

Twinkle, Twinkle, Little Firefly

The lightning bug is brilliant
But he hasn't any mind.
He blunders through existence
With his headlight on behind.
--Anonymous



Photo: Wiki Commons

Summer's here again, and love is in the air. Ah, l'amour! Depending on where you live, maybe lots of love. Love that comes and goes in a flash. Love that has its own rhythm and sometimes is deceptively alluring. Love we can't help but watch, magical yet painfully short-lived.

The firefly, or lightning bug, is more properly called a beetle. It has leathery forewing covers that conceal softer wings used for flying. Unlike other beetles, though, fireflies are fairly soft (in other words, easily squished by curious children). All fireflies have a unique shield-like covering, the pronotum, over their heads. Over 2000 species occur in moist tropical and temperate areas. Most firefly larvae eat worms or snails. Most adults do not appear to eat.

Unlike lightbulbs, fireflies do not get warm when they glow. The light is caused by a biochemical reaction. This reaction occurs in eggs, larvae, and adults. Adults use the light to seek sexual partners. Larvae seem to use the light to warn predators of their foul taste and eggs flash the light when they are disturbed. Each firefly species in a particular area has a unique signal. This ensures that the fireflies find the right partner. One signal might be to flash for one second then rest for two seconds. Another signal might be to form a "j" shape while flashing for three seconds. Males usually signal while flying, but females usually signal from a perch, such as a blade of grass or a twig. Females of some species also can imitate another species' signal. They mimic the signal until some unwitting male approaches. Instead of mating, the female will attack and eat the male. Nobody said firefly love was always pretty.

As is true with many insect populations, firefly numbers are dwindling globally. Loss of suitable habitat is certainly a cause, but bright lights, pesticides, and fertilizers also seem to interfere with natural firefly behavior and physiology. If your family wants to enjoy nature's little light show, turn the lights down, avoid pesticides on your lawn and garden, keep fertilizer use to a minimum, and don't over-mow the lawn (fireflies hide in the grass during the day).