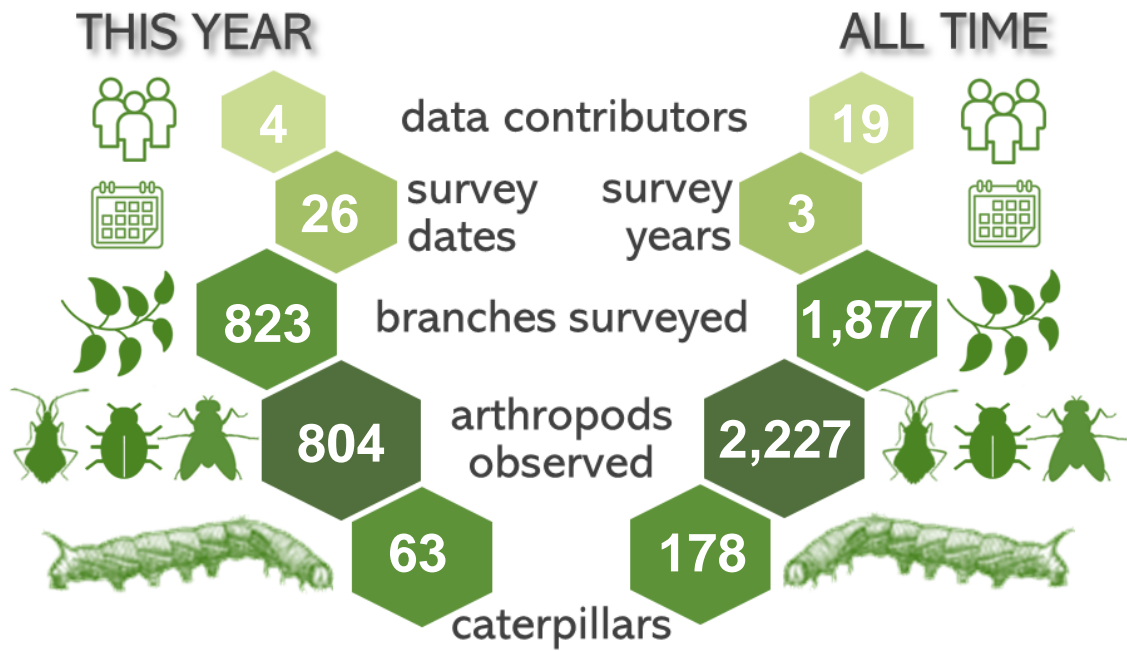




Grandfather Mountain, 2025 Summary



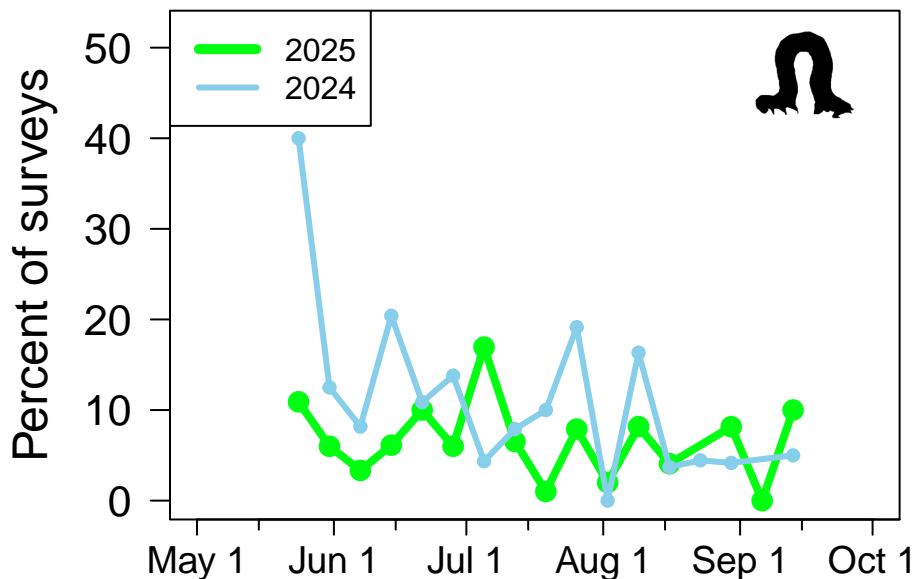
The **823** total surveys conducted at **Grandfather Mountain** this year ranks **6th** out of the **68** sites that participated in 2025.

Top Participants of 2025

User	Surveys	Arthropods	Caterpillars	% Caterpillars
F Maloney	75	88	7	9.33
N Perkins	91	106	8	8.79
H Lowman	359	423	37	7.80
J Johnson	298	187	11	3.69

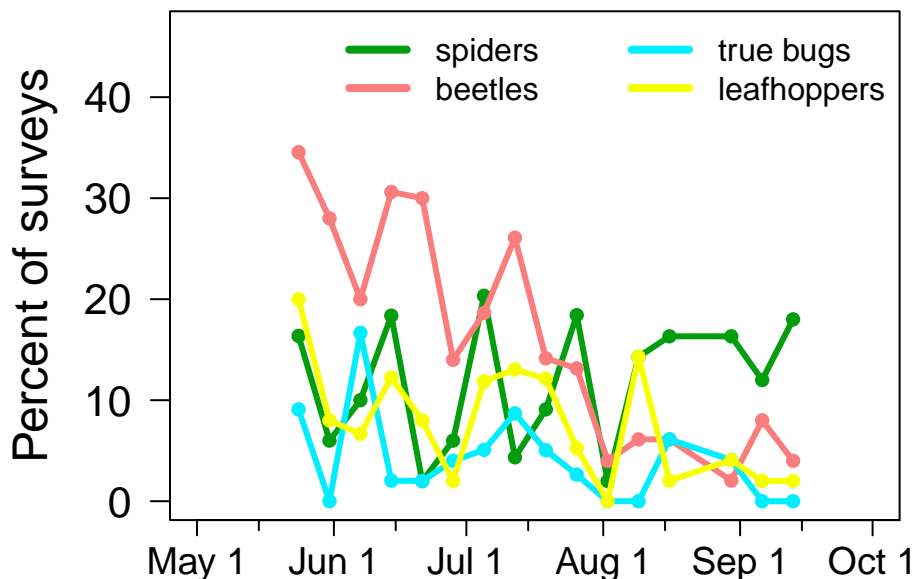
## Caterpillar Phenology

As a major source of food for nestlings of migratory birds, we are especially interested in the timing of caterpillar availability. At **Grandfather Mountain in 2025**, caterpillar occurrence peaked at **16.9%** of surveys on **5 July**. Do you see other peaks as well? How does the pattern compare to the previous year?



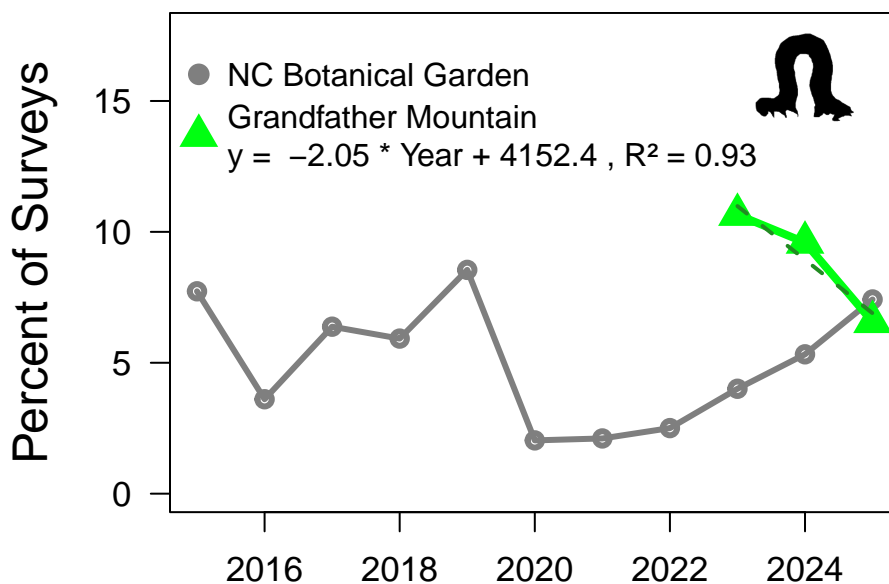
## Other Arthropod Phenology

While caterpillars tend to have pronounced seasonal peaks, other groups are more variable. What patterns do you see below for **2025**? You can explore the phenology of other groups on the ***Caterpillars Count!*** website.



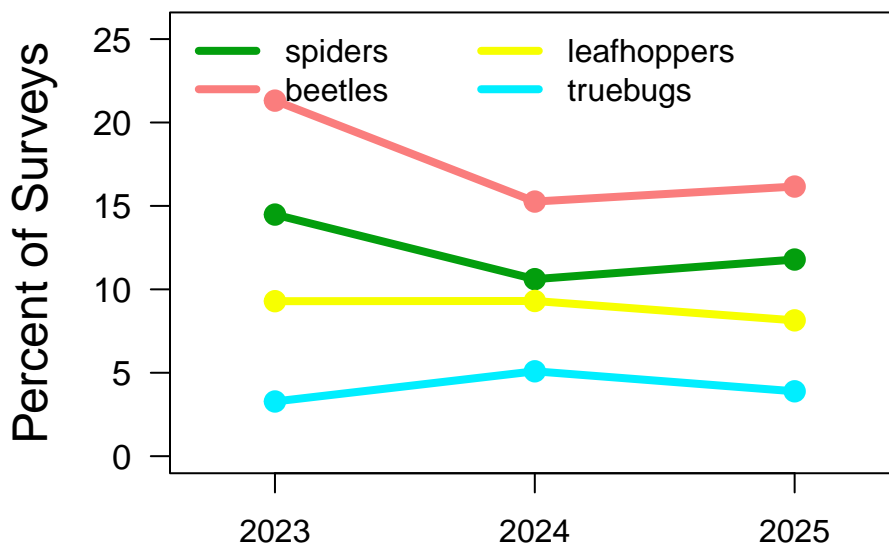
## Arthropod Trends

Annual monitoring is critical for assessing the health of ecosystems and evaluating the impacts of environmental change that may be happening in your area. There have been worrying reports of insect declines around the world but there is much we don't know, so your efforts help to fill in pieces of the puzzle. Keep it up!



Above you can see how the proportion of surveys with caterpillars has varied over time at your site, with the trend for one of our flagship sites, **NC Botanical Garden**, for comparison. If you've surveyed for at least 3 years, then you will also see the average dashed trend line displayed.

Below are trends for some other common arthropod groups. Do the different groups go up and down in sync, or seem to vary independently?

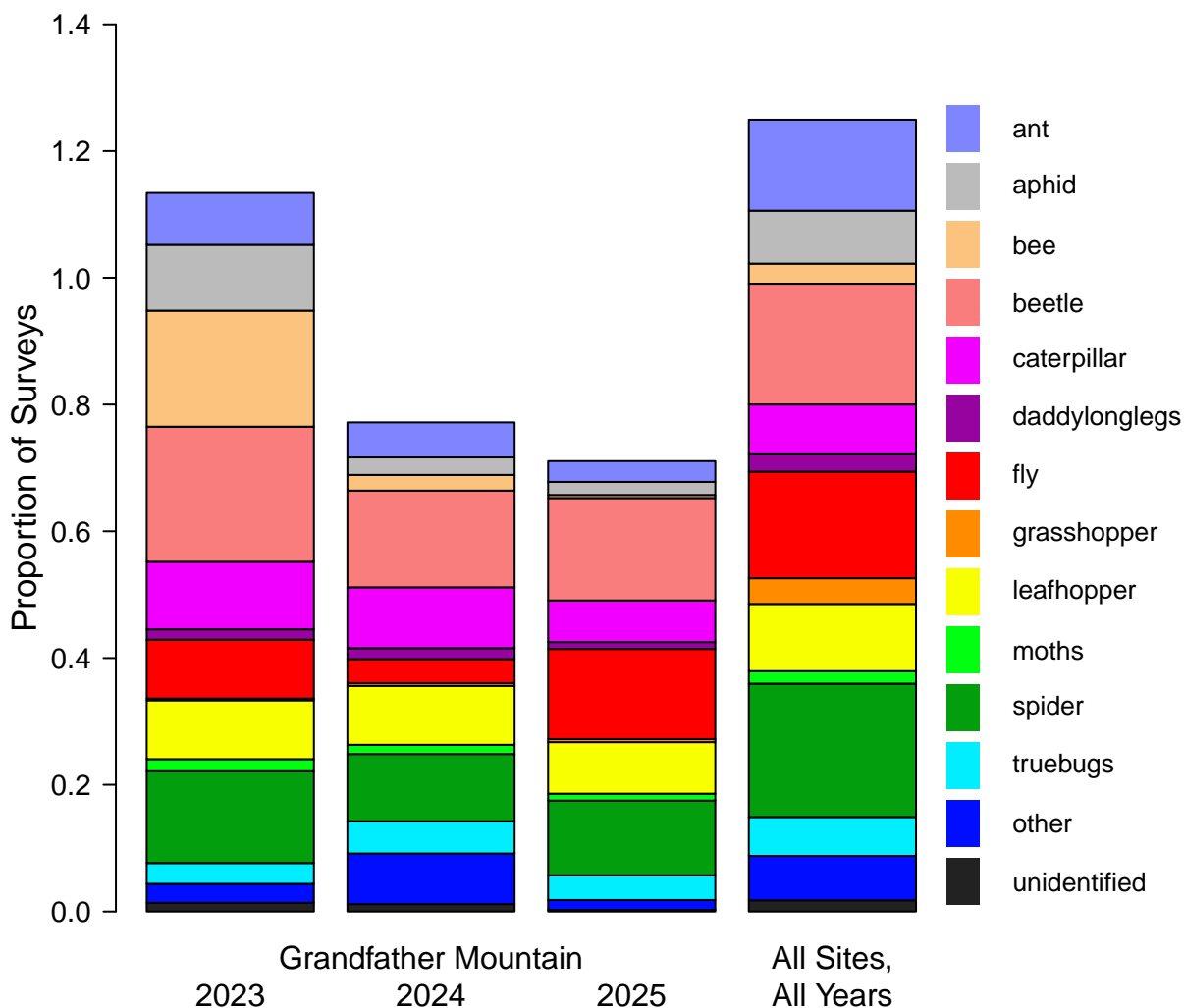


You can explore trends for more arthropod groups, and compare trends at different sites, on your site's **Trends Page**. See also our **November 2021 newsletter** for more on how to interpret these trends.

## Site Arthropod Composition

Some arthropods are more commonly encountered than others. The graph below portrays the occurrence (proportion of surveys where a given group was found) for each arthropod group found at your site. See how what was found varies by year (if the site has been participating for multiple years), and how it compares to what has been found across all sites in the **Caterpillars Count!** network (*right bar*).

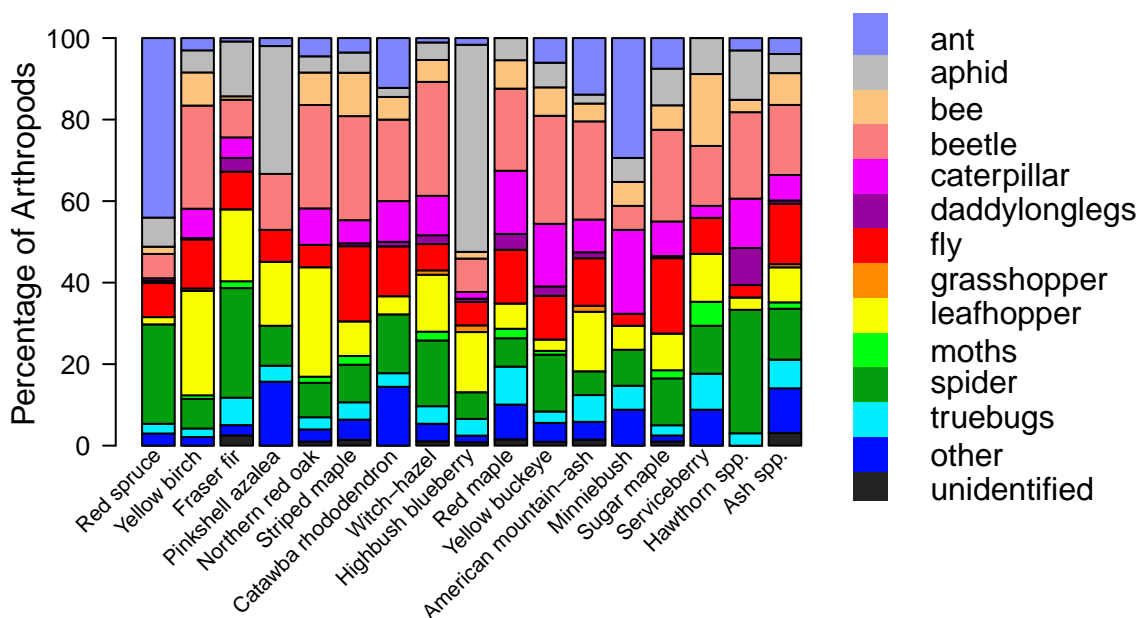
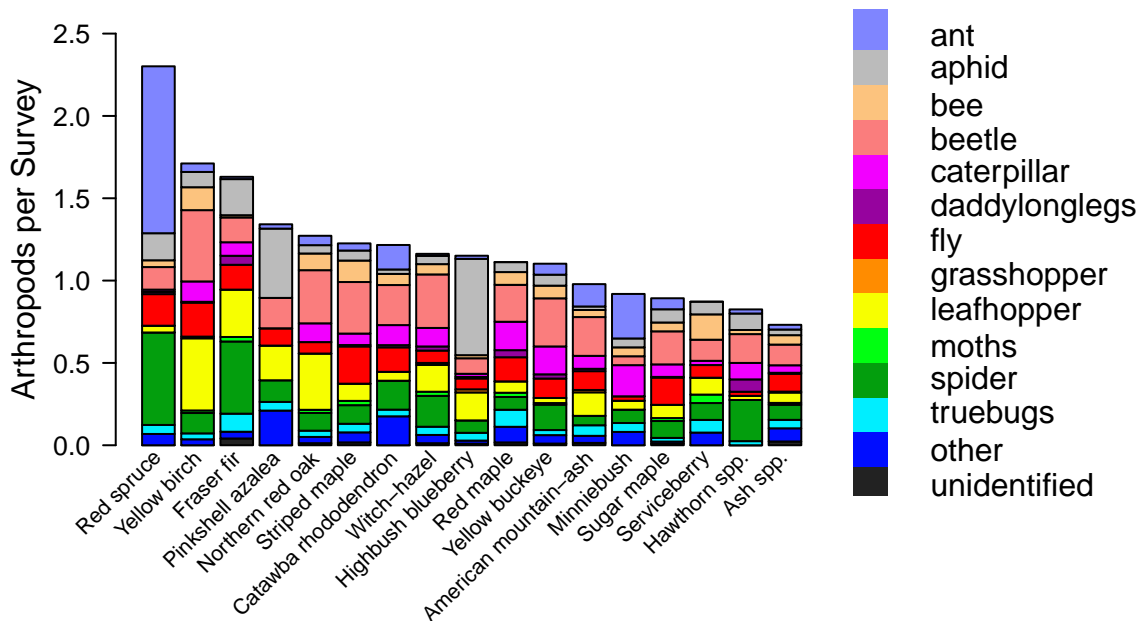
- What are the most common arthropod groups found at your site?
- Has that varied by year?
- Is anything noticeably different about **Grandfather Mountain** compared to all other participating sites?
- If arthropod photos were submitted as part of your site's surveys, check the last section of this report for a summary of any finer taxonomic id's that have been made.



## Arthropod Composition by Plant Species

For some arthropods like spiders, trees and leaves are merely habitat—a place where they live, hide, and hunt. For others like caterpillars, the leaves are not just habitat, but also food.

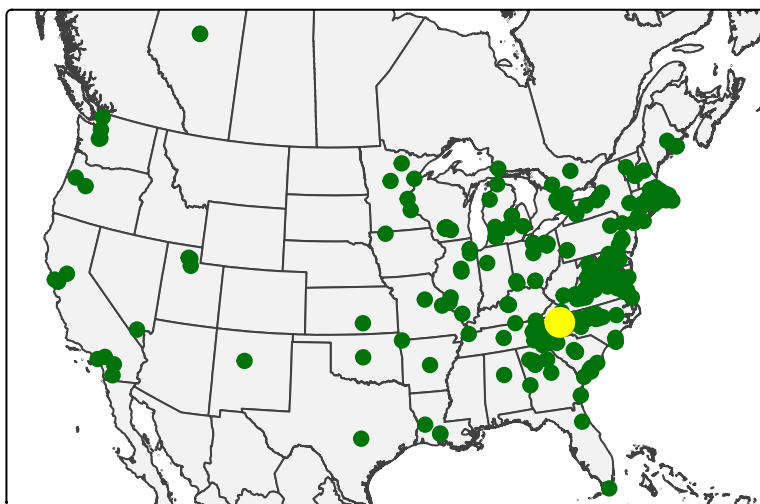
- Which plant species supports the most arthropods per survey?
- Which plant species supports the most **caterpillars**?
- Are any plant species dominated by just one or two types of arthropods?
- Or do they support a diversity of arthropod types?



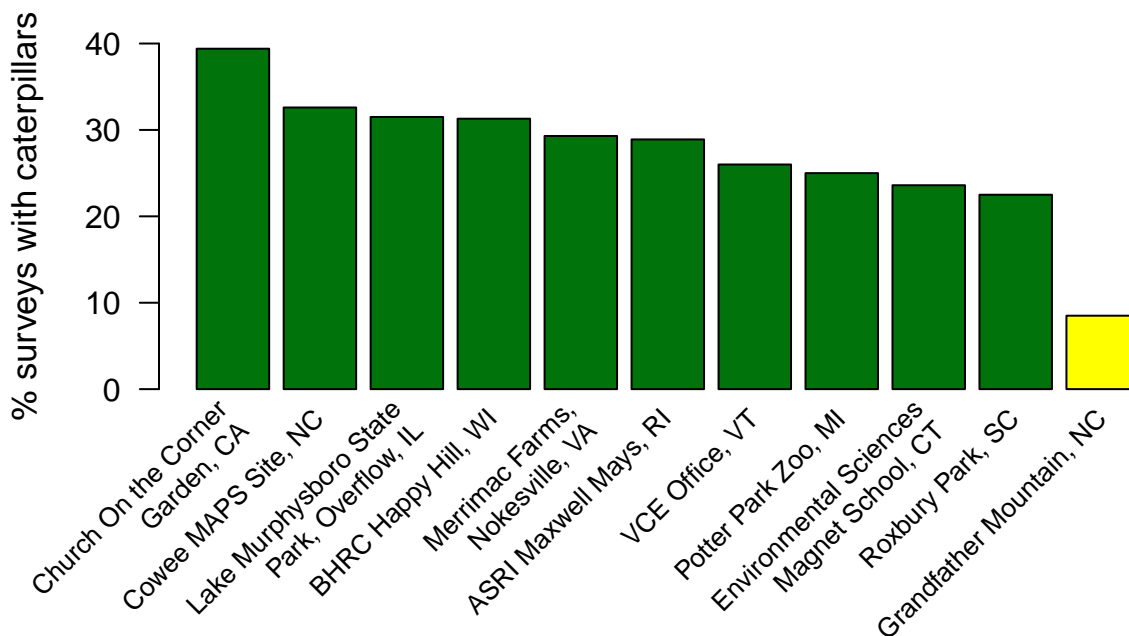
This bottom panel shows, of the arthropods found on a given plant species, what proportion were from each taxonomic group. At most, only the top 25 plant species are shown.

## Broader Patterns

Thanks to participants like yourself, **Caterpillars Count!** observers have now submitted a total of **358,184** arthropod observations—including **23,494 caterpillars**—from **274** different sites.



Across all surveys ever done at **Grandfather Mountain**, caterpillars have been found **8.5%** of the time, which ranks **71st** across the **204** sites with  $\geq 20$  surveys. The top 10 sites are shown for comparison.



Caterpillar occurrence and phenology vary as a function of climate, land cover, tree species, and other local factors, and **your data** are helping us understand this variation and what it might mean for birds. Thank you for participating in **Caterpillars Count!**

## Expert Identifications

Your site has submitted **778 Caterpillars Count!** photos which ranks **13rd** out of the **191** sites with photos. You can check them all out at the site's **iNaturalist page**. Based on these photos, experts on **iNaturalist** have identified the following taxa, including at least **33** unique species. Taxa seen for the first time this year are marked with a \*.

### Caterpillars

Erebidae

Zale sp.\*

Halysidota tessellaris

Lophocampa caryae\*

Geometridae\*

Noctuidae

Acronicta sp.\*

Notodontidae

Cecrita guttivitta

### Moths, Butterflies

Argyresthiidae

Argyresthia oreasella

Autostichidae

Taygete attributella

Blastobasidae

Blastobasis sp.\*

Geometridae

Tetracis cachexiata\*

### Spiders

Araneidae

Araneus pegnia

Cyclosa sp.

Neoscona sp.\*

Clubionidae

Clubiona sp.

Philodromidae

Philodromus sp.

Salticidae

Hentzia mitrata

Tetragnathidae

Tetragnatha sp.\*

Theridiidae

Theridion sp.

Thomisidae

Xysticus sp.

Misumessus oblongus

### True Bugs

Miridae

Pentatomidae

Banasa dimidiata

Chinavia hilaris\*

### Leafhoppers, Cicadas

Acanaloniidae

Acanalonia sp.\*

Aphrophoridae

Aphrophora quadrinotata

Philaenus spumarius

Cicadellidae

Oncopsis abietis

Scaphoideus sp.

Cixiidae

Clastopteridae

Clastoptera obtusa

Membracidae

Cyrtolobus sp.\*

Platycotis vittata

### Aphids, Scales

Aphididae\*

### Beetles

Cantharidae

Dichelotarsus sp.

Podabrus sp.

Rhagonycha sp.

Pacificanthia rotundicollis\*

Carabidae

Lebia fuscata

Cephaloidae

Cephaloon lepturides

Cerambycidae

Saperda candida

Chrysomelidae

Calligrapha sp.

Chrysomela scripta\*

Coccinellidae

Psyllobora vigintimaculata

Coleomegilla maculata\*

Harmonia axyridis

Curculionidae

Anthonomus sp.

Cyrtopistomus castaneus

Elateridae

Lampyridae

Photinus sp.

Lucidota atra\*

Ptilodactylidae

Pyrochroidae

Dendroides concolor

Scarabaeidae

Dichelonyx sp.

Popillia japonica

Scraptiidae

Tenebrionidae

### Bees, Wasps

Ichneumonidae

Choreutidae

### Ants

Formicidae

Formica fusca

### Flies

Bibionidae

Dilophus sp.

Dolichopodidae

Hybotidae

Platypalpus sp.

Rhagionidae

Rhagio punctipennis

Sciaridae

Tipulidae

### Other observations

Dermaptera

Forficula auricularia

Mecoptera

Panorpidae\*

Neuroptera

Chrysopidae\*

Psocodea

Graphopsocus cruciatus\*

Psocoptera

Mesopsocus unipunctatus



Thank you for participating in **Caterpillars Count!** For a more in-depth exploration of the data check out our **Maps & Graphs page**. The raw data from your site, or any site, can be downloaded **here!**

We can't wait to see what you find next year!



Spicebush swallowtail caterpillar, *Papilio troilus*, observed by *tem1691* on August 22, 2025 at **Lake Murphysboro State Park, Overflow**, Illinois.

**Allen Hurlbert**

Director

*Caterpillars Count!*

caterpillarscount@gmail.com