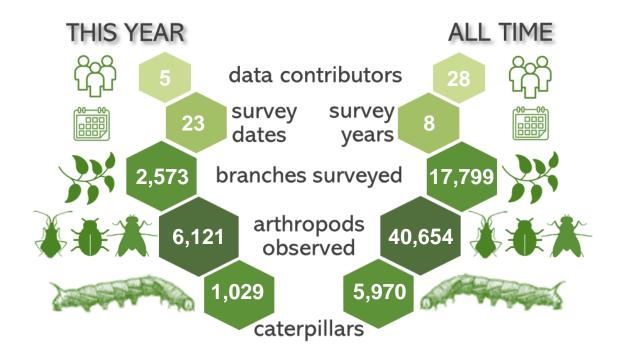


Prairie Ridge Ecostation, 2022 Summary



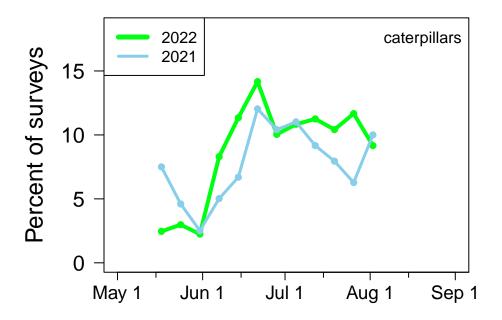
The **2,573** total surveys conducted at **Prairie Ridge Ecostation** this year ranks **1st** out of the **70** sites that participated in 2022.

Top Participants of 2022

| User | Surveys | Arthropods | Caterpillars | % Caterpillars |
|------------|---------|------------|--------------|----------------|
| A Hurlbert | 256 | 1193 | 756 | 12.11 |
| E Weaver | 568 | 1368 | 64 | 10.04 |
| M Beverly | 630 | 1530 | 69 | 9.52 |
| A Moore | 530 | 697 | 93 | 9.43 |
| I Edwards | 589 | 1333 | 47 | 6.45 |

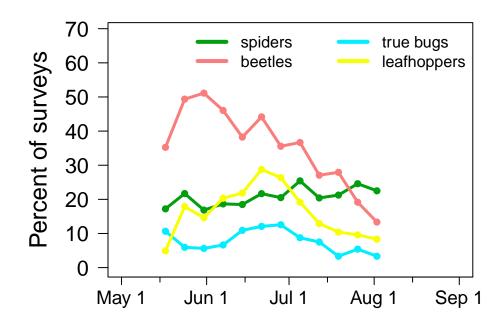
Caterpillar Phenology

As a major source of food for nestlings of migratory birds, we are especially interested in the timing of caterpillar availability. At **Prairie Ridge Ecostation** in **2022**, caterpillar occurrence peaked at **14.2**% of surveys on **21 June**. Do you see other peaks as well? How does the pattern compare to the previous year?



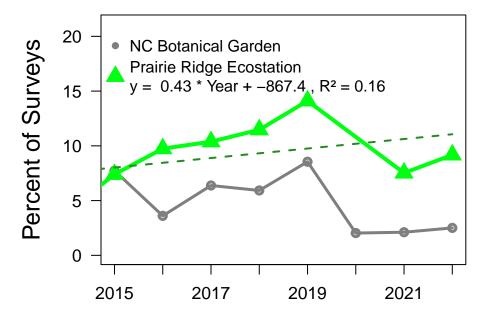
Other Arthropod Phenology

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



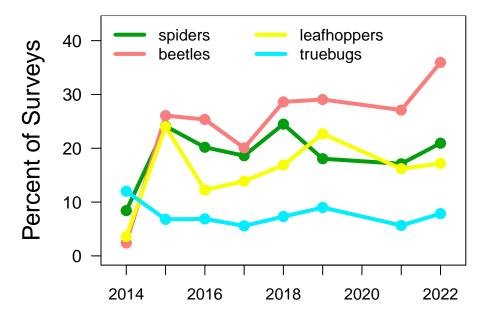
Arthropod Trends

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?

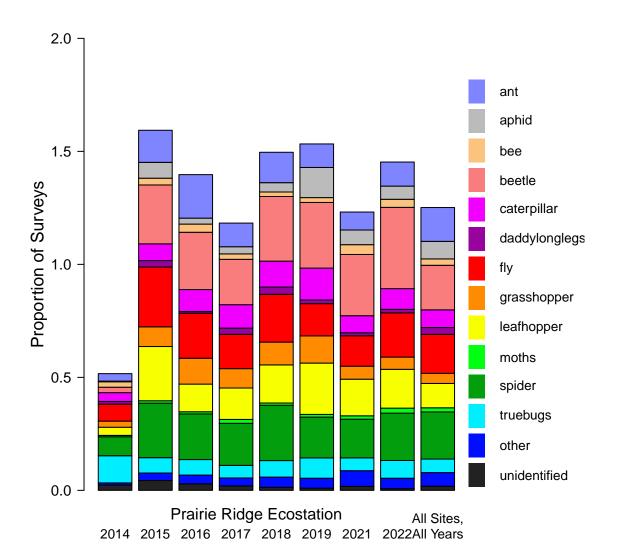


You can explore trends for more arthropod groups, and compare trends at different sites, on your site's Trends Page. See also our November 2021 newsletter for more on how to interpret these trends.

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*).

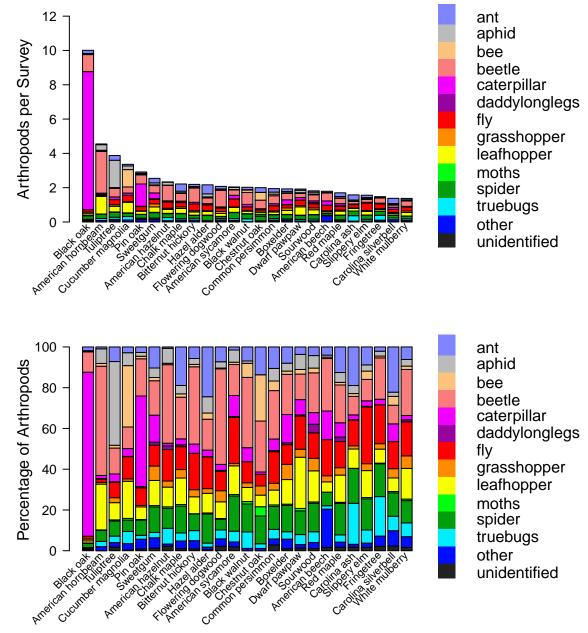
- What are the most common arthropod groups found at your site?
- · Has that varied by year?
- Is anything noticeably different about Prairie Ridge Ecostation compared to all other participating sites?
- If arthropod photos were submitted as part of your site's surveys, check the last section of this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

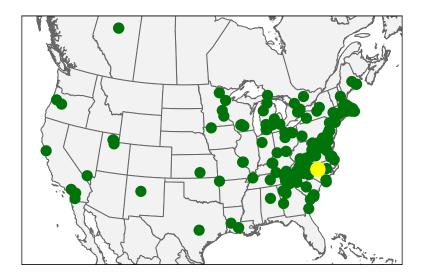
- Which plant species supports the most arthropods per survey?
- Which plant species supports the most caterpillars?
- Are any plant species dominated by just one or two types of arthropods?
- Or do they support a diversity of arthropod types?



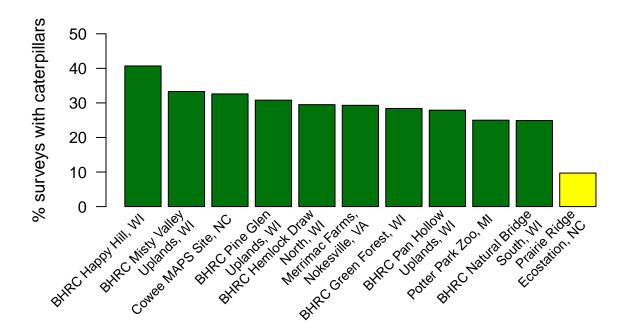
This bottom panel shows, of the arthropods found on a given plant species, what proportion were from each taxonomic group. At most, only the top 25 plant species are shown.

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 **Prairie Ridge Ecostation**, caterpillars have been found **9.7%** of the time, which ranks **43rd** 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

2599 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 **126** unique species. Taxa seen for the first time this year are marked with a *.

| Caterpillars |
|--------------|
|--------------|

Erebidae

Orgyia leucostigma
Panopoda sp.
Halysidota harrisii
Halysidota tessellaris
Hyphantria cunea
Hypsoropha hormos
Parallelia bistriaris
Pyrrharctia isabella

Spilosoma virginica

Euteliidae Paectes sp. Geometridae

> Epimecis hortaria Hypagyrtis unipunctata Macaria bisignata

Limacodidae

Lithacodes fasciola Natada nasoni Phobetron pithecium*

Noctuidae

Acronicta americana Acronicta retardata Harrisimemna trisignata Morrisonia confusa

Notodontidae Datana sp.

Schizura ipomaeae
Cecrita biundata
Cecrita guttivitta
Coelodasys unicornis
Misogada unicolor
Nadata gibbosa

Pyralidae
Pococera sp.
Saturniidae
Anisota sp.

Actias luna Sphingidae

Moths, Butterflies

Acrolophidae
Acrolophus sp.*

Erebidae

Spilosoma sp.* Hypsoropha hormos*

Geometridae
Eulithis sp.
Hypagyrtis sp.*
Eutrapela clemataria

Hesperiidae Lon zabulon Saturniidae Anisota sp. Tortricidae

Coelostathma discopunctana

Spiders

Anyphaenidae
Wulfila sp.
Araneidae
Araneus sp.
Eustala sp.
Neoscona sp.

Larinioides cornutus Mecynogea lemniscata Metepeira labyrinthea Micrathena gracilis* Verrucosa arenata

Clubionidae

Castianeira longipalpa

Corinnidae
Trachelas sp.
Philodromidae
Philodromus sp.
Salticidae

Colonus sylvanus

Hentzia sp.

Lyssomanes viridis
Paraphidippus aurantius

Tetragnathidae
Tetragnatha sp.
Leucauge venusta

Theridiidae
Theridion sp.*
Theridula sp.
Rhomphaea fictilium

Thomisidae
Mecaphesa sp.
Tmarus sp.
Xysticus sp.
Synema parvulum

Grasshoppers, Crickets

Gryllidae

Cyrtoxipha columbiana

Mogoplistidae
Cycloptilum sp.
Oecanthidae

Oecanthus niveus*

Podoscirtidae
Orocharis sp.
Tettigoniidae
Scudderia sp.
Trigonidiidae
Cyrtoxipha sp.

Phyllopalpus pulchellus

True Bugs

Berytidae
Jalysus sp.*
Coreidae

Acanthocephala declivis Acanthocephala terminalis Leptoglossus oppositus Miridae

Ceratocapsus sp. Hyaliodes harti Hyaliodes vitripennis

Lopidea sp.

Paraxenetus guttulatus Texocoris nigrellus*

Nabidae

Lasiomerus sp.*

Pentatomidae

Banasa euchlora* Euschistus servus*

Podisus sp.*

Brochymena quadripustulata

Chinavia hilaris

Reduviidae

Empicoris sp.*
Pselliopus barberi
Pselliopus cinctus*

Sinea sp.
Zelus luridus
Arilus cristatus
Rhopalidae

Boisea trivittata

Tingidae

Corythucha sp.

Leafhoppers, Cicadas

Acanaloniidae

Acanalonia bivittata Acanalonia conica

Cercopidae

Prosapia bicincta

Cicadellidae
Bandara sp.
Osbornellus sp.
Paraphlepsius sp.
Scaphoideus sp.*
Agalliopsis ancistra*

Graphocephala coccinea

Graphocephala versuta Japananus hyalinus

Jikradia olitoria

Oncometopia orbona

Rugosana querci

Cixiidae

Haplaxius sp.*
Bothriocera cognita*

Derbidae Cedusa sp.

Flatidae

Flatormenis proxima Metcalfa pruinosa Ormenoides venusta

Issidae

Thionia bullata Thionia quinquata Aplos simplex

Aplos simplex
Membracidae
Telamona sp.*
Platycotis vittata
Stictocephala militaris

Tropiduchidae

Pelitropis rotulata

Stictocephala taurina

Thraupidae

Stictocephala sp.

Aphids, Scales

Aphididae

Pseudococcidae

Beetles

Anthribidae

Ormiscus sp.*

Toxonotus cornutus*

Attelabidae

Eugnamptus sp.

Cantharidae

Chauliognathus marginatus

Podabrus rugosulus

Carabidae*
Cerambycidae
Anelaphus sp.
Chrysomelidae
Bassareus sp.

Cryptocephalus sp.

Paria sp.

Demotina modesta

Coccinellidae

Cycloneda munda* Harmonia axyridis

Psyllobora vigintimaculata*

Cupedidae

Cupes capitatus*
Tenomerga cinerea

Curculionidae

Brachystylus sayi

Cyrtepistomus castaneus

Lechriops oculatus
Ochyromera ligustri*

Pseudocneorhinus bifasciatus

Pseudoedophrys hilleri*

Elateridae

Glyphonyx sp. Melanotus sp.

Conoderus lividus

Lampyridae Photinus sp.

Photuris sp.

Mordellidae

Falsomordellistena hebraica* Mordellistena trifasciata* Paramordellaria triloba

Scarabaeidae

Macrodactylus subspinosus

Popillia japonica

Bees, Wasps

Eupelmidae

Tenthredinidae

Vespidae

Vespula maculifrons*

Choreutidae

Ants

Formicidae

Formica fusca

Formica subsericea

Camponotus castaneus

Camponotus pennsylvanicus

Camponotus snellingi*

Camponotus subbarbatus

Crematogaster sp.

Monomorium minimum*

Brachyponera chinensis*

Pseudomyrmex ejectus*

<u>Flies</u>

Asilidae

Cerotainia sp.

Bombyliidae

Anthrax argyropygus*

Chironomidae

Chloropidae

Dolichopodidae

Keroplatidae

Macrocera sp.

Lauxaniidae

Homoneura sp.

Rhagionidae

Chrysopilus thoracicus

Sciomyzidae

Anura

Hyla cinerea

Blattodea

Cariblatta*

Reticulitermes hageni

Collembola

Tomocerinae

Dermaptera

Forficula auricularia

Entomobryomorpha

Homidia socia

Neuroptera

Chrysopa nigricornis

Chrysoperla

Chrysopidae

Leucochrysa insularis

Leucochrysa pavida*

Hemerobius*

Micromus

Micromus posticus

Odonata

Calopteryx maculata

Polydesmida

Oxidus gracilis

Psocodea

Cerastipsocus venosus

Graphopsocus

Spirobolida

Narceus americanus

Other observations

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!