



## NC Botanical Garden, 2020 Summary

Thank you for participating in **Caterpillars Count!** Here we provide a summary of what was found at your site this year. 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!](#)

### Site Statistics

**NC Botanical Garden** joined **Caterpillars Count!** in **2015** and has **40** survey branches spread across **8** survey circles. This season (as of 30 October):

- **2** unique participant(s) submitted observations at your site,
- conducting **0** visual and **639** beat sheet surveys
- on **16** different dates
- observing a total of **840** arthropods
- including **13** caterpillars (present on **2.03%** of surveys).
- Across all years, **38** unique participants have conducted **8,386** total surveys.

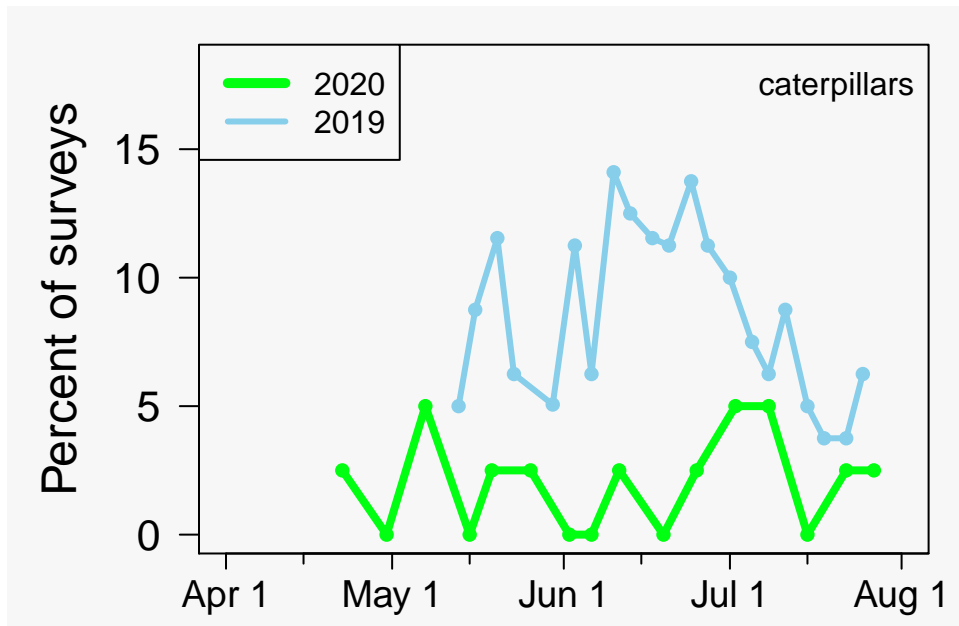
The **639** total surveys conducted at **NC Botanical Garden** this year ranks **1st** out of the **33** sites that participated in 2020.

### Top Participants of 2020

User	Surveys	Arthropods	Caterpillars	% Caterpillars
A Hurlbert	599	776	12	2.0
G Di Cecco	40	64	1	2.5

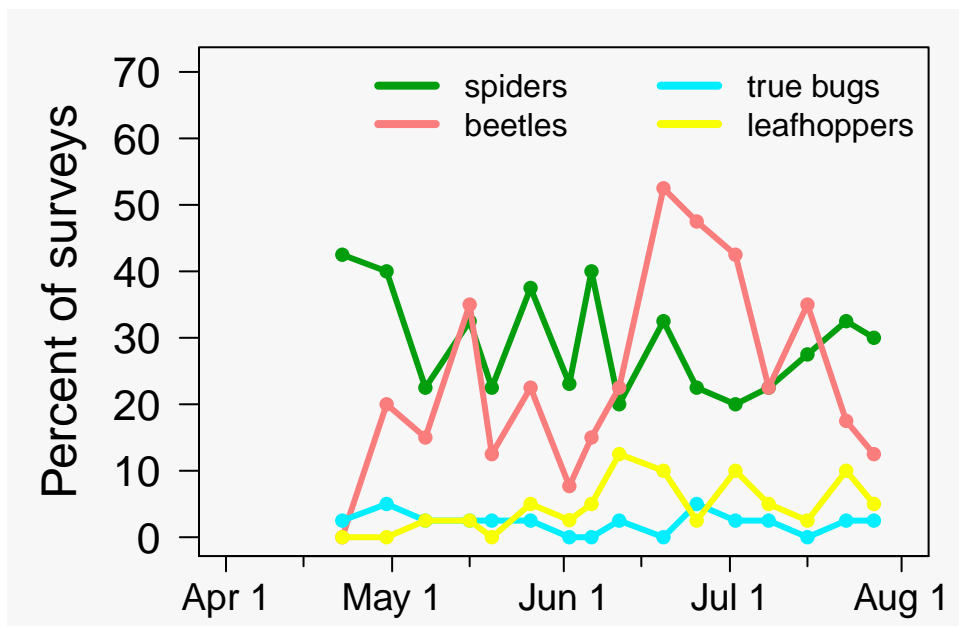
## Caterpillar Phenology

As a major source of food for nestlings of migratory birds, we are especially interested in the timing of caterpillar availability. At **NC Botanical Garden in 2020**, caterpillar occurrence peaked at **5%** of surveys on **6 May**. Do you see other peaks as well? How does the pattern compare to the previous year?



## Other Arthropod Phenology

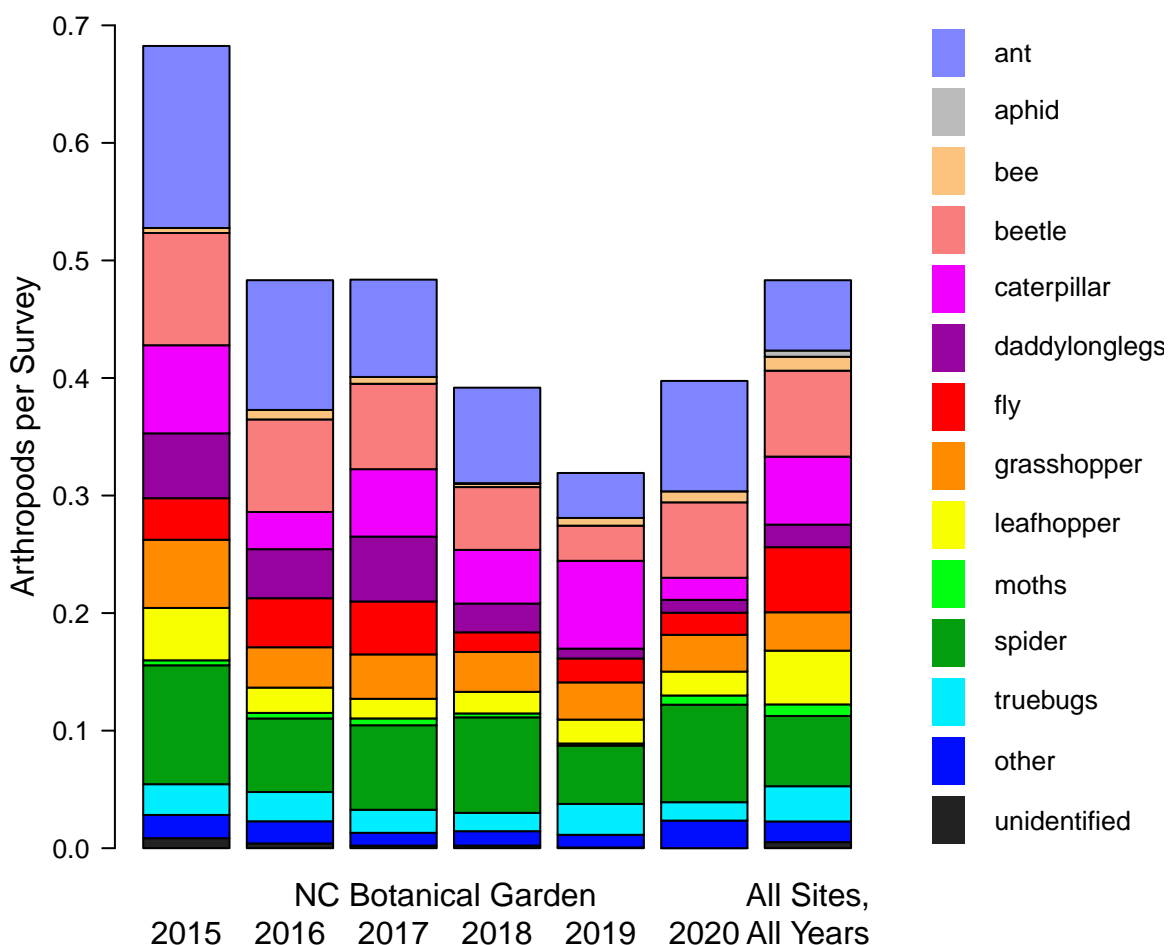
While caterpillars tend to have pronounced seasonal peaks, other groups are more variable. What patterns do you see below for **2020**? You can explore the phenology of other groups on the [Caterpillars Count! website](#).



## Site Arthropod Composition

Some arthropods are more commonly encountered than others. The graph below portrays the survey frequency of all arthropods **longer than 5 mm** that are more likely to be of interest to birds. 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*).

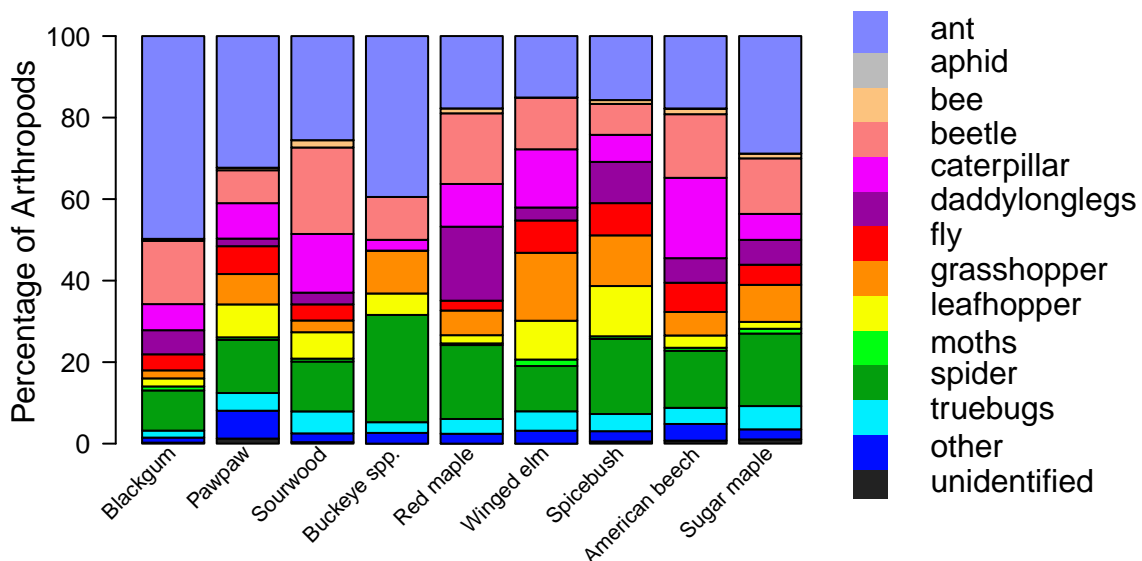
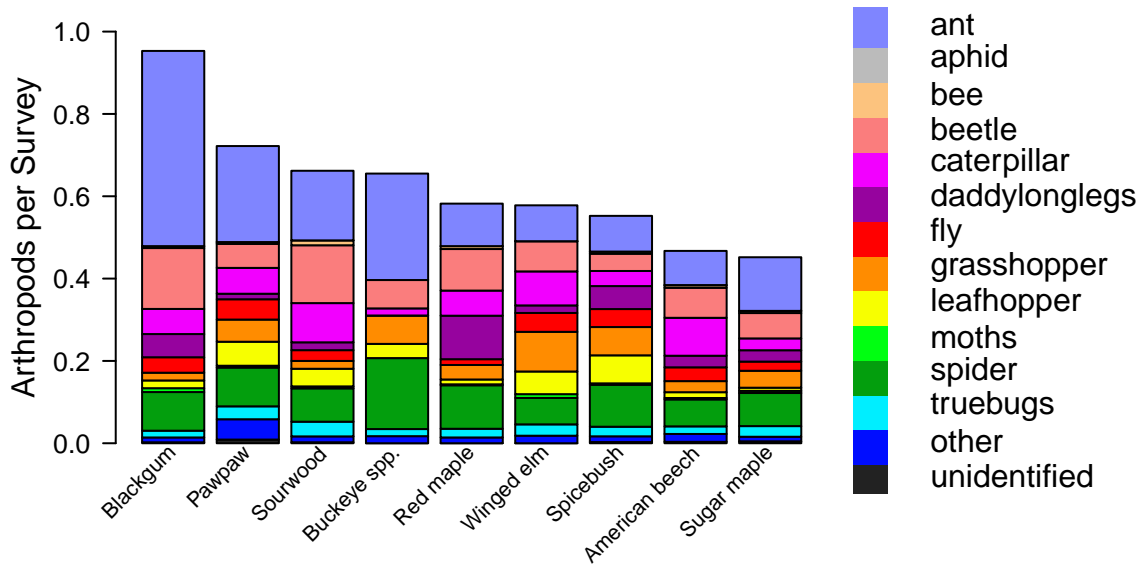
- What are the most common arthropod groups found at your site?
- Has that varied by year?
- Is anything noticeably different about **NC Botanical Garden** compared to all other participating sites?
- If arthropod photos were submitted as part of your site's surveys, check the last section of this report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

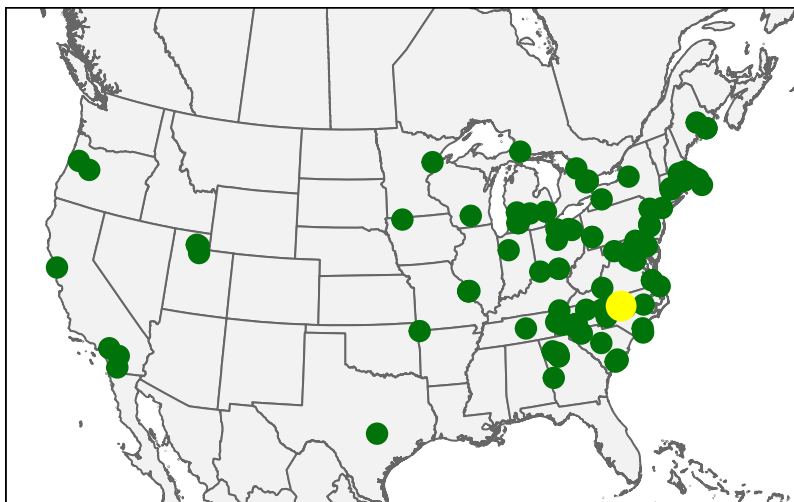
- Which plant species supports the most arthropods per survey? (only  $\geq 5$  mm shown)
- Which plant species supports the most **caterpillars**?
- Are any plant species dominated by just one or two types of arthropods?
- Or do they support a diversity of arthropod types?



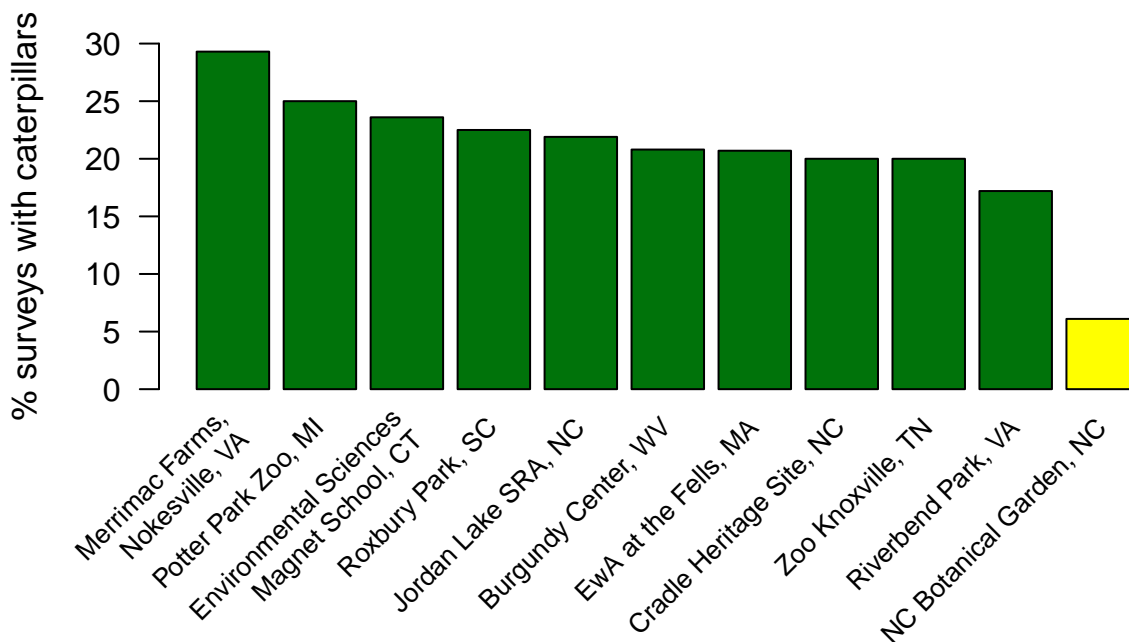
This bottom panel shows, of the arthropods found on a given plant species, what proportion were from each taxonomic group. At most, only the top 25 plant species are shown.

## Broader Patterns

Thanks to participants like yourself, **Caterpillars Count!** observers have now submitted a total of **112,511** arthropod observations—including **8,955 caterpillars**—from **85** different sites.



Across all surveys ever done at **NC Botanical Garden**, caterpillars have been found **6.1%** of the time, which ranks **37th** across sites. The top 10 sites (with  $\geq 20$  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

You can check out any of the arthropod photos submitted to **Caterpillars Count!** 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 \*.

### Spiders

Anyphaenidae

Anyphaena sp.\*

Wulfilia sp.

Araneidae

Araneus sp.\*

Eustala sp.

Philodromidae\*

Salticidae

Colonus sylvanus

Lyssomanes viridis

Tetragnathidae

Leucauge sp.

Tetragnatha sp.\*

Thomisidae

Misumessus oblongus

Uloboridae

Uloborus sp.\*

Stenotrachelidae

### Grasshoppers, Crickets

Gryllidae

Cyrtoxipha columbiana

Oecanthidae

Oecanthus sp.

Trigonidiidae

Phyllopalpus pulchellus

### True Bugs

Alydidae

Coreidae

Acanthocephala terminalis

Leptoglossus sp.

Miridae

Pentatomidae

Reduviidae

Zelus luridus\*

### Cicadas, Leafhoppers

Acanaloniidae

Acanalonia conica

Cercopidae

Prosapia bicincta\*

Cicadellidae

Empoasca sp.\*

Flatidae

Flatormenis proxima

Metcalfa pruinosa\*

Ormenoides venusta

Issidae

Membracidae

Platycotis vittata\*

### Ants

Formicidae

Camponotus sp.

Brachyponera chinensis\*

### Caterpillars

Erebidae

Halysidota tessellaris

Hypena sp.

Hyphantria cunea

Orgyia leucostigma

Geometridae

Epimecis hortaria\*

Limacodidae

Acharia stimulea

Noctuidae

Acronicta americana

Acronicta retardata

Colocasia sp.

Morrisonia confusa

Notodontidae

Heterocampa guttivitta

Heterocampa umbrata

Lochmaeus sp.

Peridea basitriens

Macrurocampa marthesia

### Flies

Syrphidae

Tipulidae\*

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

Explore your data further on the [Caterpillars Count! website!](#)