

Common Fireflies of Maryland



Did you know? There are just over 25 species of fireflies in the family Lampyridae that have been documented in Maryland. Fireflies, aka lightning bugs, don't all glow! They also undergo metamorphosis, and spend much of their life underground. Firefly larvae are carnivorous, consuming slugs, snails, and sometimes even each other! While the general flash patterns are below, some can be faster when the temperatures are higher. Learn about a few species found in Maryland below.

Timing Key  **Daytime**  **Twilight**  **Nighttime** 



Tyler Bell CC by NC 4.0

Eastern Firefly (*Photinus pyralis*)

ID:

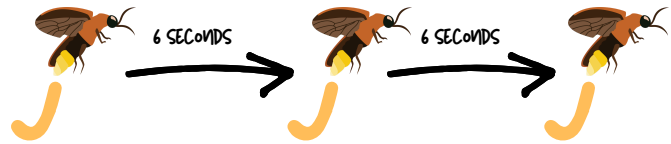
- Up to 0.7" in length
- Pink or red around central black dot of pronotum
- Light border around elytra

Timing: Mid-May- Mid-July; can go later into August

Habitat: Generalist; can be found in urban, suburban, and rural environments

Male Flash Pattern:

- J-shaped every 5-7 seconds



Judy Gallagher CC by 4.0

Black Firefly (*Lucidota atra*)

ID:

- Up to 0.4" in length
- Pronotum can be dark to dark center with red patches
- Dark elytra lacking light border
- Thick antennae to sense chemical signals

Timing: Mid-May- Mid-July

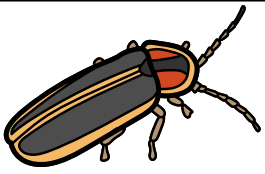
Habitat: Generalist; can be found in urban, suburban, and rural environments

Male Flash Pattern:

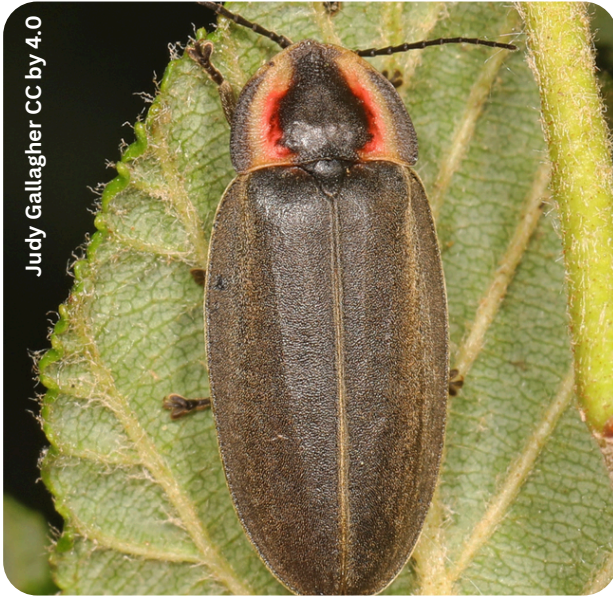
- None.



The pronotum is a shield that covers the head of fireflies.



More Fireflies



Judy Gallagher CC by 4.0

Winter Firefly (*Ellychnia corrusca*)

ID:

- Up to 0.7" in length
- Yellow and pink “parentheses” between black mark in center of the pronotum
- Ridged elytra covered in short hairs

Timing: Jan-June

Habitat: Hardwood forests, yards, parks, etc

Male Flash Pattern:

- None.



Judy Gallagher CC by 4.0

Spring Treetop Flasher (*Pyroctomena borealis*)

ID:

- Up to 0.7" in length
- Pronotum has dark edge, a dark central triangle and is bordered by pink
- Elytra have pale margins

Timing: Most common late March- mid May

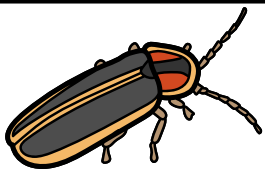
Habitat: Generalist; seem to prefer trees with furrowed bark like tulip poplars, hickories, and oaks

Male Flash Pattern:

- Single flash every 2-3 seconds.



The elytra (wing covers) lift up to reveal their wings underneath.



Lookalikes



Patrick Coin CC by NC 2.0

Railroad-worm
(*Phengodes* sp.)

Pale, grub-like females & larvae with assortment of spots and lines. Continuously glow at night.



Emilio Concari CC by NC 2.0

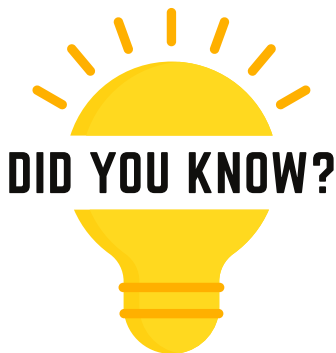
Soldier Beetles
(*Podabrus* sp.)

Pronotum does not cover head. Some species mimic fireflies for protection from predators.



Scape Moth
(*Cisseps* sp.)

Lacks elytra and pronotum. Has feathery antennae. Can be 1" or larger.



Females are often on the ground & are harder to see. Some females in the *Photuris* genus mimic the patterns of rival species and eat the males who visit!



Fireflies generate luciferase and luciferin to produce light. This substance is highly sought after in the biochemical industry for food safety testing and biomedical research. Fireflies were once wild collected for harvest, but these chemicals are mostly synthetically made now.



Light pollution and lawn chemicals can cause firefly decline. Turn off the lights at night (or put them on timers or sensors) and reduce or eliminate pesticide use in your yard.