine** corn, jalapeños, tomato, pimento peppers, onion, and butter in a microwave-safe bowl. **Cover** and **cook** in microwave oven on high until heated through, about 4 to 5 minutes. **Stir** every minute. **Add** salt and black pepper. **Combine** corn mixture and cooked rice. **Fluff** mixture with a fork.

Yield: 6, 3/4-cup servings

Nutritional Analysis:
250 calories, 6 g fat, 3 g saturated fat, 10 mg cholesterol, 120 mg sodium, 47 g carbohydrate, 9 g sugar, 0 g added sugar, 6 g protein.



Kentucky Sweet Corn

SEASON: July through August.
NUTRITION FACTS: Corn is low in fat and is a good source of fiber and B vitamins. A half-cup serving of corn contains 90 calories.
SELECTION: Look for ears with green shucks, moist stems, and silk that is free of decay. Kernels should be small, tender, plump, and milky when pierced. They should fill up all the spaces in the rows.
STORAGE: Keep unshucked, fresh corn in the refrigerator until ready to use. Wrap ears in damp paper towels and place in a plastic bag for four to six days.
PREPARATION: To microwave: Place ears of corn, still in the husk, in a single layer, in the microwave. Cook on high for 2 minutes for one ear, adding 1 minute per additional ear. Turn the ears after 1 minute. Let corn sit for several minutes before removing the shucks and silks.

To boil: Remove shucks and silks. Trim stem ends. Carefully place ears in a large pot of boiling water. Cook 2 to 4 minutes or until kernels are tender.

To grill: Turn back the shucks and remove silks. Sprinkle each ear with 2 tablespoons of water and nonfat seasoning such as salt, pepper, or herbs. Replace shucks and tie them shut with a string that has been soaked in water. Place ears on a hot grill for 20 minutes to 30 minutes, turning often.

KENTUCKY SWEET CORN
Kentucky Proud Project
County Extension Agents for Family and Consumer Sciences
University of Kentucky, Dietetics and Human Nutrition students
June 2019

Source: www.fruitsandveggiesmatter.gov

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http://plateitup.ca.uky.edu

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2025 HORTICULTURE PROGRAMS

DRYING & PRESSING FLOWERS

5pm-6pm

Join us at the Extension Office to learn all about drying and pressing cut flowers. This free program is RSVP required. To RSVP, call our office at (270) 554-9520

August 5th, 2025
McCracken County Extension Office
2025 New Holt Rd
Paducah, KY 42001

MARY DOSSETT,
HORTICULTURE AGENT

Cooperative Extension Service
MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

Cooperative Extension Service

2025 Horticulture Programs

5:00 - 6:00 P.M.
McCracken County Extension Service
2025 New Holt Rd Paducah, KY 42001

Please RSVP for each program by calling (270) 554-9520

JAN 7	Winter Sowing
FEB 4	"Evergreens" Propagation (on-site)
MAR 4	Native Plants
APR 1	Fairy Gardens
MAY 6	Container Gardening
JUN 3	Floral Arranging
JUL 1	Love Shack Farm (on-site)
AUG 5	Drying & Pressing Cut Flowers
SEP 2	Lawn Management
OCT 7	Pumpkin Planters
NOV 5	Holiday Wreaths

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