Quick Flash Guide for the Fireflies of West Virginia

Flashing fireflies are harbingers of summer in West Virginia, with flashing typically beginning in May and lasting until August. Many night-active, flashing male fireflies can be identified to species based entirely on their unique flash pattern and color. Therefore, this guide is designed for identification based on this flash behavior!

If you see:

Time of night: late dusk, lasting ~45 mins

6-8 mm in length

- Yellow flashes go to "Photinus" subheading, but see also "Snappy Single Sync," "Heebie-Jeebies," and "Spring Treetop Flasher" species
- Green flashes go to "Photuris" subheading
- Orange flashes go to "Pyractomena" subheading
- Continuous green glowing go to "Phausis" subheading

In the flash pattern depictions within this guide, each box represents 1 second (12 seconds of flash behavior for each species depicted). However, please be aware that higher temperatures will increase the speed of these flash patterns, and lower temperatures will decrease the speed of flash patterns. Fireflies will not flash below 50°F. Species length information and flash charts adapted from "Fireflies, Glowworms, and Lightning Bugs" by Lynn Faust. † In the chart below, ○ represents flashes, and \(\psi \widetilde{\psi} \) represents flickering flashes.

Please contact westvirginiafireflies@gmail.com if you believe you see a firefly that has an asterisk next to its name in this guide, or for any firefly related guestions!

Photinus Yellow-Bellied Firefly Mr. Mac Synchronous Firefly Photinus scintillans Photinus macdermotti Photinus carolinus 0 Habitat: forest trails, open fields/lawns Habitat: open forests near streams Habitat: small forest clearings near streams Time of year: June-July Time of year: mid-June-early July Time of year: mid-June-mid-July Time of night: sunset Time of night: sunset Time of night: ~10:30PM to ~12AM 6.5-8.5 mm in length 10 mm in length 11-15 mm in length Cattail Flash-Train Firefly Murky Flash-Train Little Gray Photinus consimilis Photinus obscurellus Photinus marginellus $\diamond \diamond \diamond$ 0 Habitat: wetlands, riverbanks Habitat: open wetland areas Habitat: forests, margin areas Time of year: June-mid-July Time of year: late May-early June Time of year: late June-July Time of night: after dark, lasting ~ 1 hour Time of night: dusk, lasting 1-2 hours Time of night: sunset-dark 10-11 mm in length 9-11 mm in length 6-9 mm in length Creekside Tree Blinker Common Eastern Firefly Double Cousin* Photinus sabulosus Photinus consanguineus Photinus pyralis $\circ \diamond$ Habitat: in trees near openings Habitat: widespread Habitat: shrubland, forest Time of year: June-July Time of year: mid-June-August Time of year: late June Time of night: dusk

Time of night: sunset-midnight

9-19 mm in length

1 of 2

7.5-11 mm in length ††

Photuris

Spring 4-Flasher Photuris quadrifulgens

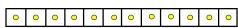


Habitat: open areas bordered by trees Time of year: late May-early June Time of night: ~1-2 hours after sunset 12-20 mm in length More likely to see pattern 1.

> Slow Glows Photuris "slow glows"

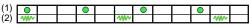
Habitat: tree margins near water, fields Time of year: early June-early July Time of night: late dusk-midnight 11-17 mm in length

Heebie-Jeebies
Photuris hebes



Habitat: tree margins near water, fields
Time of year: late June
Time of night: dusk, lasting 1–2 hours
10-12 mm in length

Christmas Lights Photuris tremulans



Habitat: woodland openings, fencerows Time of year: early June-mid-June Time of night: after dark-midnight 10-12.5 mm in length Could see either pattern 1 or 2.

> Snappy Single Sync* Photuris frontalis



Habitat: forested wetlands & bottomland Time of year: late June Time of night: late dusk, lasting 1–2 hours 11-17 mm in length

Dot Dashers*

Photuris pennsylvanica-like species

Habitat: wetlands and adjacent open areas
Time of year: July

Time of night: after dark-midnight 8-11 mm in length

Variable Triple Flash Photuris versicolor

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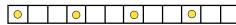
Habitat: widespread
Time of year: mid-June-early July
Time of night: dusk and into the night
13-18 mm in length

Potomac Firefly* Photuris potomaca

Habitat: early succession along Potomac Time of year: ~early June-early July^{†††} Time of night: dusk and into the night Variable length

Pyractomena

Spring Treetop Flasher Pyractomena borealis



Habitat: forests, trees along open areas
Time of year: late April–May
Time of night: dusk
14-22 mm in length

Marsh Flicker
Pyractomena dispersa



Habitat: wetland and adjacent areas
Time of year: late May–early June
Time of night: dusk–midnight
7-14 mm in length

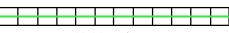
Candle Firefly
Pyractomena angulata



Habitat: forests, margins Time of year: mid-June Time of night: after dark-midnight 9-17 mm in length

Phausis

Shadow Ghost Phausis inaccensa



Habitat: forest
Time of year: mid-June-early July
Time of night: late dusk and into the night
Note: only females glow, stationary
4-6 mm in length

Blue Ghost*
Phausis reticulata



Habitat: forests
Time of year: ~May-July
Time of night: just after dark, lasting ~1.5hr
6-9 mm in length

[†] Faust, L.F. 2017. Fireflies, Glowworms, and Lightning Bugs: Identification and Natural History of the Fireflies of the Eastern and Central United States and Canada. University of Georgia Press, Athens, Georgia, 30602.

^{††} Green, J.W. 1956. Revision of the Nearctic species of Photinus (Lampyridae: Coleoptera). Proceedings of the California Academy of Sciences, 28(4): 561-613. ^{†††} Lloyd, J. E. 2018. A naturalist's long walk among shadows: of North American Photuris – patterns, outlines, silhouettes... echoes. Self-published, Gainesville, FL, USA. 477 pp.