

# **Great Smoky Mountains Institute at Tremont, 2019**

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**

**Great Smoky Mountains Institute at Tremont** joined *Caterpillars Count!* in **2014** and has **40** survey branches spread across **8** survey circles. This season (as of 27 September):

- 4 unique participant(s) submitted observations at your site,
- conducting 0 visual and 89 beat sheet surveys
- · on 4 different dates
- observing a total of 102 arthropods
- including 8 caterpillars (present on 8.99% of surveys).
- Across all years, 11 unique participants have conducted 939 total surveys.

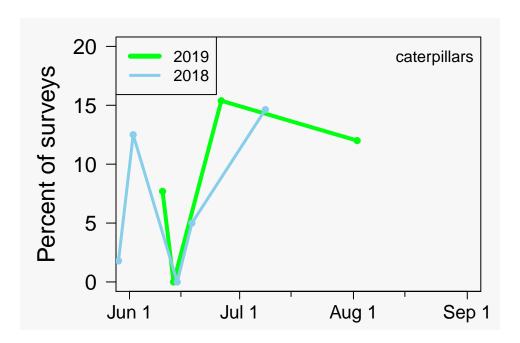
The **89** total surveys conducted at **Great Smoky Mountains Institute at Tremont** this year ranks **38th** out of the **54** sites that participated in 2019.

### **Top Participants of 2019**

User	Surveys	Arthropods	Caterpillars	% Caterpillars
L Kessler	34	41	4	11.76
A Cameron	33	32	4	12.12
A Krichten	16	23	0	0.00
T Beachy	6	6	0	0.00

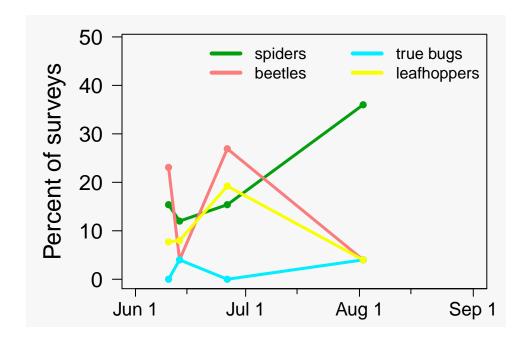
### **Caterpillar Phenology**

As a major source of food for nestlings of migratory birds, we are especially interested in the timing of caterpillar availability. At **Great Smoky Mountains Institute at Tremont** in **2019**, caterpillar occurrence peaked at **15.4%** of surveys on **26 June**. Do you see other peaks as well? How does the pattern compare to the previous year?



## **Other Arthropod Phenology**

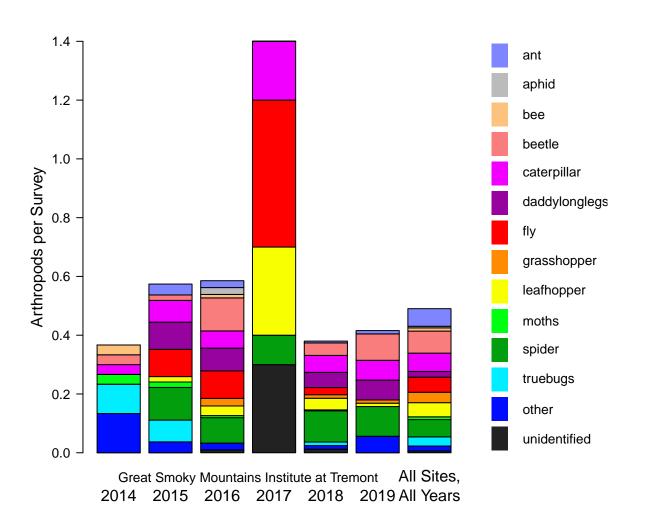
While caterpillars tend to have pronounced seasonal peaks, other groups are more variable. What patterns do you see below for **2019**? You can explore the phenology of other groups on the *Caterpillars Count!* website.



#### **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*).

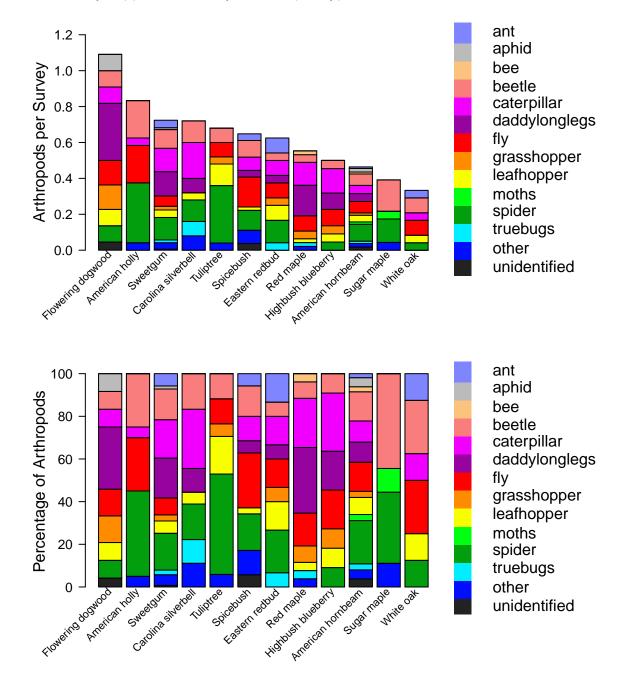
- · What are the most common arthropod groups found at your site?
- · Has that varied by year?
- Is anything noticeably different about **Great Smoky Mountains Institute at Tremont** compared to all other participating sites?
- Don't forget that you can check out any of the arthropod photos submitted to Caterpillars
  Count! at the site's iNaturalist page. See what's been identified by experts!



### **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.

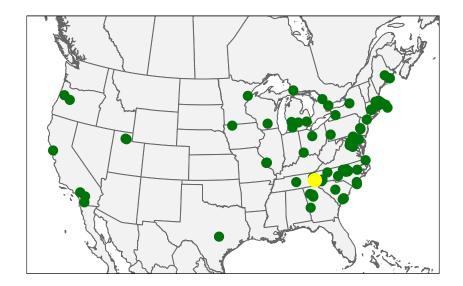
- Which plant species supports the most arthropods per survey? (only ≥5 mm shown)
- · Which plant species supports the most caterpillars?
- Are any plant species dominated by just one or two types of arthropods?
- Or do they support a diversity of arthropod types?



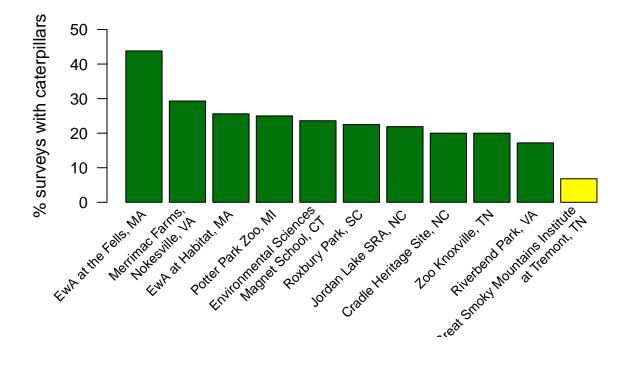
This bottom panel shows, of the arthropods found on a given plant species, what proportion were from each taxonomic group. At most, only the top 25 plant species are shown.

#### **Broader Patterns**

Thanks to participants like yourself, *Caterpillars Count!* observers have now submitted a total of **96,392** arthropod observations–including **8,461 caterpillars**–from **67** different sites.



Across all surveys ever done at **Great Smoky Mountains Institute at Tremont**, caterpillars have been found **6.8%** of the time, which ranks **31st** 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!* 

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

Explore your data further on the Caterpillars Count! website!