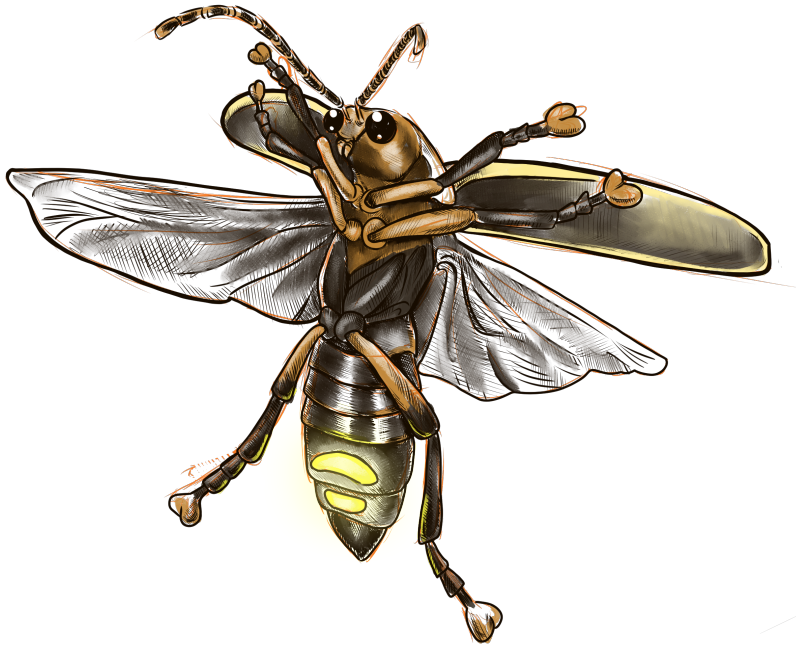


# Congaree Female *Photuris frontalis* Observational Log



**Observer:**

Amber Elder

*Independent Field Researcher*

Southeast Louisiana

Email: [amber@photurisfrontalis.org](mailto:amber@photurisfrontalis.org)

**Study Focus:**

Behavior, habitat use, flash patterns, courtship dynamics, and seasonal activity of female *Photuris frontalis*, with particular attention to female behavior.

**Geographic Area:**

Congaree National Park

**Observation Period:**

May 8 - May 14, 2026

## **Purpose of This Document**

This document contains **raw, contemporaneous field notes** recorded during nightly observations. Entries are written in real time or shortly thereafter and may include:

- Incomplete thoughts
- Hypotheses in progress
- Emotional reactions
- Unverified interpretations
- Environmental impressions
- Speculative language

These notes are **intentionally unpolished** and are preserved in their original form to maintain observational integrity.

## **Methodology (General)**

Observations are conducted visually during evening hours, typically between dusk and ~9:30 PM, using headlamps (white and/or red light), handheld capture when necessary, and minimal disturbance practices. Environmental factors such as temperature, humidity, wind, moon phase, and weather conditions are noted when relevant.

## Data Status & Use Notice

- These notes **do not represent finalized conclusions**
- Interpretations may evolve as additional data is gathered
- Species identifications may be provisional unless otherwise stated

This document is part of an **ongoing independent field study**.

© 2026 Amber Elder. All rights reserved. • [www.photurisfrontalis.org](http://www.photurisfrontalis.org)

These notes may **not be reproduced, shared, modified, or quoted** without the written permission of the author. Scholarly reference is permitted only with full attribution and contextual clarification that the material represents *raw field data*.

## Related Materials

Supporting materials may include:

- Photographs
- Video recordings
- Specimen-specific observation sheets
- Weather records
- Annotated maps

Availability upon request.

DATE	Congaree National Park	ESTIMATED NUMBER of SYNCs	TEMP/TIME	MOON PHASE	WEATHER NOTES
5/8/2026	(Bannister Bridge) Scoped Orit Peleg's Lab site. Looks like there's potential for Snappy activity. She says they usually start flashing around 8:45pm. Contacted Lynn who told me I should try Sims trail. Says lots of good activity there and that's where I'll probably find some females.	N/A	Temp not recorded. 12:50pm	Waning Gibbous	Sunny. Warm. Clear.
5/9/2026	(Banister Bridge) I went out from 7:40-9:05pm. There was lots of firefly activity but no Snappies. Contacted Peleg Lab team via WhatsApp and Orit told me to try Sims Trail as Lynn had suggested. I drove out, but it is DARK and I am not familiar with the other trails. So I headed home. Emailed Lynn (she's traveling to Turkey today). During layover in Istanbul Lynn wrote saying her 2024 notes mentioned they were reliably appearing around 8:35-8:40 PM last year. She told me to email Carson Lillard at Congaree. So I did. Hoping to hear back. Nolan responded on WhatsApp and said that Bannister Bridge is behind the rest of the park. Decided I would scope things out during the daylight the next day.	0	7:40pm/72°, then dropped to 69° HI: 77° LO: 57°	Last Quarter	Partly cloudy. Wind: 2mph, humidity 82%
5/10/2026	(Sims Trail) We met Orit, Nolan, and Heather at Harry Hampton Visitor Center in Congaree National Park around 8:00pm. We made the trek to Sims Trail and the Snappies began flashing around ~8:30pm. A few males were seen. I would say a good hundred or so if I had to guess. Saw a few suspicious flashes, faintly in the leaves or perched on a tree. But nothing came of it. I caught a male blue ghost! But it took us awhile to realize he was in the net and had not gotten away! Peleg Lab kept him for research purposes.	~100	~8:37pm/85° HI: 86° LO: 61°	Waning Crescent	Clear. Wind: 6mph. 36% humidity NOTE: Nolan says there's rain in the forecast in the mornings and predicts it may encourage the bugs. I've seen this happen, too.

DATE	Congaree National Park	ESTIMATED NUMBER of SYNCs	TEMP/TIME	MOON PHASE	WEATHER NOTES
5/11/2026	<p>(Sims Trail) Arrived around 8:00pm. Males began flashing around 8:33pm. Nolan and Orit say eventually the males spill out into the path, but we are not at that point yet. Hoping for the females to show up at that point. I have three nights left. There have been a few males who have faked me out. And a femme fatale who was hiding in the leaf litter where the males were flashing. It is very, very dark out and running into the trees is a real risk. I am tempted to go deeper into the forest to find the ladies... but my most successful catches have always been on the edges where the females sit and wait or fly along paths where the underbrush meets a clearing. I have also reliably found females VERY shortly after the males began flashing at night. Here's hoping I will be more successful tonight. Left the park around 10pm due to tired daughter</p> <p><b>OTHER NOTES: Orit's team observed a highly synchronous <i>Photinus</i> swarm at Congaree with behavior similar to <i>P. carolinus</i>, though Lynn suspects it is likely <i>Photinus consimilis</i>, a closely related and debated sibling species. Lynn recommended preserving a specimen in at least 75% ethanol and emphasized that exact temperature-linked video documentation, flash timing, female response, and possibly genetics would be most useful for resolving the ID.</b></p>	Hundreds	~8:00pm/73° HI: 86° LOW: 57°	Waning Crescent	Clear; Wind:11mph, 18mph gusts. Humidity 54%

DATE	Congaree National Park	ESTIMATED NUMBER of SYNCs	TEMP/TIME	MOON PHASE	WEATHER NOTES
5/12/2026	<p>(Sims Trail) Saw a single Snappy flashing at 8:33pm, but they didn't really get going until a little later. Cooler, dropping temps made them all sluggish. Several males faked me out by perching or hiding in the leaf litter flashing strangely. Eventually everything nearly came to a halt. Met a few more of Orit's team members. Orit introduced me as the leading female <i>Photuris frontalis</i> expert in the world. Which, while flattering also made me feel worse that I have so far been unable to locate these females I know so much about.</p> <p>Piper and I saw a strange glowing in the leaves. Not flashing. But it would glow, and then go dark. Glow, then go dark. We could not locate whatever it was when we put our lights on it. Lynn tells me it could have been <i>Photuris</i> larva or Blue Ghost <i>Phausis</i> female.</p> <p>Before things got really slow, Piper caught 3 male Snappies in her net and was able to provide them to the researchers to study. Because of the sluggish behavior of the bugs, the researchers were unable to obtain any... so, GOOD JOB PIPER!</p>	~100	~12 noon/68° 7:39pm/ 67° 8:24pm/66° 9:03pm/60°	Waning Crescent	Fair; wind 2-3mph Humidity: 36-48%

DATE	Congaree National Park	ESTIMATED NUMBER of SYNCs	TEMP/TIME	MOON PHASE	WEATHER NOTES
5/13/2026	<p>(Sims Trail) Walked the edges of the trail. And stamped around the underbrush. Congaree Synchronous Firefly Event was tonight so we has passersby disrupting with their lights making visibility challenging. Very dark evening. First emergence: 8:33pm. More numerous than last night. Still no females seen. <b>Talked with Lynn... perhaps there is some Protandry happening... meaning the males mature and emerge first, then the females mature and emerge.</b> Would like to know WHEN the males in Congaree first came out. Got faked out by a few males AND, a very tricky femme fatale versicolor who decided to be dramatic and play dead... she was VERY much alive, however. Piper was able to provide more males for Peleg Lab and that was extremely helpful. SO! At least there's that.</p>	Hundreds	7:56pm/82° 8:32pm/77° HI 83° LO 50°	Waning Crescent	Mostly Cloudy; wind 5mph; Humidity: 40-53%

DATE	Congaree National Park	ESTIMATED NUMBER of SYNCs	TEMP/TIME	MOON PHASE	WEATHER NOTES
5/14/2026	<p>(Sims Trail) Arrived ~7:48pm and parked myself deeper into the woods to wait for nightfall. At 8:33pm on the dot the Snappies began their lightshow. I kept chasing every unusual flash in the leaf litter. Came back with nothing but males. But about 10-15 minutes after the males began flashing, I saw another faint little flash. I don't remember what was unusual about it. Shined my headlamp on it and saw that male and was frustrated for a split second. Then I realized he looked "bulky" and strange. HE WAS MOUNTED ON A FEMALE. They were on top of a sliver of pine bark. I immediately shouted at Nolan, "I found a copulating pair!" He ran off to get his camera and I fumbled around with the pair in my hands against my body. We got the pair into a large ziplock bag and they'd broken apart and were very unhappy. The male was still... uh... "erect" for lack of a better term. Nolan Bonnie took a massive amount of photos after we got her into a petri dish and everyone started excitedly gathering around. Orit Peleg ran over all excited and we got the female in a butterfly cage where they placed her back among the males with three cameras on her. I hated letting her go... but... science. I will have access to all videos and photos and Orit came to me after saying, "Thank you so much! I don't know how many papers will come out of this, but your name will be in all of them." Wish I could have studied her more... but I suppose the researchers will let me know what becomes of her.</p>	Hundreds	7:48pm/77° HI 82° LO 61°	Waning Crescent	Clear; wind: 9mph; Humidity 20%