

Rebecca Konopka Carter County Extension Office

Fireflies Provide Nighttime Beauty; Help Control Some Garden Pests

Remember how much fun it was to chase fireflies when you were young? Once you caught a firefly, you would hold it in your hand to watch the flickering light for a few moments and then release it unharmed to fly away.

Interestingly, fireflies do more than generate entertaining childhood memories; they also help control some pests in the garden. On summer nights, glow worms (luminescent firefly larvae) often emerge from their underground homes to forage for food. A typical menu includes slugs, snails and caterpillars including cutworms. The larvae feed much like a spider by injecting a paralyzing toxin into their prey; then, injecting digestive juices to dissolve the prey and allow it to be more easily consumed. The adults probably feed on plant nectar to sustain their energy requirements.

There are several theories about why fireflies glow. One is that the flashing light is a homing beacon for the opposite sex. The male flies around flashing the signal to attract a female's attention. A female on the ground or on low-growing foliage will signal back when a male visits her vicinity. To avoid confusion, each firefly species has its own specific signal to attract a mate.

Another theory is that firefly larvae use their luminescence to warn a potential predator that they taste bad. Larvae contain defensive chemicals in their bodies. When disturbed, larvae also increase their glow's intensity and frequency.

Typical nighttime habitats for adults and larvae take place in rotting wood or other forest litter, or on the edges of water sources such as streams, ponds, marshes and ditches. The highest species diversity is in tropical Asia and Central and South America. Incidentally, some Asian species have tracheal gills that enable them to live under water where they feed on aquatic snails.

To attract fireflies to your property, reduce or eliminate lawn chemicals. Add low, over-hanging trees, tall grass and similar vegetation to give adult fireflies a cool place to rest during the day. Reduce extra lighting on your property because this light interferes with fireflies' luminous signals, making it harder for them to locate mates in the area. Fireflies also determine the time of night they'll flash by the intensity of ambient light. This is why you don't see many fireflies flashing on clear nights with a full moon.

For more information contact your Carter County Extension office. Educational programs of the Cooperative Extension Service 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 expressions, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability.

Upcoming Events:

- The Grayson Farmer's Market is open on Saturdays from 9:00 AM until noon and on Thursdays from 2:00-6:00 PM. The market is located in the shed behind the Extension Office. The Olive Hill Farmer's Market is located in the Save-a-Lot parking lot and is open on Saturdays and Wednesdays at 8:00 AM and Mondays at 3:00 PM until sell out each day. There will be a pop-up market on the first Tuesday of the month in the Friendship & Chapel House parking lot from 6:00-8:00 PM.
- Ag Development Board Meeting Monday, June 24th @ 6:00 PM Extension Office
- Little Sandy Beekeepers Meeting Tuesday, July 2nd @ 6:30 PM Speaker: Wes Mattox; Topic Bear Control