Fireflies, commonly known as lightning bugs, are beetles whose abdomens glow at night. In North America, there are over 150 species of fireflies commonly seen in summer evenings. These insects are called “fireflies” and “lightning bugs” because of the flashes of light they naturally emit. The bioluminescent organs in the underside of the abdomen are responsible for this phenomenon, which is known as bioluminescence. Fireflies use these organs to take in oxygen and combine it with a molecule called luciferin to produce light that can be yellow, green, or orange in color and is nearly heatless. The flashing patterns of fireflies help them to attract mates. Males flash from trees or shrubs while females reply by flashing from vegetation closer to the ground. Each species of firefly has its own flashing pattern, and some species can even synchronize their flashes. Moreover, the flashing is also a warning to predators to stay away. It advertises their toxicity and therefore predators rarely eat them. Most fireflies are carnivorous. While most firefly larvae eat snails and worms, certain species feed on other fireflies.

Biology. Fireflies can live for up to a year from egg to adulthood, but they can only fly and lay eggs for around two months of that time. They spend the winter and early spring as larvae in underground burrows, emerging as adults to quickly lay eggs (approximately 500 per female on average) before dying after five to 30 days.

By Laura Laiton Jimenez