

Firefly Field Guide



Identify fireflies around Athens, GA!

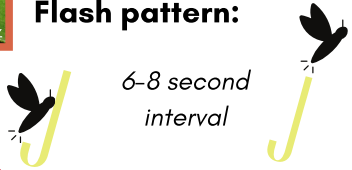


Big Dipper Firefly

Photinus pyralis 

- Yellow-green flashes of light
- J-shaped flight path
- Quarter-sized body length

Flash pattern:

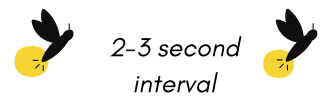


Twilight Bush Baby


Photinus australis 

- Yellow-orange, short flashes of light
- Flies low to the ground
- Dime-sized body length

Flash pattern:

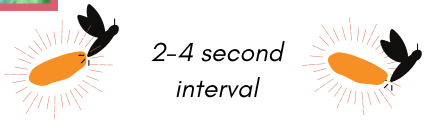


Candle Firefly


Pyraclomena angulata 

- Orange flashes of light
- High flier
- Quarter-sized body length

Flash pattern:



Photuris Fireflies

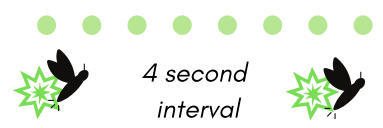
Photuris species 

- (a group of fireflies)
- Green flashes of light
 - Fast, powerful flier; any height
 - Long legs, strong, hunchback


Flash pattern: Varies

Snappy Single Syncs:
<1 second interval

Flashbulb Fireflies:



Blue Ghost


Phausis reticulata 

- Blue-green glowing light
- Flies low to the ground in dark woods
- Grain of rice-sized body length

Flash pattern:



Black Firefly


Lucidota atra 


- No light organ or light signals
- Flies during the day; can be found on blades of grass
- Quarter-sized body length


Flash pattern: None!

Firefly Tips

Every type of firefly comes out at a specific time!


Day




Twilight


Night



Safety:

- Stay with your adults or let them know where you're going!
- Wear long pants, sleeves and close-toed shoes if not on pavement
- Bring lights! Red is preferred. Turn off near fireflies.
- Wear bug spray (try to avoid hands if catching fireflies)

Find fireflies:

In meadows, shrubs Near water

By woods, leaf litter Warm temperature (but not too dry!)

Did you know that each firefly species has a season? Some can only be found for a few weeks in the spring, while others stay out all summer!

Learn more! Check out "Fireflies, Glow-worms, and Lightning Bugs" by Lynn Faust!

Images from iNaturalist. Reference: Faust, L. F. (2017). Fireflies, glow-worms, and lightning bugs: identification and natural history of the fireflies of the eastern and central United States and Canada. University of Georgia Press.

Observe Fireflies!



1. Use your net, hands, or a Mason jar to catch fireflies



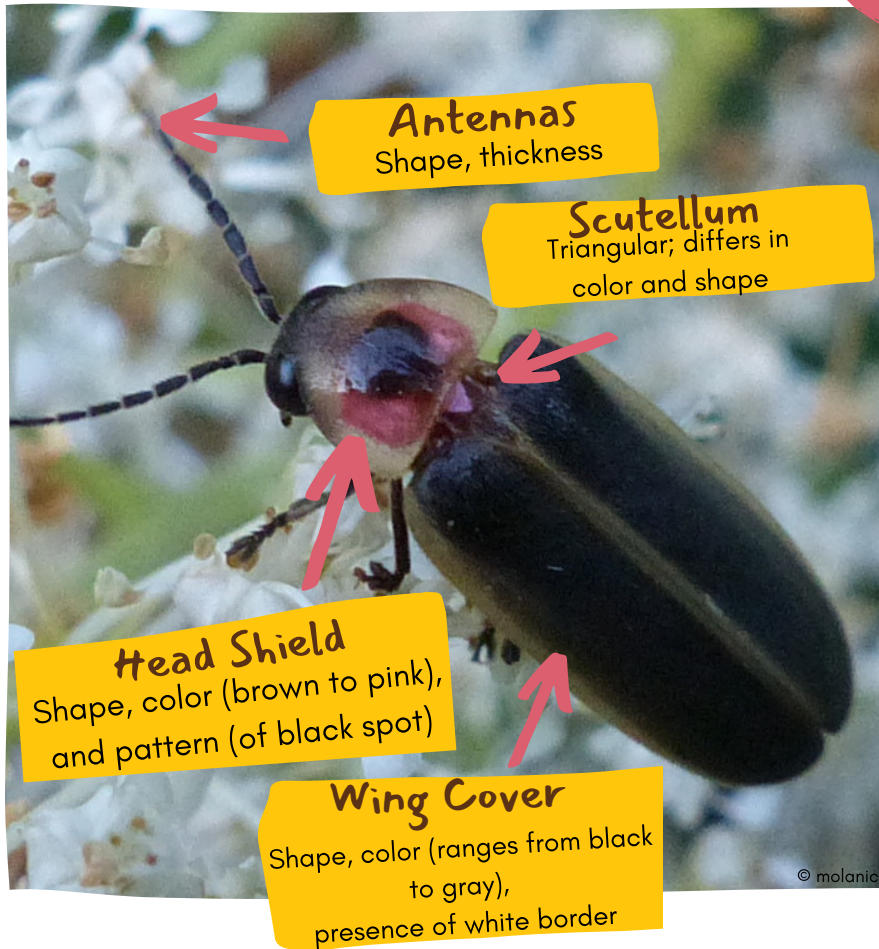
2. Hold firefly gently in your hand (can use a magnifying glass!)



3. Can keep firefly in a jar while observing, & release all fireflies where you found them!

Look out for:

These fireflies look like twins, but they are different species!



Big Dipper Firefly
Photinus pyralis



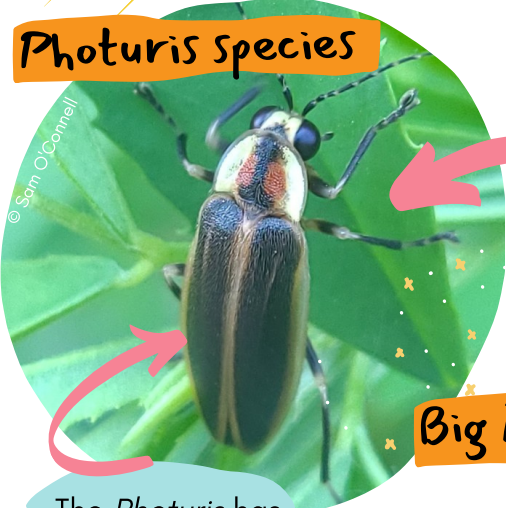
Spring Treetop Flasher
Pyroctomena borealis

Notice how the **head shield shape** and **pattern** differs. The Big Dipper Firefly has a *long, narrow body* that ends in a *pointed tip* compared to the Spring Treetop Flasher.

Firefly Diversity



Photuris species



This Photuris has a **brown head shield** and **long black spot** compared to the Big Dipper, which is **pink** with a **round black spot!**



The **wing covers** lift up when flying, revealing the real wings!

Big Dipper Firefly

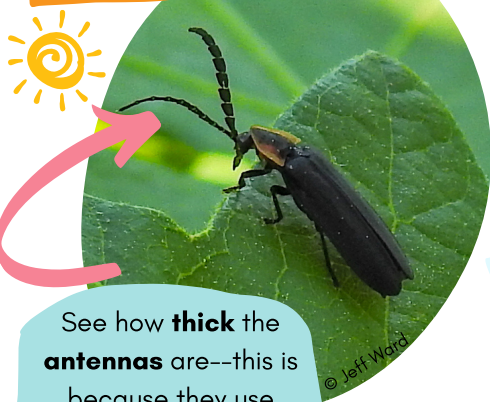


The Photuris has **long legs**, which improves its **speed** and **agility!**

Blue Ghost



Black Firefly

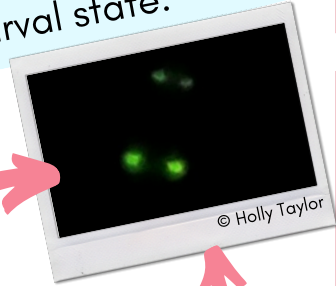


Some fireflies have **wingless** females, who do not develop wings and kept many traits from their larval state.

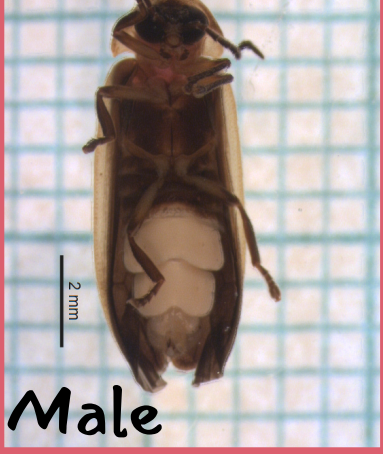


See how **thick** the **antennas** are--this is because they use antennas to **sense chemical signals** during the **day!**

Wingless females cannot fly and signal using green glow spots!



Twilight Bush Baby



Females are often found on leaves, and can be harder to find than males, who display while flying through the air.

Female fireflies have **one** light organ segment, males have **two!**

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