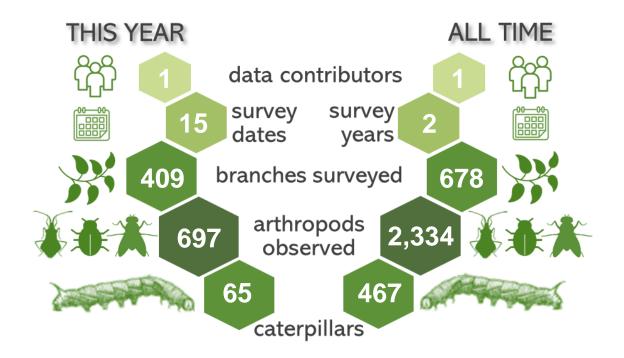


## **Schuylkill Center, 2021 Summary**



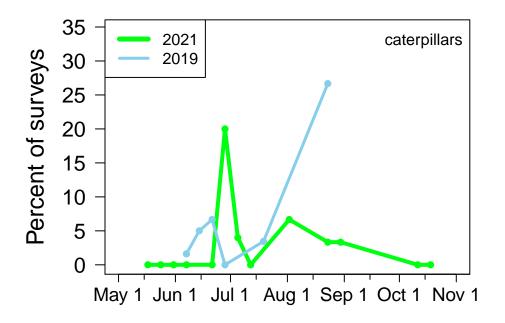
The **409** total surveys conducted at **Schuylkill Center** this year ranks **6th** out of the **52** sites that participated in 2021.

## **Top Participants of 2021**

User	Surveys	Arthropods	Caterpillars	% Caterpillars
J Duenas	409	697	65	2.93

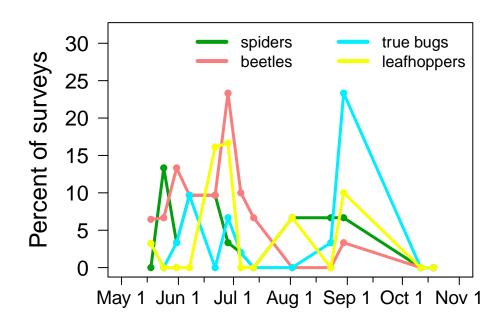
## **Caterpillar Phenology**

As a major source of food for nestlings of migratory birds, we are especially interested in the timing of caterpillar availability. At **Schuylkill Center** in **2021**, caterpillar occurrence peaked at **20%** of surveys on **28 June**. Do you see other peaks as well? How does the pattern compare to the previous year?



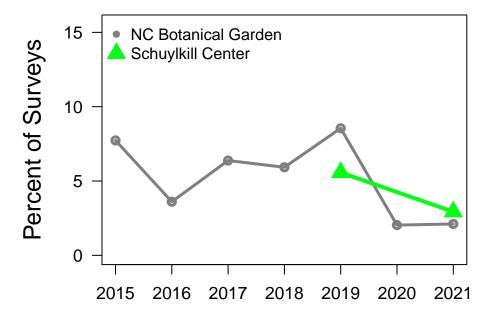
## **Other Arthropod Phenology**

While caterpillars tend to have pronounced seasonal peaks, other groups are more variable. What patterns do you see below for **2021**? You can explore the phenology of other groups on the *Caterpillars Count!* website.



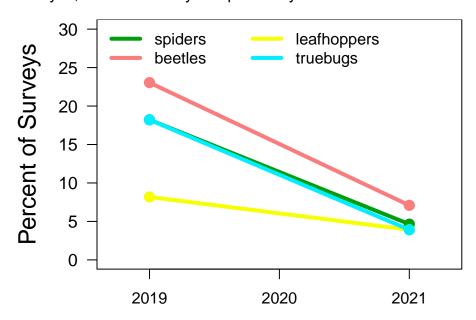
### **Arthropod Trends**

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?

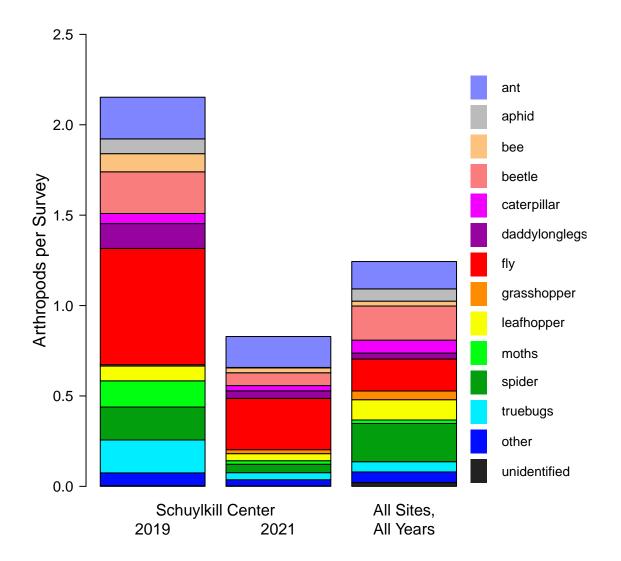


You can explore trends for more arthropod groups, and compare trends at different sites, on your site's Trends Page. See also our November 2021 newsletter for more on how to interpret these trends.

## **Site Arthropod Composition**

Some arthropods are more commonly encountered than others. The graph below portrays the density (arthropods per survey) of all arthropods groups 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*).

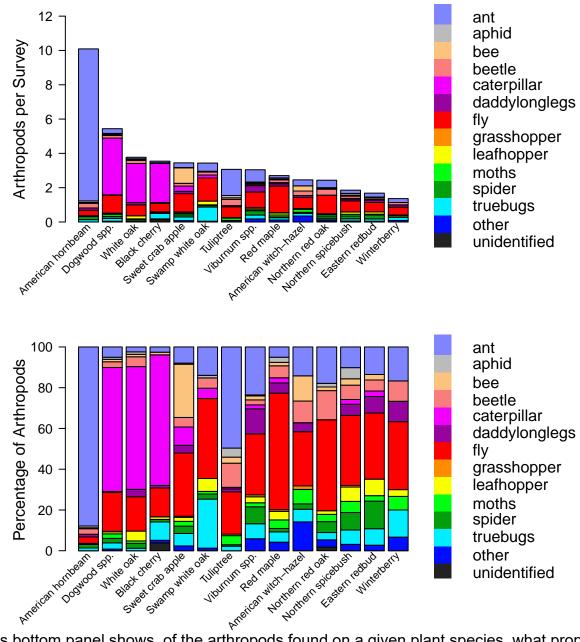
- What are the most common arthropod groups found at your site?
- · Has that varied by year?
- Is anything noticeably different about Schuylkill Center compared to all other participating sites?
- If arthropod photos were submitted as part of your site's surveys, check the last section of this report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

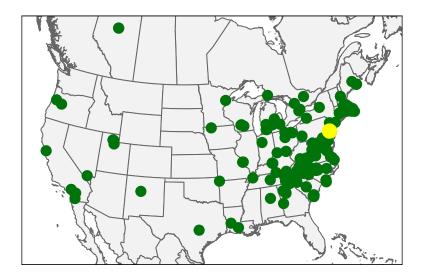
- Which plant species supports the most arthropods per survey?
- · Which plant species supports the most caterpillars?
- Are any plant species dominated by just one or two types of arthropods?
- Or do they support a diversity of arthropod types?



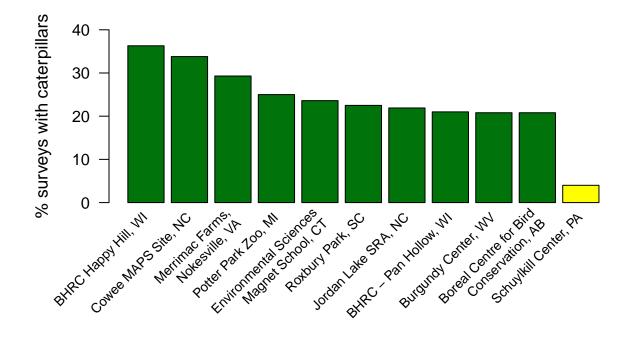
This bottom panel shows, of the arthropods found on a given plant species, what proportion were from each taxonomic group. At most, only the top 25 plant species are shown.

#### **Broader Patterns**

Thanks to participants like yourself, *Caterpillars Count!* observers have now submitted a total of **163,022** arthropod observations—including **11,354 caterpillars**—from **152** different sites.



Across all surveys ever done at **Schuylkill Center**, caterpillars have been found **4%** of the time, which ranks **69th** 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**

**65** 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. Taxonomic groups seen for the first time this year are marked with a \*.

#### Caterpillars

Erebidae

Halysidota tessellaris

Lycaenidae

Noctuidae

Acronicta americana\*

Morrisonia confusa

Notodontidae

Nadata sp.

#### Moths, Butterflies

Lycaenidae

Parrhasius m-album

#### True Bugs

Pentatomidae

Chinavia hilaris\*

#### Leafhoppers, Cicadas

Cicadellidae

Colladonus clitellarius

Fulgoridae

Lycorma delicatula

#### Bees, Wasps

Apidae

Bombus impatiens

Cynipidae

Melikaiella ostensackeni

#### Flies

Asilidae

Eudioctria sp.

Cecidomyiidae

Macrodiplosis majalis

Dolichopodidae

Condylostylus sp.

Xylophagaidae

Dialysis rufithorax

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!



Saddled prominent, *Heterocampa guttivitta*. Photo by Lauren Whitenack.

# Allen Hurlbert Director Caterpillars Count!