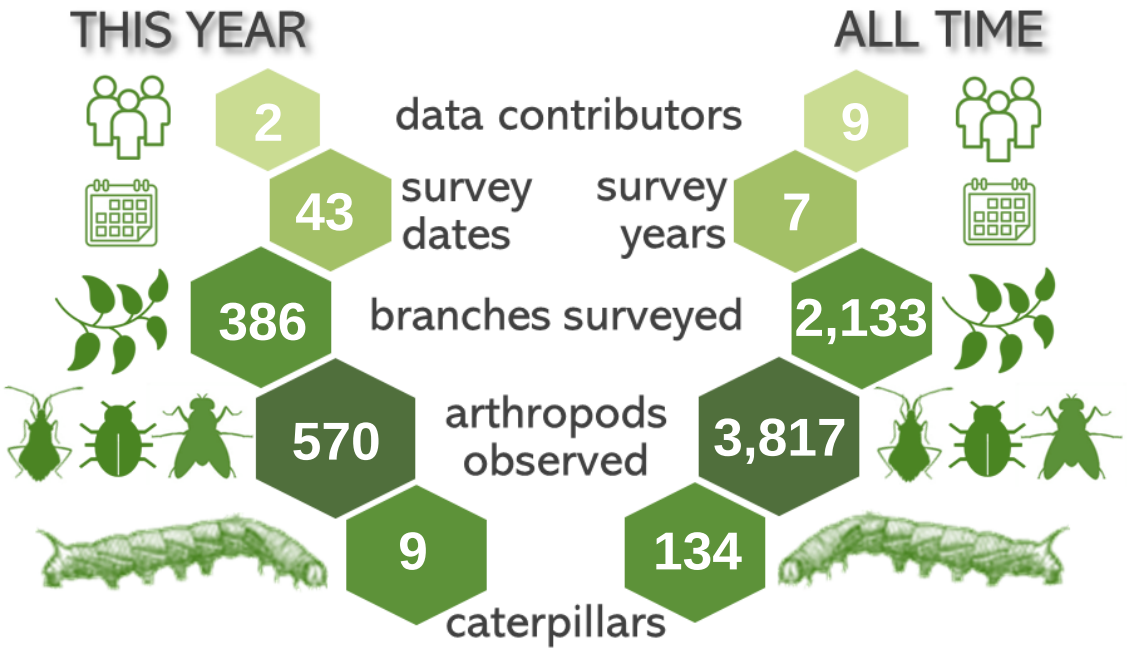
Walker Nature Center, 2024 Summary



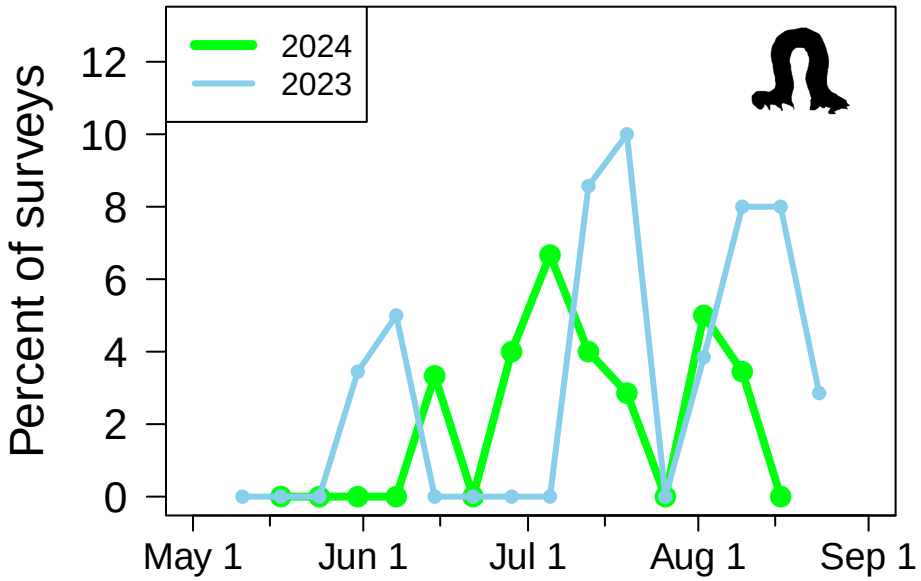
The **386** total surveys conducted at **Walker Nature Center** this year ranks **14th** out of the **78** sites that participated in 2024.

Top Participants of 2024

User	Surveys	Arthropods	Caterpillars	% Caterpillars
A Stocking	15	35	1	6.67
D CSB	371	535	8	1.89

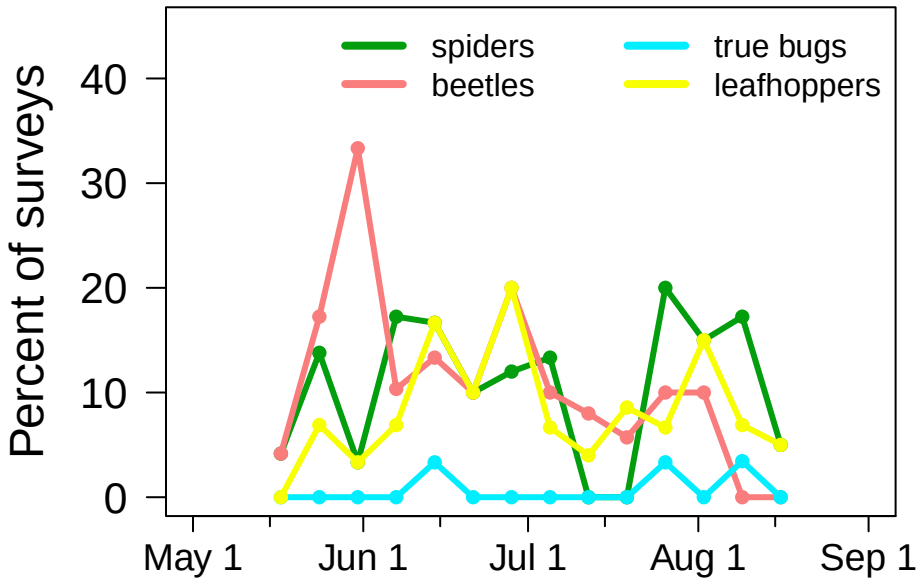
Caterpillar Phenology

As a major source of food for nestlings of migratory birds, we are especially interested in the timing of caterpillar availability. At **Walker Nature Center** in **2024**, caterpillar occurrence peaked at **6.7%** of surveys on **4 July**. Do you see other peaks as well? How does the pattern compare to the previous year?



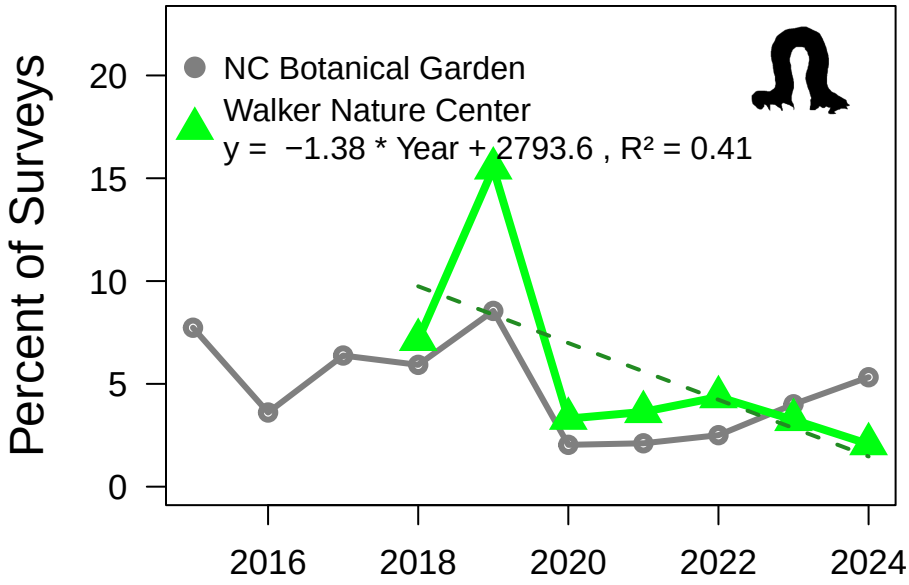
Other Arthropod Phenology

While caterpillars tend to have pronounced seasonal peaks, other groups are more variable. What patterns do you see below for **2024**? You can explore the phenology of other groups on the ***Caterpillars Count!*** **website**.



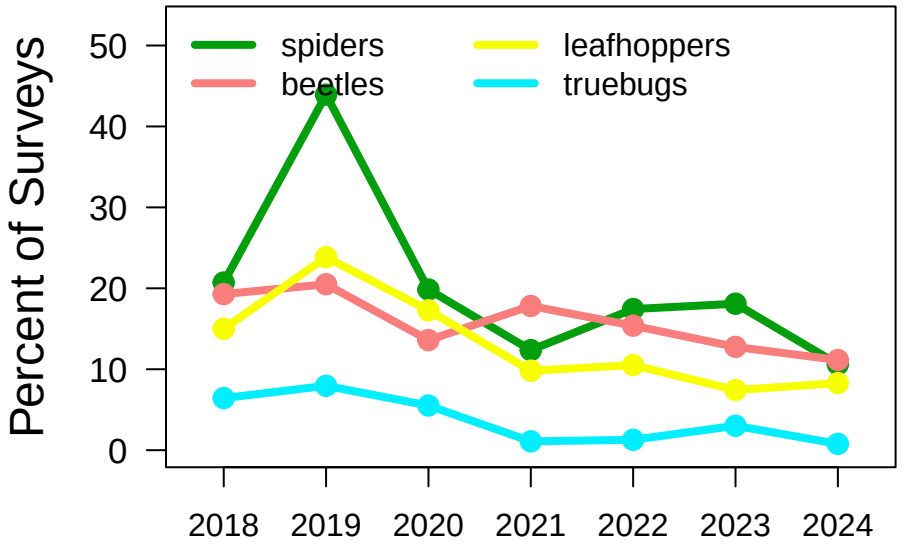
Arthropod Trends

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?

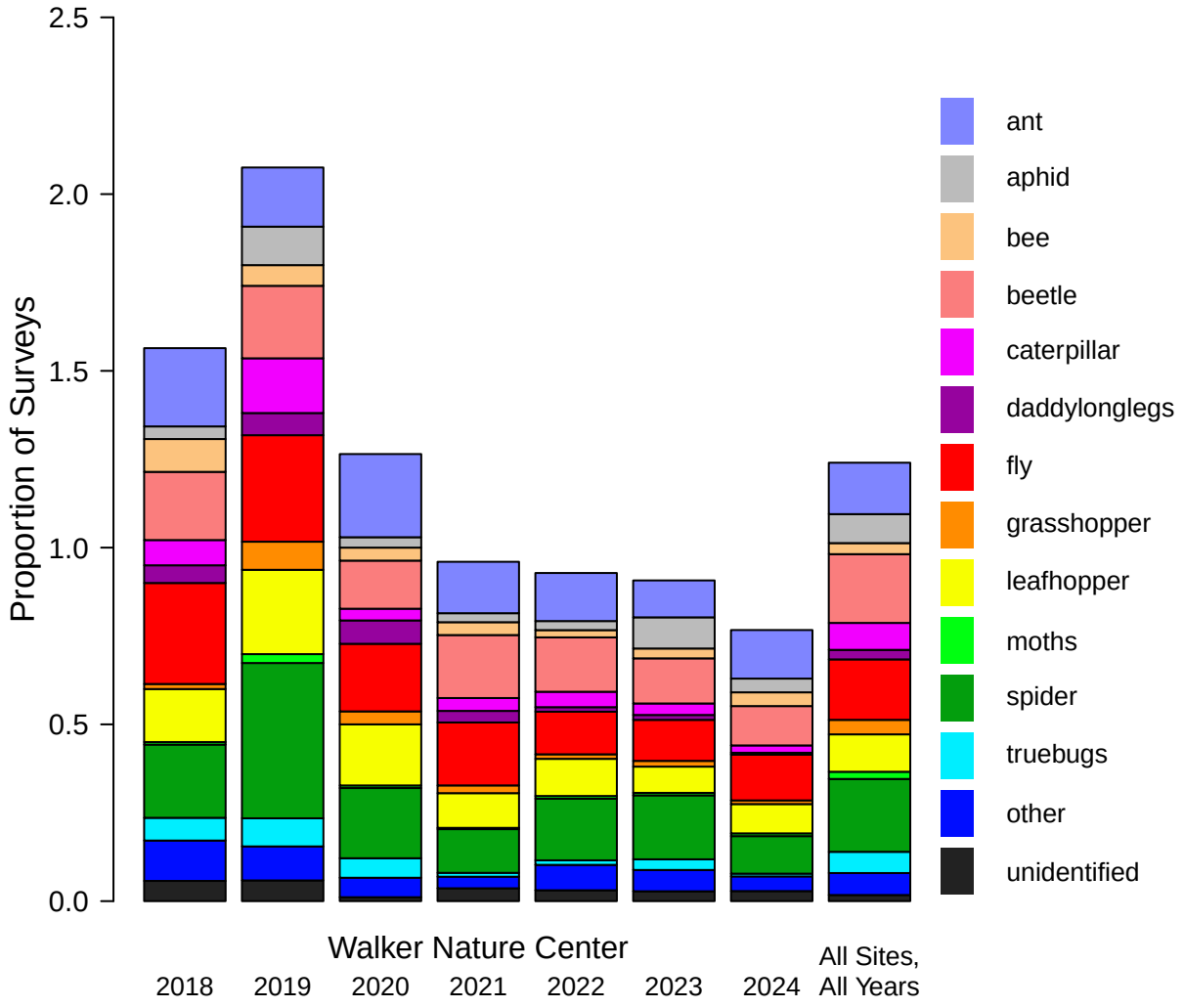


You can explore trends for more arthropod groups, and compare trends at different sites, on your site's **Trends Page**. See also our **November 2021 newsletter** for more on how to interpret these trends.

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*).

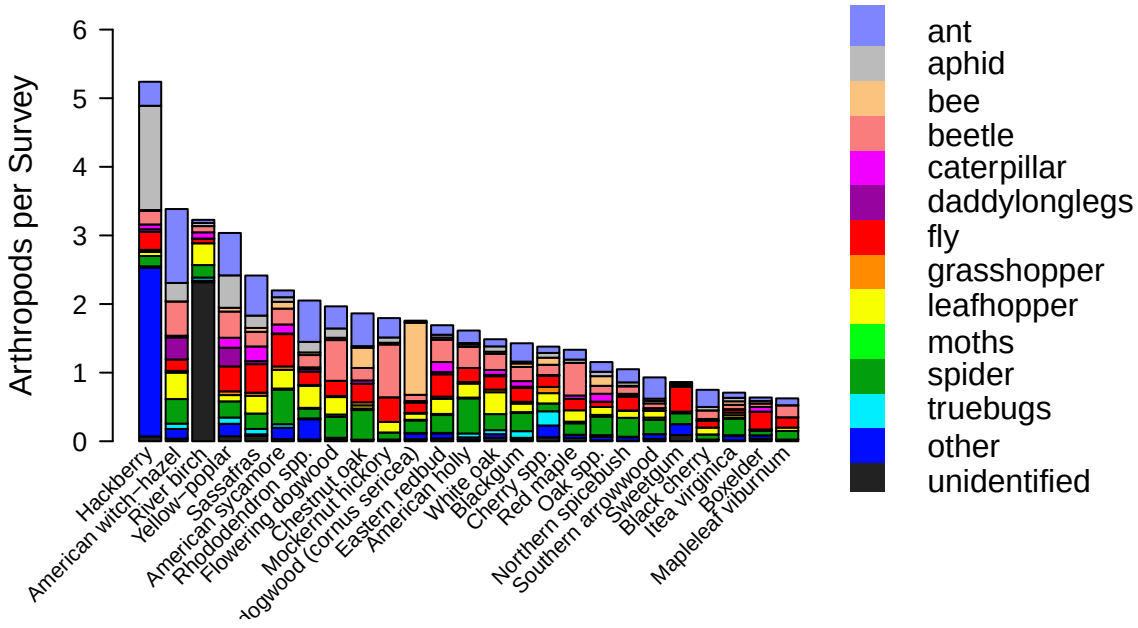
- What are the most common arthropod groups found at your site?
- Has that varied by year?
- Is anything noticeably different about **Walker Nature Center** compared to all other participating sites?
- If arthropod photos were submitted as part of your site's surveys, check the last section of this report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

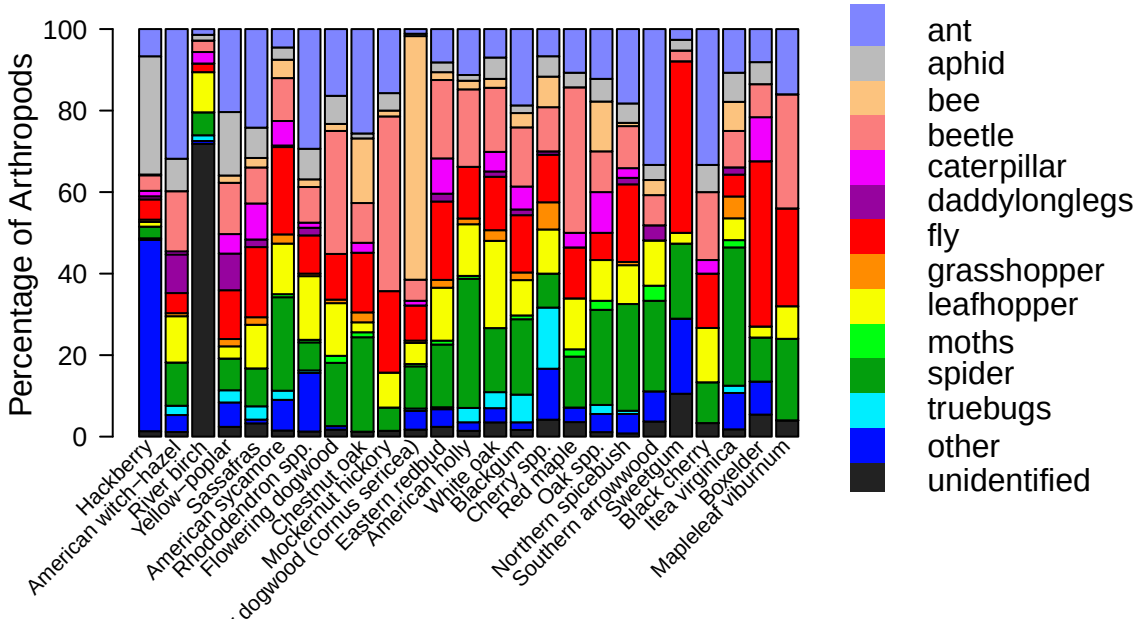


Arthropod Composition by Plant Species

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?

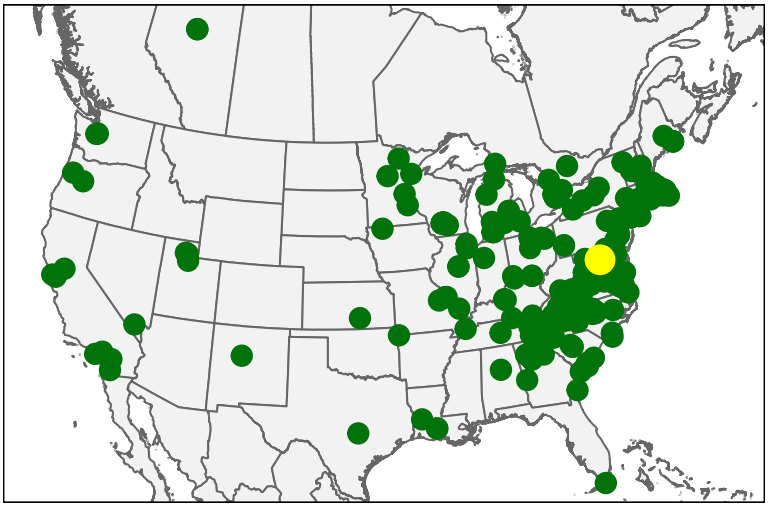




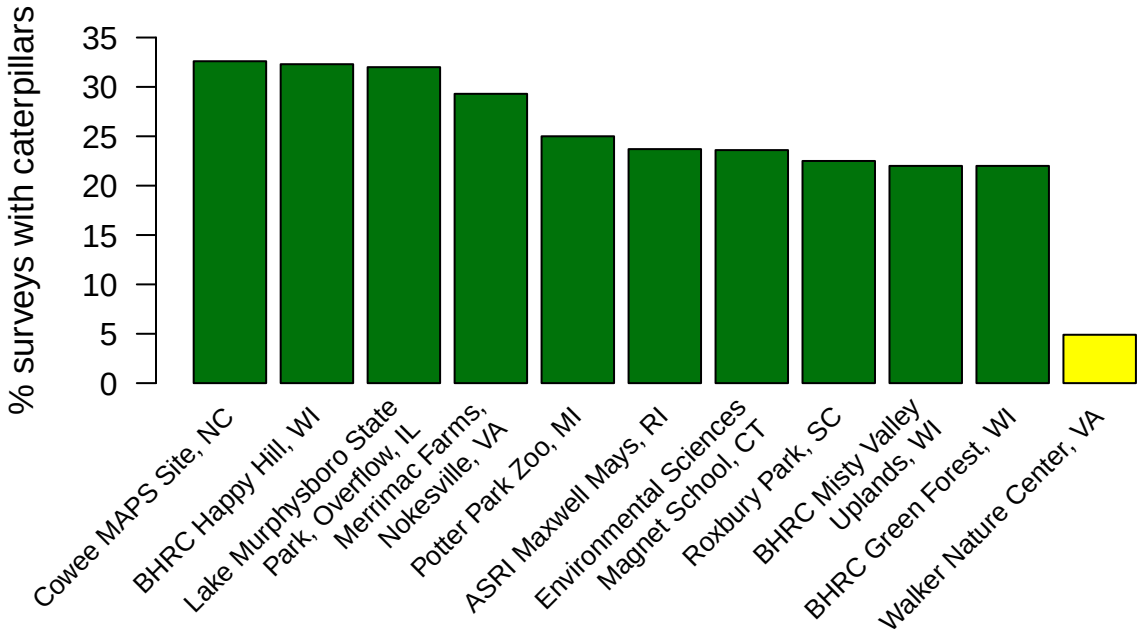
This bottom panel shows, of the arthropods found on a given plant species, what proportion were from each taxonomic group. At most, only the top 25 plant species are shown.

Broader Patterns

Thanks to participants like yourself, ***Caterpillars Count!*** observers have now submitted a total of **310,306** arthropod observations–including **20,843 caterpillars**–from **257** different sites.



Across all surveys ever done at **Walker Nature Center**, caterpillars have been found **4.9%** of the time, which ranks **103rd** across the **189** sites with ≥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

815 photo observations from ***Caterpillars Count!*** surveys have been submitted from your site which ranks **8th** out of the **177** sites with photos. You can check them all out at the site's **iNaturalist page**. Based on these photo observations, experts on **iNaturalist** have identified the following taxa, including at least **73** unique species. Taxa seen for the first time this year are marked with a *.

Caterpillars

Depressariidae
- Machimia tentoriferella

Erebidae
- Zale sp.
- Halysidota harrisii
- Halysidota tessellaris
- Hyphantria cunea
- Orgyia leucostigma

Geometridae
- Ennomos subsignaria

Noctuidae
- Acronicta americana
- Acronicta retardata

Notodontidae
- Misogada unicolor
- Nadata gibbosa

Nymphalidae
- Polygonia interrogationis

Saturniidae
- Anisota senatoria

Moths, Butterflies

Erebidae
- Halysidota harrisii*
- Halysidota tessellaris*

Limacodidae
- Euclea delphinii*

Spiders

Anyphaenidae
- Anyphaena sp.*
- Wulfila albens

Araneidae
- Mangora sp.
- Metepeira labyrinthea
- Araneus niveus
- Micrathena gracilis
- Micrathena mitrata
- Verrucosa arenata

Dictynidae

Philodromidae
- Philodromus marxi

Pisauridae
- Dolomedes sp.

Salticidae
- Colonus sp.
- Hentzia sp.
- Lyssomanes viridis

Tetragnathidae
- Leucauge venusta
- Tetragnatha sp.

Theridiidae
- Theridion sp.
- Spintharus flavidus

Thomisidae
- Misumessus oblongus
- Synema parvulum

Grasshoppers, Crickets

Oecanthidae
- Oecanthus niveus*
- Neoxabea bipunctata*

Trigonidiidae
- Anaxipha sp.

True Bugs

Coreidae

Miridae
- Hyaliodes harti

Nabidae
- Lasiomerus sp.

Reduviidae
- Pselliopus barberi
- Zelus luridus

Tingidae
- Corythucha sp.

Leafhoppers, Cicadas

Acanaloniidae
- Acanalonia conica

Cercopidae
- Prosapia bicincta

Cicadellidae
- Erythroneura bistrata
- Jikradia olitoria
- Paraulacizes irrorata

Cicadidae
- Magicicada septendecim

Cixiidae
- Haplaxius sp.

Derbidae
- Otiocerus wolfii

Flatidae
- Flatormenis proxima
- Metcalfa pruinosa
- Ormenoides venusta

Membracidae
- Enchenopa binotata
- Platycotis vittata

Mymaridae
- Enchenopa sp.

Aphids, Scales

Aphididae
- Shivaphis celti

Beetles

Anthicidae
- Macratria sp.

Buprestidae

Cantharidae
- Rhagonycha angulata

Coccinellidae
- Harmonia axyridis

Curculionidae
- Anthonomus sp.
- Cyrtepistomus castaneus

Elateridae
- Limonius sp.
- Megapenthes limbalis

Erotylidae
- Triplax sp.

Lampyridae
- Photuris sp.
- Photinus pyralis

Lycidae

Melandryidae
- Microtonus sericans*

Mordellidae
- Mordella marginata

Ptilodactylidae

Tenebrionidae

Bees, Wasps

Apidae
- Bombus sp.

Braconidae*

Ichneumonidae

Tenthredinidae
- Caliroa liturata
- Caliroa quercuscoccineae
- Macremphytus testaceus

Choreutidae*

Ants

Formicidae
- Formica fusca
- Camponotus castaneus
- Camponotus chromaiodes
- Camponotus subbarbatus
- Prenolepis imparis*
- Tapinoma sessile*
- Temnothorax curvispinosus*

Flies

Chironomidae

Culicidae
- Aedes triseriatus

Dolichopodidae
- Condylostylus caudatus

Lauxaniidae
- Homoneura sp.
- Minettia sp.
- Neogriphoneura sp.*

Micropezidae*

Pallopteridae
- Toxonevra superba

Rhagionidae
- Chrysopilus thoracicus

Syrphidae
- Eupeodes pomus
- Toxomerus geminatus

Tipulidae

Rhaphidophoridae

Other observations

Collembola
- Tomoceridae

Isopoda
- Philoscia muscorum

Neuroptera
- Chrysopidae
- Leucochrysa
- Micromus

Opiliones
- Leiobunum
- Leiobunum vittatum

Polydesmida
- Oxidus gracilis
- Paradoxosomatidae*

Psocodea
- Polypsocus corruptus*

Stylommatophora
- Arion

Trichoptera
- Mystacides sepulchralis

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!

Maple dagger caterpillar, *Acronicta retardata*, observed by *margiemcchemp* on July 2, 2024 at **ASRI Fort**, Rhode Island.

Allen Hurlbert
Director
Caterpillars Count!
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