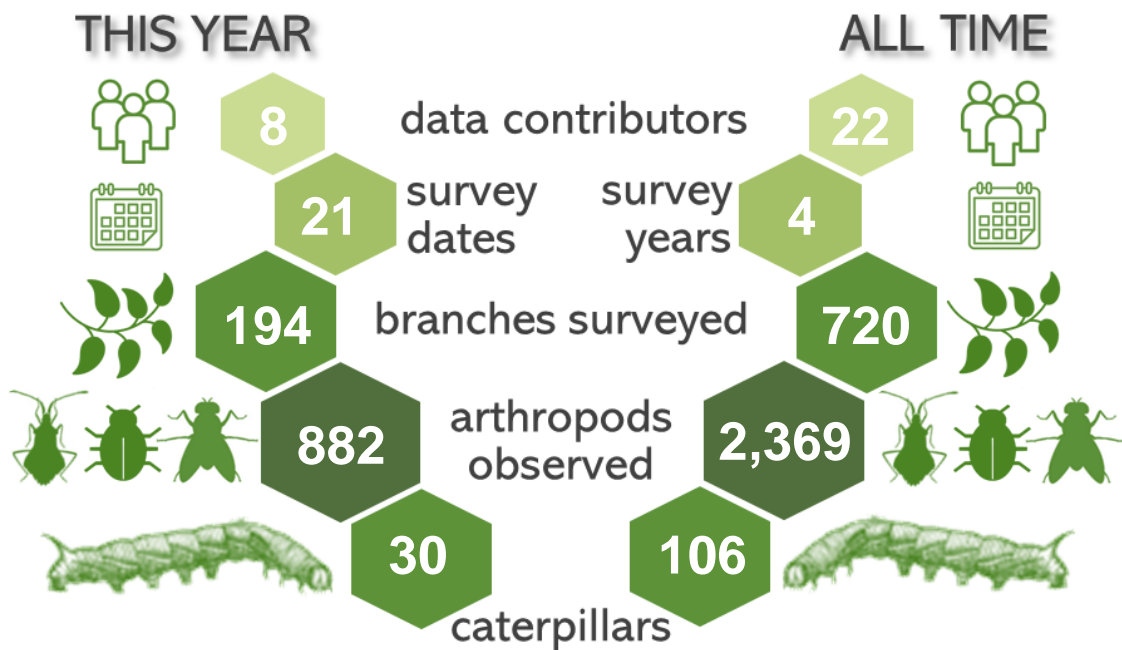




EWA at Fresh Pond, 2022 Summary



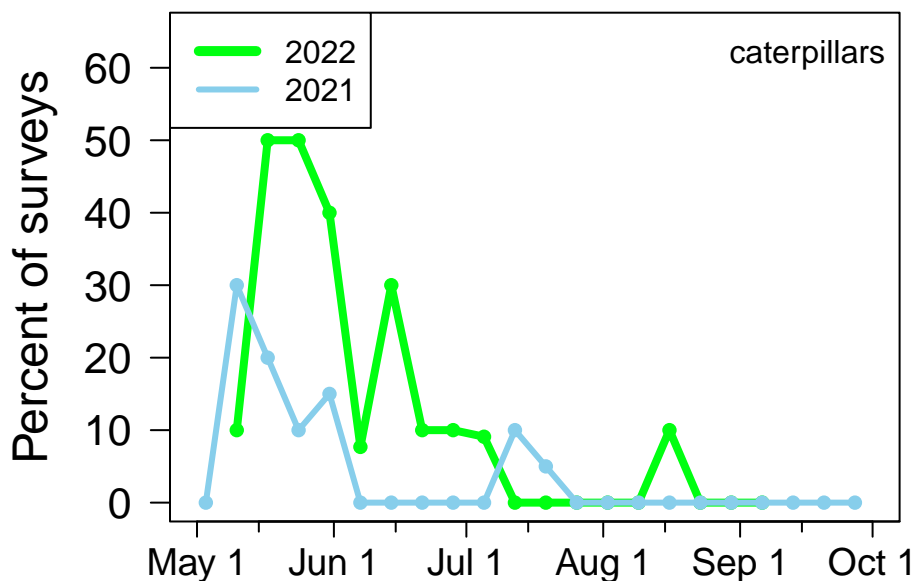
The **194** total surveys conducted at **EWA at Fresh Pond** this year ranks **36th** out of the **70** sites that participated in 2022.

Top Participants of 2022

User	Surveys	Arthropods	Caterpillars	% Caterpillars
C O'NEILL	89	451	25	20.22
J D’Amore	40	214	5	12.50
J Lee	10	29	0	0.00
J Moll-Rocek	2	2	0	0.00
K Estrop	16	37	0	0.00
M Rocek	2	2	0	0.00
S Gardner	34	147	0	0.00
U Moll	1	0	0	0.00

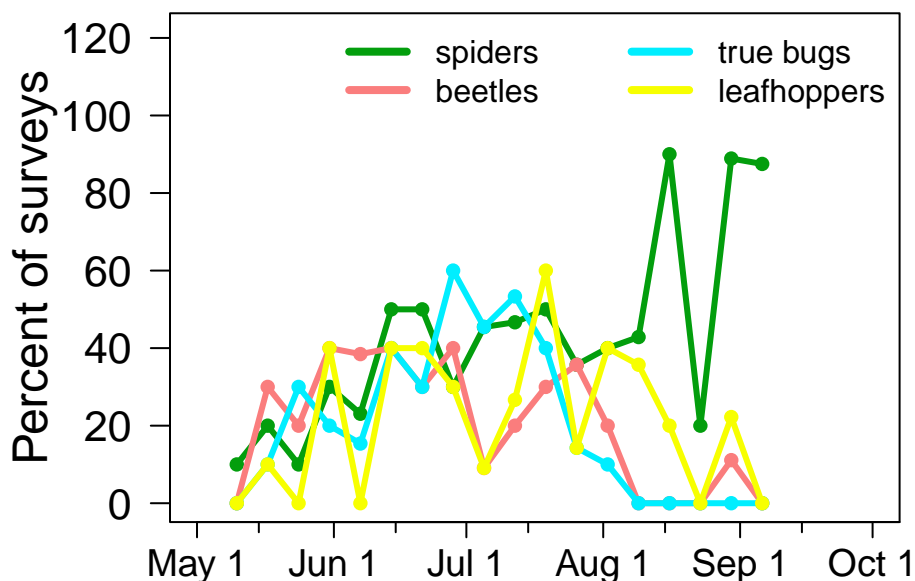
Caterpillar Phenology

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 **2022**, caterpillar occurrence peaked at **50%** of surveys on **17 May**. Do you see other peaks as well? How does the pattern compare to the previous year?



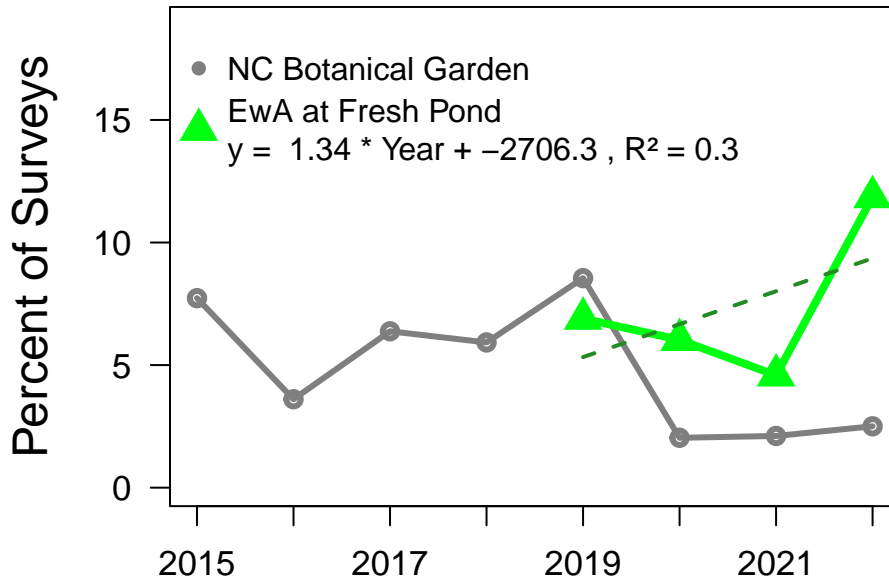
Other Arthropod Phenology

While caterpillars tend to have pronounced seasonal peaks, other groups are more variable. What patterns do you see below for **2022**? You can explore the phenology of other groups on the [Caterpillars Count! website](#).



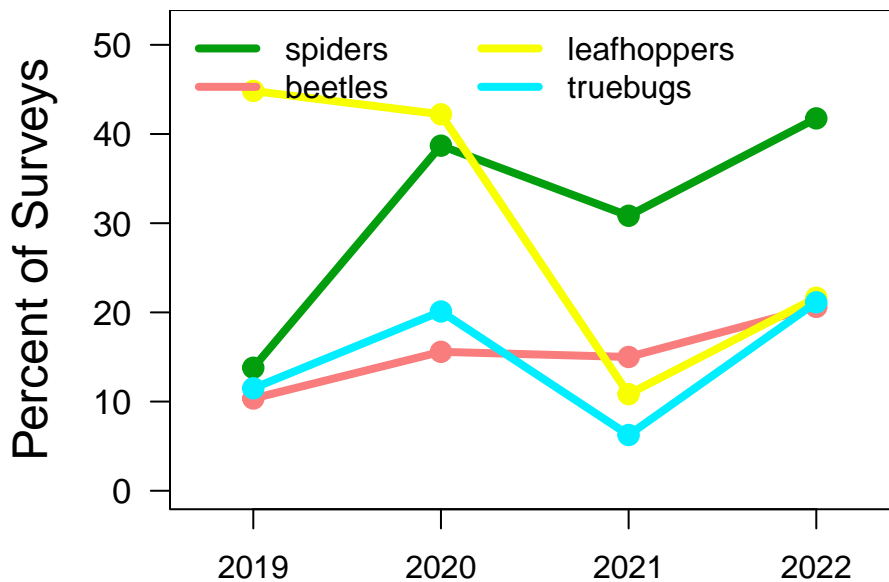
Arthropod Trends

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?

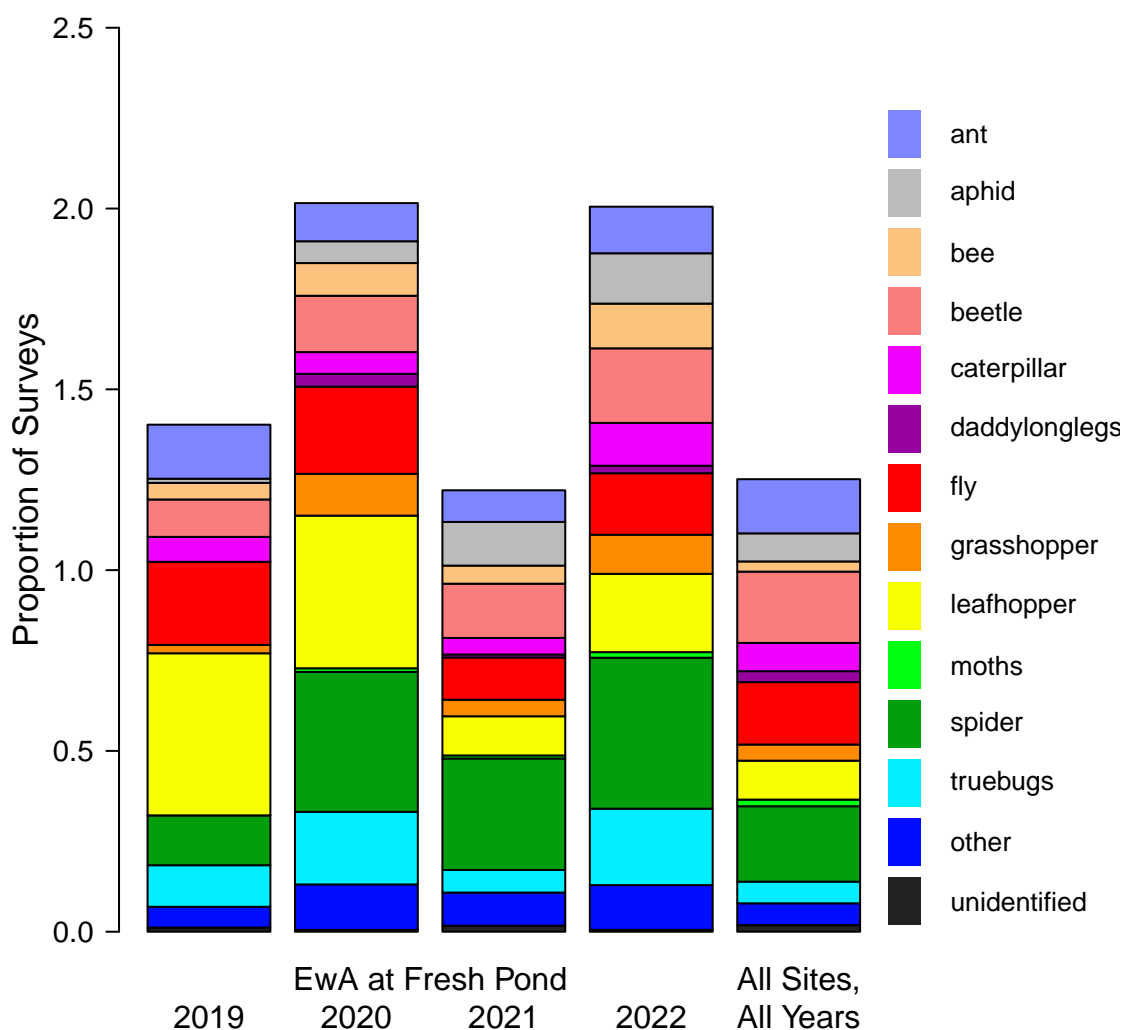


You can explore trends for more arthropod groups, and compare trends at different sites, on your site's [Trends Page](#). See also our [November 2021 newsletter](#) for more on how to interpret these trends.

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*).

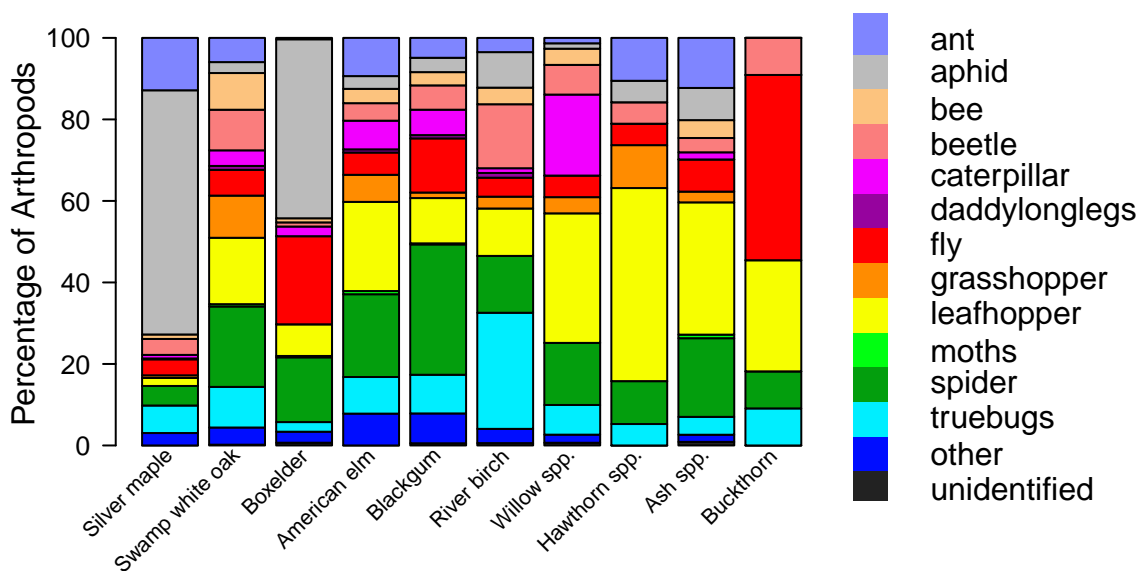
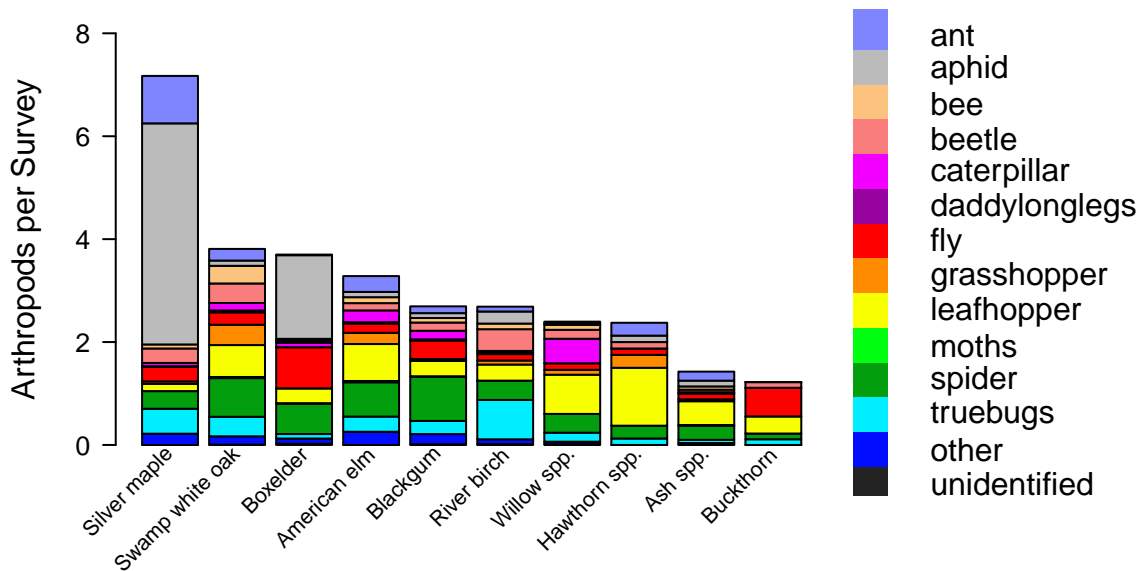
- What are the most common arthropod groups found at your site?
- Has that varied by year?
- Is anything noticeably different about **EwA at Fresh Pond** compared to all other participating sites?
- If arthropod photos were submitted as part of your site's surveys, check the last section of this report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

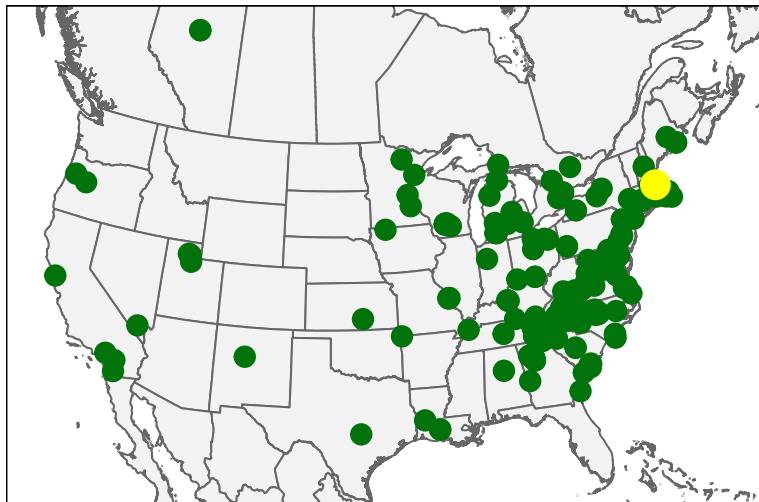
- Which plant species supports the most arthropods per survey?
- Which plant species supports the most **caterpillars**?
- Are any plant species dominated by just one or two types of arthropods?
- Or do they support a diversity of arthropod types?



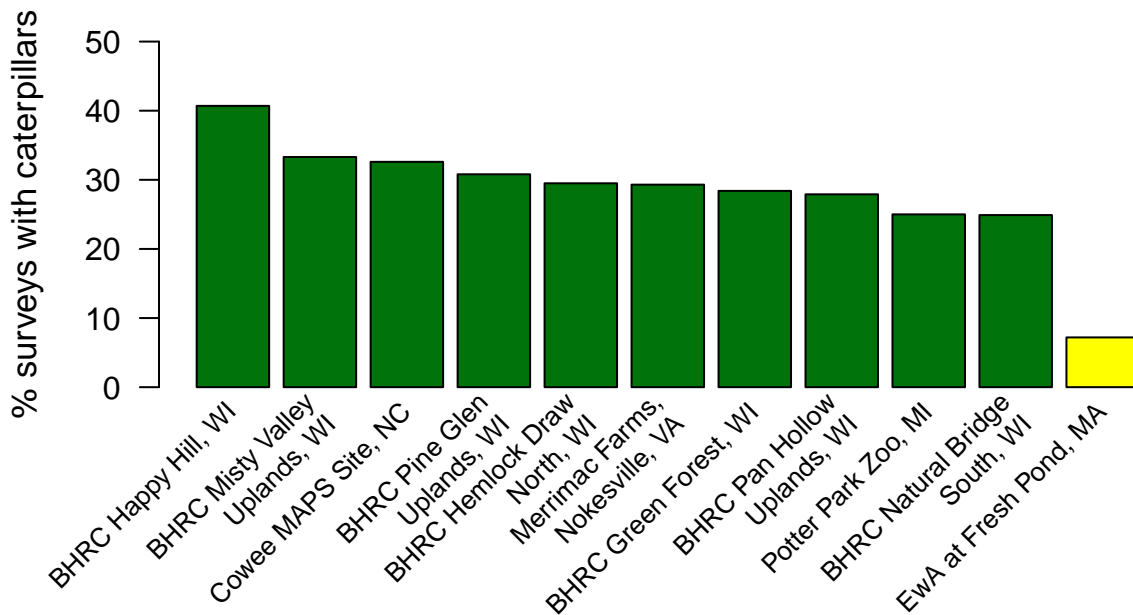
This bottom panel shows, of the arthropods found on a given plant species, what proportion were from each taxonomic group. At most, only the top 25 plant species are shown.

Broader Patterns

Thanks to participants like yourself, **Caterpillars Count!** observers have now submitted a total of **220,722** arthropod observations—including **16,838 caterpillars**—from **185** different sites.



Across all surveys ever done at **EwA at Fresh Pond**, caterpillars have been found **7.2%** of the time, which ranks **55th** across sites. The top 10 sites (with ≥ 20 surveys) are shown below.



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

1174 photo observations from **Caterpillars Count!** surveys have been submitted from your site. 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 **60** unique species. Taxa seen for the first time this year are marked with a *.

Caterpillars

Erebidae

- Dasychira sp.
- Halysidota tessellaris

Gelechiidae

Noctuidae

- Acronicta americana

Notodontidae

- Nerice bidentata*

Moths, Butterflies

Argyresthiidae

- Argyresthia oreasella*

Hesperiidae*

Tortricidae

- Hedya nubiferana

Spiders

Anyphaenidae

- Anyphaena sp.

Araneidae

- Eustala sp.
- Araniella displicata
- Neoscona crucifera

Cheiracanthiidae

- Cheiracanthium mildei*

Dictynidae

Philodromidae

- Philodromus sp.

Salticidae

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

Tetragnathidae

- Tetragnatha sp.

Theridiidae

- Theridion sp.
- Theridula sp.

Thomisidae

- Misumena vatia

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*

Reduviidae

Tingidae

Leafhoppers, Cicadas

Acanaloniidae

- Acanalonia conica

Aphrophoridae

- Philaenus spumarius

Cicadellidae

- Agallia sp.

Alebra sp.

Eratoneura sp.

Idiocerus sp.

Jikradia olitoria

Macropsis sp.

Oncopsis sp.

Scaphoideus sp.*

Colladonus clitellarius

Graphocephala coccinea

Graphocephala fennahi

Graphocephala versuta

Orientus ishidae

Derbidae

Cedusa sp.

Omolocna 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 ursina*

Cryptolaemus montrouzieri

Propylea quatuordecimpunctata
 Psyllobora vigintimaculata
 Curculionidae
 Conotrachelus anaglypticus
 Cyrtepidomus castaneus
 Polydrusus formosus
 Elateridae
 Erirhinidae
 Dorytomus sp.*
 Erotylidae
 Triplax sp.
 Lampyridae
 Ellychnia sp.
 Lycidae
 Calopteron sp.
 Mordellidae
 Mordellina pustulata*
 Scirtidae
 Scirtes orbiculatus
Bees, Wasps
 Crabronidae
 Cynipidae
 Encyrtidae
 Gasteruptiidae
 Gasteruption sp.
 Halictidae
 Torymidae
Ants
 Formicidae
 Camponotus nearcticus
 Camponotus pennsylvanicus
 Myrmica sp.
 Temnothorax curvispinosus*
 Lasius americanus
 Nylanderia flavipes
 Tapinoma sessile
 Tetramorium immigrans

Flies

Chironomidae
 Culicidae
 Dolichopodidae
 Lauxaniidae
 Homoneura sp.*
 Micropezidae
 Compsobata univitta*
 Otitidae
 Delphinia picta*
 Syrphidae
 Allograpta sp.

Other observations

Blattodea
 Ectobius pallidus
 Ectobius
 Neuroptera
 Chrysopidae
 Chrysopini
 Coniopterygidae
 Hemerobiidae*
 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!



Sycamore tussock caterpillar, *Halysidota harrisii*, at Walker Nature Center, VA.

Allen Hurlbert
Director
Caterpillars Count!