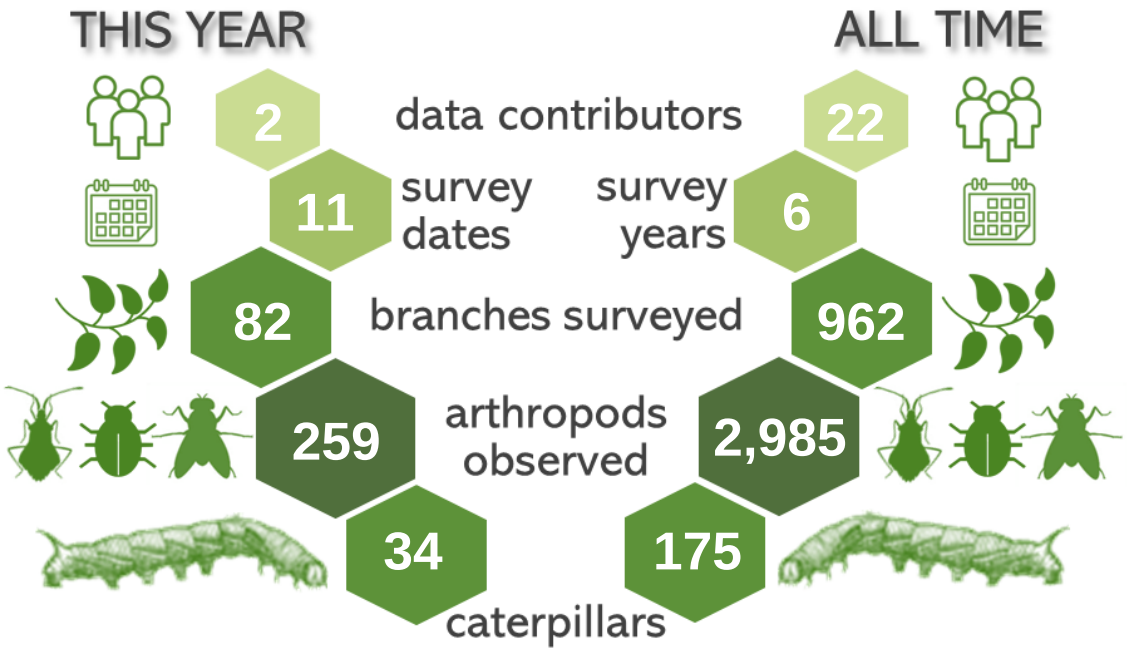
EwA at Fresh Pond, 2024 Summary



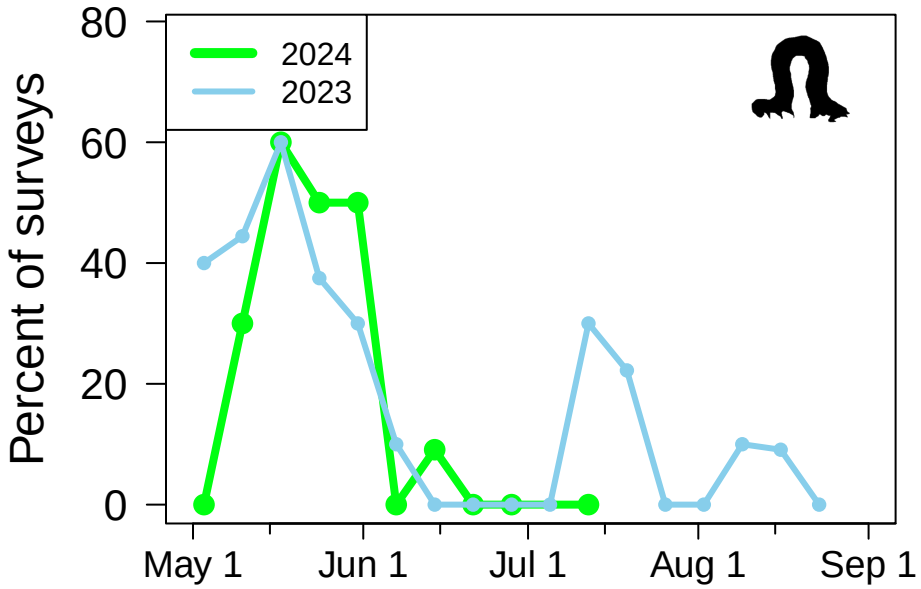
The **82** total surveys conducted at **EwA at Fresh Pond** this year ranks **55th** out of the **78** sites that participated in 2024.

Top Participants of 2024

User	Surveys	Arthropods	Caterpillars	% Caterpillars
K Estrop	18	78	6	27.78
C O'NEILL	64	181	28	21.88

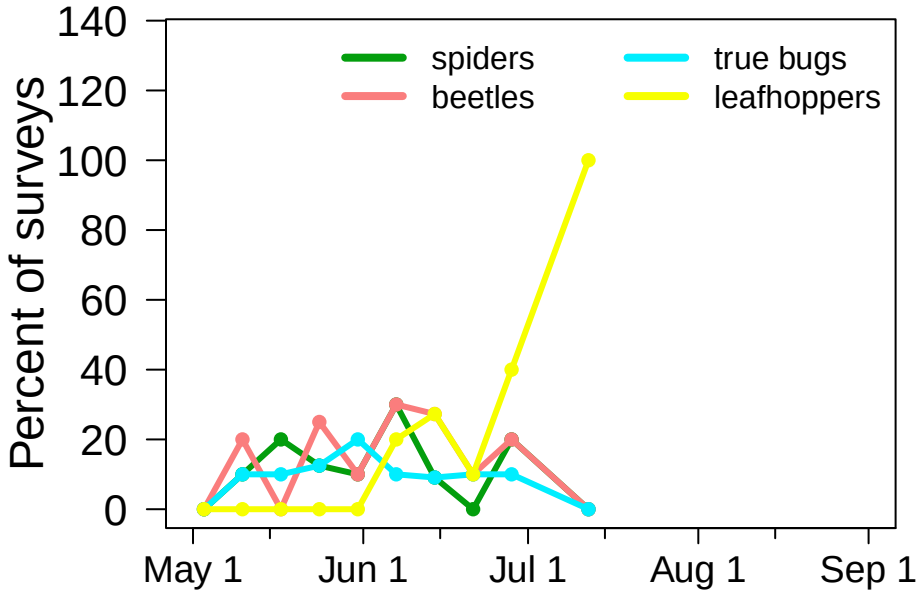
Caterpillar Phenology

As a major source of food for nestlings of migratory birds, we are especially interested in the timing of caterpillar availability. At **EwA at Fresh Pond** in **2024**, caterpillar occurrence peaked at **60%** of surveys on **16 May**. Do you see other peaks as well? How does the pattern compare to the previous year?



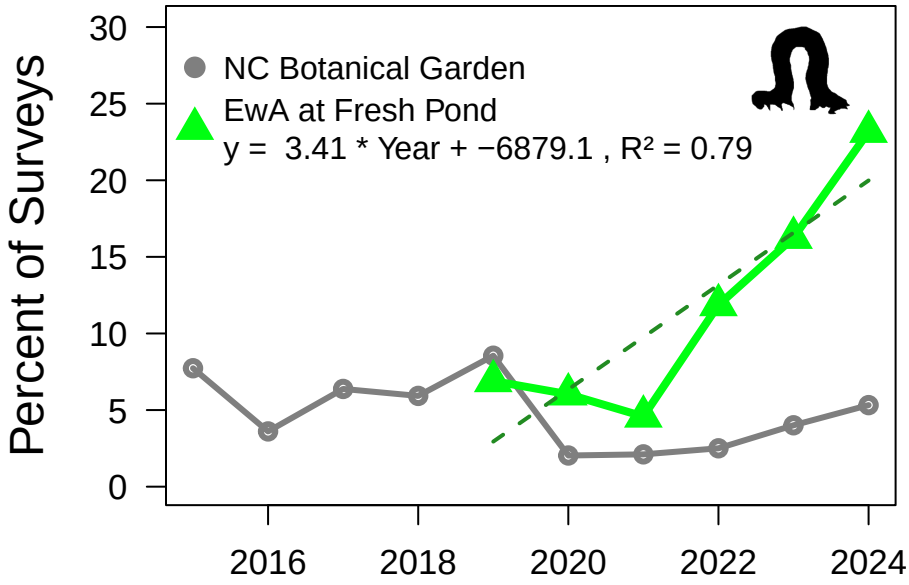
Other Arthropod Phenology

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**.



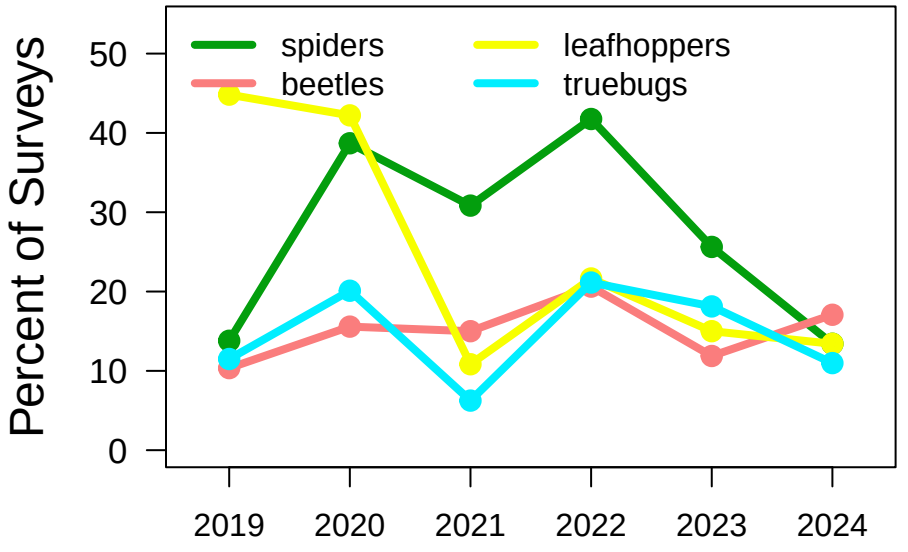
Arthropod Trends

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?

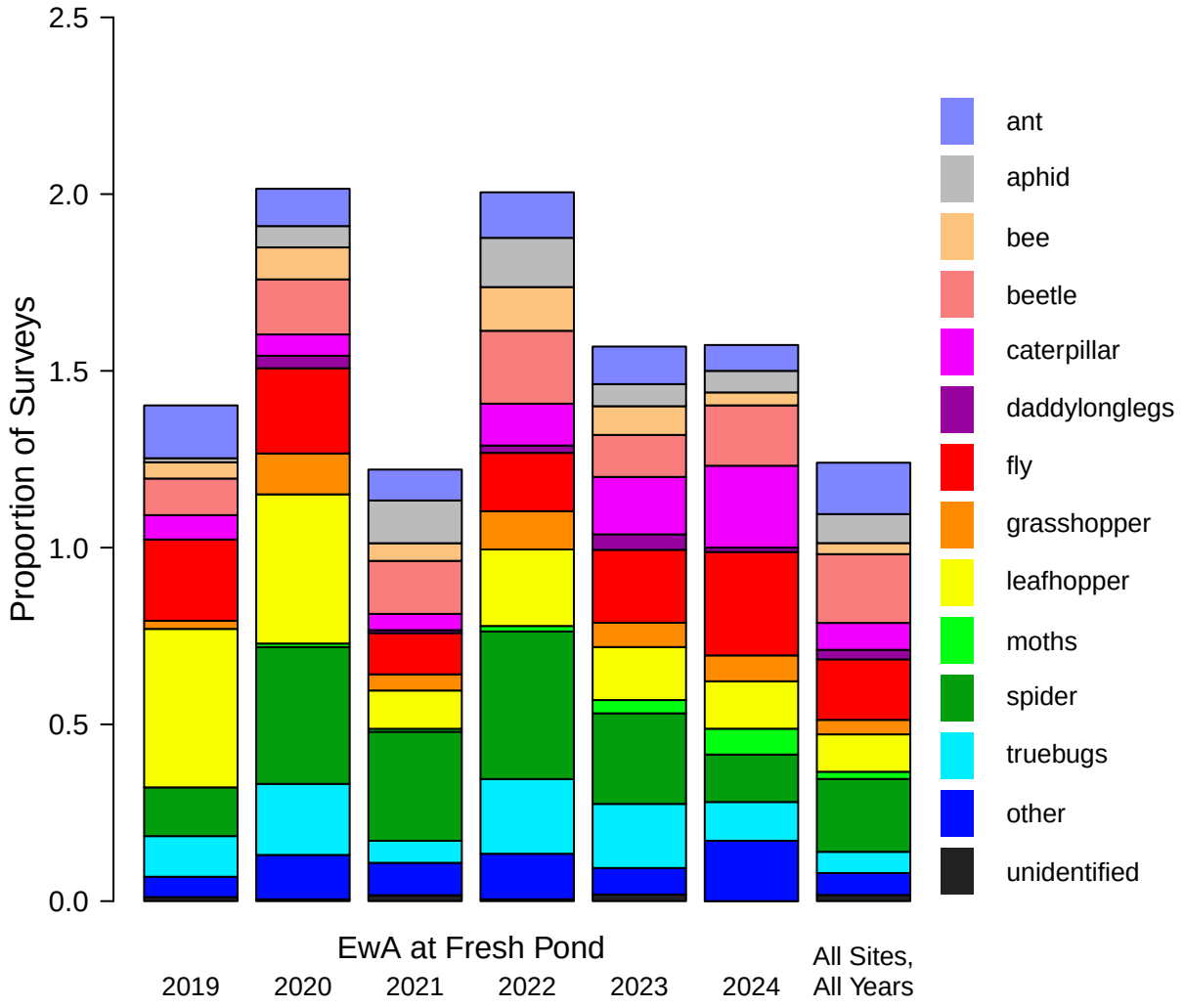


You can explore trends for more arthropod groups, and compare trends at different sites, on your site's **Trends Page**. See also our **November 2021 newsletter** for more on how to interpret these trends.

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*).

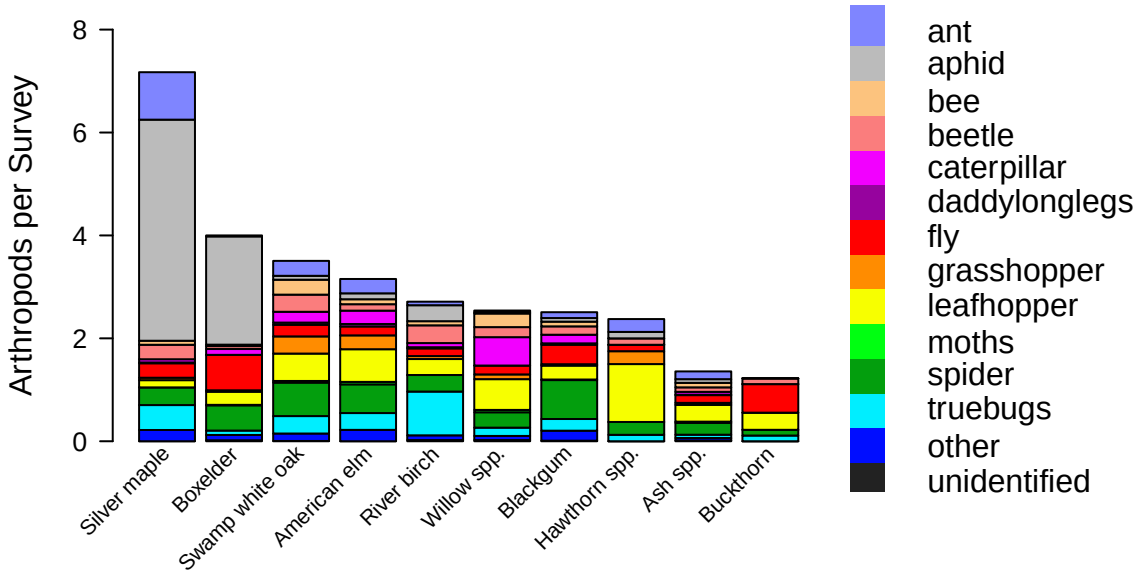
- What are the most common arthropod groups found at your site?
- Has that varied by year?
- Is anything noticeably different about **EwA at Fresh Pond** compared to all other participating sites?
- If arthropod photos were submitted as part of your site's surveys, check the last section of this report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

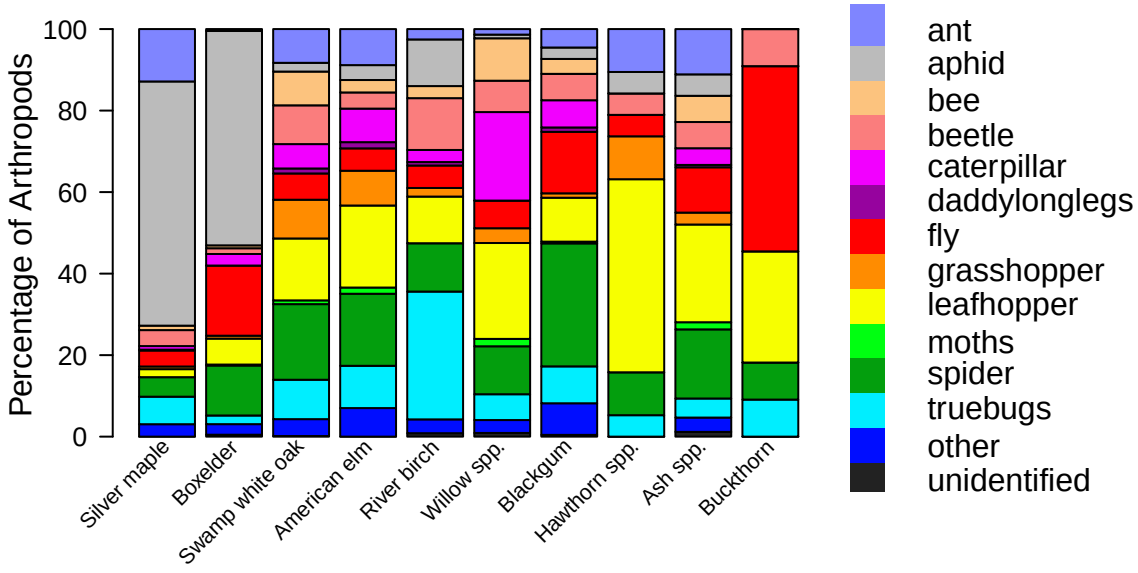


Arthropod Composition by Plant Species

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?

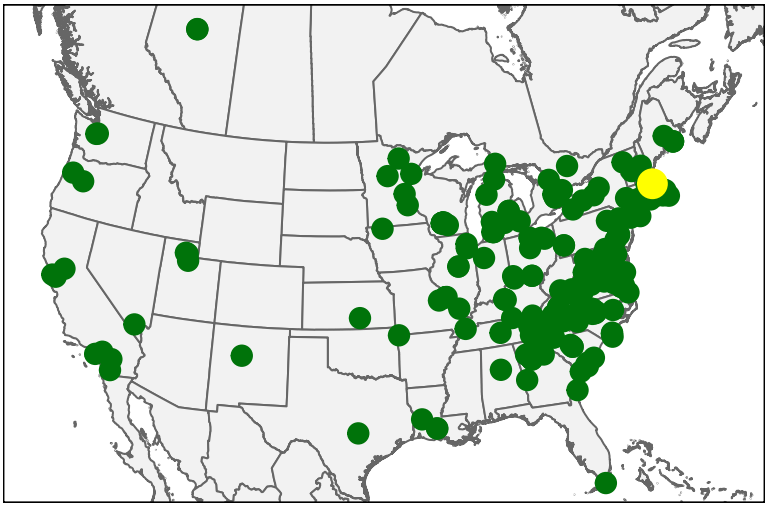




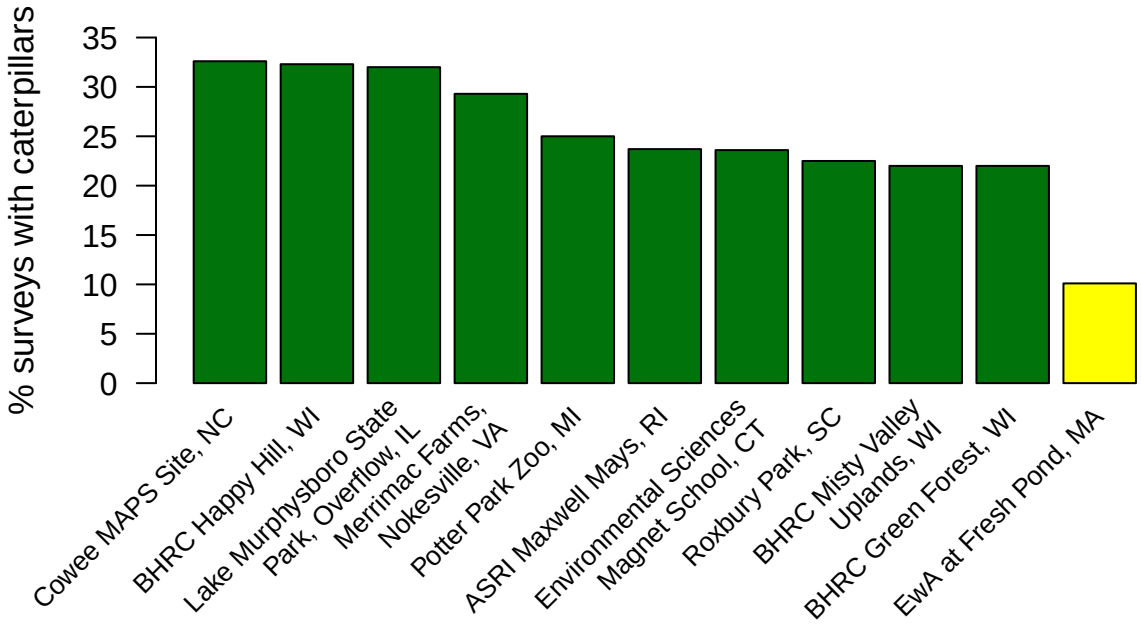
This bottom panel shows, of the arthropods found on a given plant species, what proportion were from each taxonomic group. At most, only the top 25 plant species are shown.

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 **EwA at Fresh Pond**, caterpillars have been found **10.1%** of the time, which ranks **47th** 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

1,436 photo observations from ***Caterpillars Count!*** surveys have been submitted from your site which ranks **4th** 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 **80** unique species. Taxa seen for the first time this year are marked with a *.

Caterpillars

Bucculatricidae
- Bucculatrix sp.

Depressariidae
- Machimia tentoriferella

Erebidae
- Dasychira sp.
- Halysidota tessellaris

Gelechiidae

Geometridae*

Noctuidae
- Acronicta americana
- Amphipyra pyramidoides
- Morrisonia confusa

Notodontidae
- Nerice bidentata

Sphingidae
- Paonias excaecata

Moths, Butterflies

Argyresthiidae
- Argyresthia oreasella

Gracillariidae
- Caloptilia sp.

Hesperiidae

Tortricidae
- Acleris semipurpurana*
- Argyrotaenia quercifoliana*
- Hedya nubiferana

Spiders

Anyphaenidae
- Anyphaena sp.

Araneidae
- Eustala sp.
- Araniella displicata
- Neoscona crucifera

Clubionidae
- Clubiona sp.

Dictynidae

Lycosidae*

Philodromidae
- Philodromus rufus

Salticidae
- Eris sp.
- Hentzia mitrata
- Synemosyna formica
- Maevia inclemens

Tetragnathidae
- Tetragnatha sp.
- Leucauge venusta

Theridiidae
- Theridion sp.
- Theridula emertoni
- Enoplognatha ovata

Thomisidae
- Misumena vatia
- Misumessus oblongus

Uloboridae
- Hyptiotes cavatus

Grasshoppers, Crickets

Gryllidae
- Hapithus saltator
- Oecanthus fultoni

Oecanthidae
- Oecanthus niveus
- Neoxabea bipunctata

Tettigoniidae
- Meconema thalassinum

Trigonidiidae
- Anaxipha sp.
- Phyllopalpus pulchellus

True Bugs

Coreidae

Lygaeidae
- Kleidocerys sp.
- Lygaeus turcicus

Miridae
- Hyaliodes harti
- Neurocolpus sp.
- Plagiognathus sp.

Nabidae
- Lasiomerus annulatus

Pentatomidae

Phymatidae
- Phymata sp.

Reduviidae

Tingidae
- Stephanitis takeyai

Leafhoppers, Cicadas

Acanaloniidae
- Acanalonia conica

Aphrophoridae
- Philaenus spumarius

Cicadellidae
- Agallia sp.
- Alebra sp.
- Eratoneura sp.
- Idiocerus sp.
- Jikradia olitoria
- Macropsis sp.
- Oncopsis sp.
- Populicerus sp.
- Scaphoideus sp.
- Colladonus clitellarius
- Graphocephala coccinea
- Graphocephala fennahi
- Graphocephala versuta
- Orientus ishidae

Derbidae
- Cedusa sp.
- Omolicna uhleri

Flatidae
- Flatormenis proxima

- Metcalfa pruinosa
- Ormenoides venusta

Issidae

Membracidae
- Cyrtolobus sp.
- Entylia carinata
- Microcentrus perditus

Aphids, Scales

Aphididae

Beetles

Anobiidae
- Ptilinus sp.

Chrysomelidae
- Acalymma vittatum
- Helocassis clavata

Coccinellidae
- Harmonia axyridis
- Hyperaspis sp.
- Brachiacantha decempustulata
- Brachiacantha ursina
- Cryptolaemus montrouzieri
- Propylea quatuordecimpunctata
- Psyllobora vigintimaculata

Curculionidae
- Conotrachelus anaglypticus
- Cyrtepistomus castaneus
- Polydrusus formosus

Elateridae

Erirhinidae
- Dorytomus sp.

Erotylidae
- Triplax sp.

Lampyridae
- Ellychnia corrusca*

Lycidae
- Calopteron reticulatum

Mordellidae
- Falsomordellistena bihamata
- Mordellina pustulata

Pyrochroidae
- Pedilus sp.

Scirtidae
- Scirtes orbiculatus

Bees, Wasps

Crabronidae

Cynipidae

Encyrtidae

Gasteruptiidae
- Gasteruption sp.

Halictidae

Torymidae

Vespidae
- Vespula flavopilosa

Ants

Formicidae
- Temnothorax schaumii
- Temnothorax curvispinosus
- Camponotus nearcticus
- Camponotus pennsylvanicus
- Myrmica rubra
- Lasius americanus
- Nylanderia flavipes
- Tapinoma sessile
- Tetramorium immigrans

Flies

Asilidae
- Ommatius sp.

Chironomidae
- Cricotopus sp.
- Microtendipes sp.
- Polypedilum sp.
- Stenochironomus cinctus
- Stictochironomus sp.*
- Tanytarsus sp.

Chloropidae

Culicidae

Dolichopodidae
- Condylostylus comatus

Lauxaniidae
- Homoneura sp.

Micropezidae
- Compsobata univitta

Mycetophilidae

Otitidae
- Delphinia picta

Syrphidae
- Allograpta sp.

Other observations

Blattodea
- Ectobius pallidus
- Ectobius

Ephemeroptera
- Hexagenia

Neuroptera
- Chrysopidae
- Chrysopini
- Coniopterygidae
- Micromus

Psocodea
- Graphopsocus cruciatus

Trichoptera
- Leptoceridae
- Mystacides
- Mystacides sepulchralis
- Triaenodes

Trombidiformes
- Anystis

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!
caterpillarscount@gmail.com