

July 2020

Dear **Scientific Insect Analysis Organization,**

I am a firefly. Knowing that I am next on your list of insects to research, I figured that I would save you the trouble of ... dissecting me and just go on ahead and tell you what you might want to know.

Right off the bat I would like to inform you that although our name suggests that we are classified as flies, we are actually related to the beetle. Many people call us “fireflies” or “lightning bugs”, although people of your scientific stature might tend to address us as *Lampyridae*. Unlike most insects, fireflies have one distinct trait throughout all stages of our complete cycle of growth. We glow as eggs, larvae, and adults. Our larvae live underneath the bark of fallen logs, and they eat almost exclusively soft insects like worms and snails. Firefly larvae are commonly called glowworms. My sister just laid her first batch of eggs earlier this summer. I am expecting to hear from her soon telling me that I am a proud uncle to about 500 nieces and nephews. Hopefully they will survive through their larvae stage and grow into wonderful adults.

I personally make my home in a very humid region of North America whereas my sister, who I mentioned above, lives in South America. However I received some interesting correspondence from some of my cousins, learning that they now reside far away in Asia!

Funny story: so about three days ago as I was minding my own business, a HUGE lizard startled me from behind a rock. Ok, actually it wasn't funny at all. It was TERRIFYING! However it's not very uncommon. We fireflies are hunted by birds, lizards, frogs, and even spiders. I don't think that these predators are fully aware that we make for a pretty disgusting snack. Fireflies can produce defensive steroids in our bodies that make us unpalatable to predators. Larvae use their glow as warnings to communicate distastefulness.

Our distinct characteristic of glowing is scientifically called “bioluminescence”, derived from the latin word *lumine* meaning light. Anyway, a protein in our abdomen is mixed with a chemical called luciferase creating a substance that when combined with air gives off a warm glow. We are able to control how much air is mixed with this substance and thus we are able to make our light blink. No heat is produced.

Every firefly has a unique blinking pattern. As adults, we fireflies glow to attract a mate. Male fireflies (including myself) seem to never eat, whereas female fireflies eat other fireflies, most often male mates. This is the reason I am still single. I hope that this letter will convince you to please NOT dissect me. Please?

Your extremely desperate,

Lionel lightning bug

P.S. I have enclosed a photograph of yours truly, so that now you even know my stunning appearance. If you have questions, PLEASE DON'T DISSECT! Contact me at:

Lionellightningbug@insectcorrospondence.com.

